



ISSN 2278 – 0211 (Online)

Impact of Stress Management on Employee Productivity in Polytechnics in Delta State, Nigeria

Dr. Adenekan, Tolulope Elizabeth

Senior Lecturer, Department of Information Management,
Lead City University, Ibadan, Oyo State, Nigeria

Nwoko, Godday Chukudi

Chief Lecturer, Department of Office Technology and Management,
Auchi Polytechnic, Auchi, Edo State, Nigeria

Abstract:

*The study investigated the impact of stress management on employee productivity in Polytechnics in Delta State. The study adopted the descriptive survey research design and the four owned public polytechnics were used in the study. The population of the study was 8,365 which comprised academic and non-academic staff. The sample size comprised 381 respondents which was determined using Taro Yamane's sample size determination. The instrument used in the collection of data was the questionnaire and data were analysed using frequency counts, simple percentage, mean and Pearson product moment correlation. Findings showed that the main causes of stress among employees in Polytechnics in Delta State were long work hour, increased work load/long working hours, inability to meet deadline, non-conducive working environment. The major stress management adopted by employees was flexible work time, going on vacation/sabbatical leave, breaking challenging pieces of work into smaller sets of task, seeking more information in order to clarify ambiguous role expectations. Stress management had significant positive relationship with employee productivity ($r = 0.264^{**}$; $p < 0.05$). It was recommended that employees should be given leave as and when due and those teaching staff who are entitled to sabbatical should be given as this could serve as a way of managing stress in order to avoid physical and psychological strain that could emanate from stress.*

Keywords: Stress management, employee productivity, polytechnics, delta state

1. Introduction

Most tertiary institutions are always ranked based on the level of their employee productivity. In polytechnics in Nigeria, students are being taught practical works which are being carried out by their lecturers, as it is affirmed that these practical works are measured in terms of productivity. Employee productivity is the value chain of the employee's contribution to the organisation's goal, regardless of whether the contribution is positive or negative. Employees' productivity determines organisation's success; conducting employee productivity appraisal ought to be done appropriately in order to ascertain if the goals and objectives of the polytechnics are being met.

Productivity is defined as the ability of a set of economic resources to produce anything, which can also be viewed as a trade-off between input (input) and output (output) (Suroyo, 2016). Work productivity is influenced by a variety of factors, including the personnel, the firm environment, and overall government policy (Sayogo, 2020). Ability to manage stress, physical condition of the job, remuneration system, job design, and other economic, technological, and behavioural factors will all influence whether or not employees perform productively. Employee productivity is influenced by a variety of factors, including the personnel, the firm environment, and government policies as a whole. As a result, increased productivity means producing the same amount of output with fewer inputs. As a result, higher productivity could be the result of reduced resource consumption, cost savings, the adoption of better methods, or improvements in factor capabilities, notably labour (Orji, 2020). Employees will work productively or not depending on how they are able to manage their stress. Employers of labor must manage employee stress as soon as feasible so that negative consequences to the institution can be avoided. Workplace stress is a sensation of strain that people feel while coping with their jobs. Unstable emotions, feeling uneasy, being alone, having difficulties in sleeping, smoking excessively, not being able to relax, being apprehensive, tense, and nervous are all symptoms of work stress (Syahputra, Andika & Amelia, 2022).

Stress can be defined as the negative psychological and physical reactions that arise in an individual as a result of his or her inability to cope with the expectations being placed on him or her (Okeke, Chukwuemeka & Amobi, 2017). That is, a person's anxiety as a result of unusual obligations. When pressure sources become too frequent without enough time to recover, or when just one source of pressure is too big for an individual to handle, problems occur. Stress is a condition that occurs when a person understands that the constraints on them, or the necessities of a circumstance, are greater than their understanding of what they can handle. If these demands are excessive and persist without interruption for an extended period of time, mental, physical, or behavioral issues may arise (Odor, 2019).

Stress management is the ability of employees to deal with the pressure of work as well as that of work without any effect on their psychological, physical and emotional well-being. It has been revealed that when employees are able to manage stress that emanates from work, it could enhance their level of productivity (Jemilohun, Babalola & Nkire, 2019). Stress management should not emanate from the employee alone; employers of labour have a lot to do to ensure that their employees are not over-stressed at work as this could inhibit their level of productivity. It is expedient that employers of labour should apportion to their employees' job that they could finish before the close of every work day. Giving employees time to explore and go for vacation is a way where they could manage stress that could emanate from work as this could reduce the pressure and tension that have been accumulated from works and make them to be fresh to duty when they resume work.

1.1. Statement of the Problem

For some decades now, employee productivity has been a major concern to management of various tertiary institution as well as employers of labour in different organizations as this had been traced to different factors such as stress, work life balance among others. Due to over time, employees undergo stress at work, and this stress could inhibit their productivity at work. Inability to manage this level of stress could lead to serious problem to the employees as well as the organisation as a whole. The problem that could stem from this could range from low productivity, retrenchment as a result of not meeting the organisational goal, poor health and death. All these could serve as a great loss to the organisation as well as the families of the employees. Even though stress can be caused by internal or external reasons to the organization or in its entirety, its management has yet to be fully sorted out. Even when an organization seeks to foster a culture of industrial peace and harmony so that production can proceed with minimal disruption, no organization appears to be entirely stress-free. In a booming economy like that of Nigeria, the ability to manage stress at work has been shown to have negative implications on socio-economic and cultural development. This cannot be allowed to continue, as it will decimate employee productivity in tertiary institutions, which could also affect the country's growth. Studies have been conducted on the impact of stress management on employee productivity but only a few have examined stress management on employee productivity among polytechnic employees in Nigeria, as this is the gap the study filled.

1.2. Objective of the Study

The main objective of this study was to examine the impact of stress management on employees' productivity in Polytechnics in Delta State, Nigeria. The specific objectives were to:

- Examine the causes of work place stress among employees in Polytechnics in Delta State;
- Examine the different stress management techniques adopted by employees in Polytechnics in Delta State;
- Examine the significant relationship between stress management and employee Productivity in Polytechnics in Delta State

1.3. Research Questions

- What are the causes of stress among employees in Polytechnics in Delta State?
- What are the different stress management techniques adopted by employees in Polytechnics in Delta State?

1.4. Hypothesis

- H01: There is no significant relationship between stress management and employee productivity in Polytechnics in Delta State.

2. Review of Related Literature

Studies have showed that employee productivity is very germane to the growth of every organisation, due to some factors such as stress, and work environment. Several studies have been conducted on stress management on employee productivity among employees. Syahputra, Andika and Amelia (2022) did a study on the effect of compensation, work stress on employee productivity in polytechnic of Medan, Indonesia adopting the descriptive survey and purposive sampling. Population comprised 82 administrative staff and questionnaire was the instrument used in the collection of data and data was analysed using the descriptive and inferential statistics. Result revealed that there was significant effect on job stress and employee productivity. It was concluded that the ability of employees to manage work stress could make them more productive. Another similar study was conducted by Onyia (2016) on job stress and coping strategy among polytechnic staff in libraries in Nigeria using descriptive survey design and purposive sampling. The population of the study comprised 113 librarians who were professionals and the instrument used in the collection of data was the questionnaire. Data was analysed using descriptive and inferential statistics and it was revealed that seeking more information in order to clarify ambiguous role expectations, job sharing, flexible work time, socializing and keeping friendship are coping techniques employed by library staff to manage job stress.

Karunanithy and Ponnampalam (2013) did a study on the effect of stress on employee productivity in Ceylon commercial bank in Sri Lanka using survey design and simple random sampling technique. The instrument used in the collection of data was the questionnaire and data was analysed using descriptive and inferential statistics. Result showed that there was significant relationship between stress and employee productivity. It was concluded that in order to bring out the best out of their employees, employers of labour should reduce their level of stress. Understanding the elements that determine whether someone working very hard feels stressed out and burned out, or whether they feel inspired, thrilled, and devoted, is the key to boosting productivity while avoiding stress. Sahbudin & Halim (2017) did a study on the impact of work stress on employee productivity among Malaysian polytechnics academic staff in Indonesia using the

survey design and purposive sampling. Questionnaire was the instrument used in the collection of data and data was analysed using the descriptive statistics. Result showed that work load, time pressure, long work hour, recognition, insufficient facilities and student mis-behaviour were some of the causes of work stress. It was concluded that when employees undergo too much stress, it could hinder their productivity at their various places of work.

Sulaiman & Baksh (2019) examined the roles of stress management in enhancing employee productivity in India adopting the descriptive survey design and convenient sampling method. The population of the study comprised 320 staff and questionnaire was the instrument used in the collection of data. Data was analysed using descriptive and inferential statistics and result showed that there is an impact of job stress on employee's productivity. Psychological support factor, comfort ability factor, efficiency factor, technical factor, and clarity factor were some of the factors that increase employee's productivity. It was concluded that stress management is to provide good support for both psychological and physical support. It is clear that stress management helps in increasing the productivity of the employees. Another study was conducted by Radha (2014) on the impact of occupational stress and job productivity among bank employees in trivandrum district of Tamilnadu. Questionnaire was employed in the collection of data and data was analyzed using the chi-square test. Result showed that occupational stress has an association with job productivity.

Igbokwe, Itoya and Eziuzo (2020) did a study on long hours of work and employee productivity in Nigerian universities adopting the descriptive survey design and purposive sampling. Questionnaire was used in the collection of data and data was analysed using descriptive and inferential statistics of chi-square. Result showed that long hours of work as a source of job stress has negative and significant effect on employee productivity in tertiary institutions. The study concludes that putting too much pressure and stress on employees often results in negative consequences which are capable of reducing their productivity. Okeke, Chukwuemeka and Amobi (2017) conducted a study on occupational stress and the productivity of non-teaching staff of selected universities in the South-Eastern Nigeria. The study used descriptive survey design and the findings indicate that occupational stress does have positive effect on the productivity of non-teaching staff. Also, the reductions of occupational stress have positive effect on the effectiveness of the employees in the study. It was concluded that reduction in the occupational stress will enhance employees' productivity in the organizations.

Bartels (2020) did a study on the impact of occupational stress on employee productivity among employees in Technical University in South Africa using the survey design and purposive sampling. Result revealed that occupational stress had a significant negative relationship with employee productivity at the technical university. The author came to the conclusion that work stress is a major factor in the technical university's academic staff's poor productivity. Management should use new tactics aimed at lowering occupational stress at the institution in order to improve employee productivity levels, according to the study.

3. Methodology

Descriptive survey design was employed in this study. This design was adopted because it would enable the researchers to examine the impact of stress management on employee productivity among employees in polytechnics in Delta State without any form of manipulation. There are four public polytechnics in Delta State, one Federal and three States. These are: Petroleum Training Institute (Effurun), Delta State Polytechnics (Otefe-Oghara), Delta State Polytechnic (Ozoro) and Delta State Polytechnic (Ogwashi-Uku). The population of the study consisted of 8,365. Taro Yamane's formula was used to determine the sample size of 381 respondents comprising 249 non-teaching staff and 132 teaching staff working in the Federal and State owned polytechnics in Delta State. Questionnaire was the instrument used in the collection of data and the questionnaire was entitled 'Stress Management Employee Productivity Questionnaire (SMEPQ)'. Copies of the questionnaires were administered to teaching and non-teaching staff of the polytechnics. To ensure a high response rate, the researchers sought the assistance of a research assistant who helped in the administration and retrieval of the questionnaire. Data were analysed using Frequency counts, percentages, mean and Pearson product moment correlation (PPMC) at 0.05 level of significance.

3.1. Sample Size Determination

Taro Yamane Formula:

The values used are

N= Study population (358),

R= 0.05 (margin of error)

n= sample size

$8,365 / (1 + 8,365 * (0.05)^2)$

$8,365 / (1 + 8,365 * 0.0025)$

$8,365 / (1 + 20.913)$

$8,365 / 21.913$

n= 381

4. Results and Discussion

Variables	Frequency	Percentage
Gender		
Male	206	54.1
Female	175	45.9
Educational Qualification		
ND	27	7.1
HND	49	12.9
B.Sc	171	44.9
Masters	106	27.8
Ph.D	17	4.5
Others	11	2.9
Years of Service		
0-5	59	15.9
6-11	158	41.5
12-17	135	35.4
18-23	24	6.3
24 years and above	5	1.3

Table 1: Demographic Information of Respondents

Result from Table 1 revealed that 54.1% were male and the rest 45.9% were female. This means that there were more male participants in the study than female. Also, 7.1% had ND as their highest educational qualification, 12.9% had HND, 44.9% had B.Sc. 27.8% had masters, while 4.5% had Ph.D. and the remaining 2.9% had other qualifications. 15.9% had been in service between 0-5 years, 41.5% had been in service between 6-11 years, 35.4% had been in service between 12-17 years, 6.3% had been in service between 18-23 years and the rest 1.3% had been in service between 24 years and above. This means that respondents, whose years are in between 6-11 years, participated more in the study.

4.1. Answers to Research Questions

- Research question 1: What are the causes of stress among employees in Polytechnics in Delta State?

	Items	SA	A	D	SD	
1	Non-conductive working environment	150 (39.4%)	173 (45.4%)	49 (12.9%)	9 (2.4%)	2.9
2	Long work hour	153 (40.2%)	172 (45.1%)	39 (10.2%)	17 (4.5%)	3.5
3	Inability to meet deadline	134 (35.2%)	167 (43.8%)	76 (19.9%)	4 (1.0%)	3.1
4	Change in rules/procedures	84 (22.0%)	153 (40.2%)	103 (27.0%)	41 (10.8%)	2.9
5	Increased work load/long working hours	167 (43.8%)	193 (50.7%)	19 (4.9%)	21 (5.5%)	3.2
6	High expectations from bosses	106 (27.8%)	187 (49.0%)	68 (17.8%)	20 (5.2%)	2.3
7	Insufficient funds to meet personal needs	94 (24.7%)	148 (38.8%)	97 (25.5%)	42 (11.0%)	2.8
8	Lack of training/continuing professional education opportunities	99 (26.0%)	122 (32.0%)	88 (18.9%)	72 (18.9%)	2.5
Average mean: 2.8						

Table 2: Causes of Stress among Employees in Polytechnics in Delta State

Result from Table 2 revealed the causes of stress among employees in Polytechnics in Delta State. It revealed that long work hour, which was, 3.5 was ranked highest by the mean score rating and was followed in succession by increased work load/long working hours which was 3.2, inability to meet deadline which was 3.1, change in rules/procedures and non-conductive working environment respectively which was 2.9, insufficient funds to meet personal needs which was 2.8, lack of training/continuing professional education opportunities which was 2.5, and high expectations from bosses which was 2.3. It could be concluded the main causes of stress among employees in Polytechnics in Delta State are long work hour, increased work load/long working hours, inability to meet deadline, non-conductive working environment and insufficient funds to meet personal needs. The finding supports that of Sahbudin & Halim (2017) who did a study on the impact of work stress on employee productivity among Malaysian polytechnics academic staff in Indonesia using the survey design and purposive sampling and found that work load, time pressure, long work hour, recognition, insufficient

facilities and student mis-behaviour were some of the causes of work stress. It was concluded that when employees undergo too much stress, it could hinder their productivity at their various places of work.

- Research question 2: What are the different stress management techniques adopted by employees in Polytechnics in Delta State?

	Items	SA	A	D	SD	
1	Seeking more information in order to clarify ambiguous role expectations	118 (31.0%)	142 (37.3%)	98 (25.7%)	23 (6.0%)	2.9
2	Breaking challenging pieces of work into smaller sets of task	136 (35.7%)	137 (36.0%)	92 (24.1%)	16 (4.2%)	3.0
3	Developing interpersonal skills that dissipate aggression	70 (18.4%)	133 (34.9%)	121 (31.8%)	57 (15.0%)	2.5
4	Flexible work time	123 (32.3%)	204 (53.5%)	39 (10.2%)	15 (3.9%)	3.3
5	Job sharing	73 (19.2%)	166 (43.6%)	72 (18.9%)	70 (18.4%)	2.6
6	Going on vacation/sabbatical leave	96 (25.2%)	121 (31.8%)	88 (23.1%)	76 (19.9%)	3.1
7	Taking coffee/short break during working hours	131 (34.4%)	192 (50.4%)	31 (8.1%)	27 (7.1%)	2.5
8	Training and retraining of employees on how to manage stress	111 (29.1%)	144 (37.8%)	74 (19.4%)	52 (19.4%)	2.8
Average mean: 2.8						

Table 3: Stress Management Techniques Adopted by Employees in Polytechnics in Delta State

Result from Table 3 revealed the different stress management techniques adopted by employees in Polytechnics in Delta State. It revealed that Flexible work time, which was 3.3, was ranked highest by the mean score rating and was followed in succession by going on vacation/sabbatical leave which was 3.1, breaking challenging pieces of work into smaller sets of task which was 3.0, seeking more information in order to clarify ambiguous role expectations which was 2.9, training and retraining which was 2.8, job sharing which was 2.6, and lastly, developing interpersonal skills that dissipate aggression and taking coffee/short break during working hours respectively which was 2.5. It could be concluded that the major stress management adopted by employees in polytechnics in Delta State were flexible work time, going on vacation/sabbatical leave, breaking challenging pieces of work into smaller sets of task, seeking more information in order to clarify ambiguous role expectations and training and retraining on how to manage stress. The finding corroborates that of Onyia (2016) who did a study on job stress and coping strategy among polytechnic staff in libraries in Nigeria using descriptive survey design and purposive sampling and it was revealed that seeking more information in order to clarify ambiguous role expectations, job sharing, flexible work time, socializing and keeping friendship are coping techniques employed by library staff to manage job stress.

4.2. Test of Hypothesis

- Hypothesis 1: There is no significant relationship between stress management and employee productivity in Polytechnics in Delta State

Variable	Mean	SD	N	Df	R	Sig	Remark
Stress management	19.26	4.56	381	379	0.264**	0.000	Sig.
Employee productivity	21.83	6.18					

Table 4: Relationship between Stress Management and Employee Productivity

Result from Table 4 showed the relationship between stress management and employee productivity in Polytechnics in Delta State. Pearson's product moment correlation was used and it was found that there is significant positive correlation between stress management and employee productivity ($r = 0.264^{**}$; $p < 0.05$). This means that when employees devise good method in managing stress at their places of work, it tends to enhance their productivity. The finding lends credence with that of Sulaiman & Baksh (2019) who examined the roles of stress management in enhancing employee productivity in India adopting the descriptive survey design and convenient sampling method. The population of the study comprised 320 staff and questionnaire was the instrument used in the collection of data. Data was analysed using descriptive and inferential statistics and result showed that there is an impact of job stress on employee's productivity. It was concluded that stress management is to provide good support for both psychological and physical support. It is clear that stress management helps in increasing the productivity of the employee.

5. Conclusion and Recommendations

From the findings of the study, it could be concluded that if employees devise the necessary strategies to manage stress that could emanate from their work place, they tend to be more productive by meeting the organizational goals and objectives. Academic staff in the polytechnics tend to undergo a lot of stress that could stem from teaching, research and

community service, the stress that could emanate from their work could inhibit their productivity. Also, non-teaching staff are into administrative work of the institution which more often could be tedious and their inability to meet with the deadlines could inhibit their productivity. In line with the findings, the following recommendations were made:

- The management of various polytechnics should reduce the work load of employees to a minimum level as this could enhance higher level of productivity.
- Employees in institutions of study should embrace prototype stress management packages as policy. Formal management techniques such as seminars, training, and interactive sessions should be implemented to allow employees (teaching and non-teaching) to express their concerns and share ideas about job stress and how it could be managed. Employees should be given leave as and when due and those teaching staff, who are entitled to sabbatical, should be given as this could serve as a way of managing stress in order to avoid physical and psychological strain that could emanate from stress.
- Employees should always go for at least one or two hours break in order to get refreshed before going back to work as this could also go a long way in improving their productivity.

6. References

- i. Bartels, E. (2020). Occupational stress and employee productivity: the case of cape coast technical university. Unpublished masters' thesis, Cape Coast Technical University.
- ii. Igbokwe, I. C., Itoya, J., &Eziuzo, G. O. (2020). Long hours of work and employee productivity in Nigerian universities. *European Journal of Human Resource Management Studies*, 4, (2): 189-204
- iii. Jemilohun, V.G., Babalola, E.G., &Nkire, N.L. (2019). Effect of stress on employee productivity in the Nigerian insurance industry. *International Journal of Advanced Academic Research Social and Management Sciences*, 5, (11): 28-36
- iv. Karunanithy, K., & Ponnampalam, A. (2013). A study on the effect of Stress on productivity of employees in Commercial Bank of Ceylon in the Eastern Province. *European iJournal of Business and Management*, 5, (27): 87-95.
- v. Odor, H. O. (2019). Work related stress and employee commitment at Delta State Polytechnic, Ogwashi Ukwu, Delta State, Nigeria. *Global Journal of Management and Business Resources, Administration and Management*, 19(1): 25-36.
- vi. Okeke, C., Chukwuemeka, E. &Amobi, D. (2017). Occupational stress and the productivity of non-teaching staff of selected universities in the South Eastern Nigeria. *Management Studies and Economic Systems*, 3(3): 183-196
- vii. Orji, M. G., and Yakubu, G.N. (2020). Effective stress management and employee productivity in the Nigerian public institutions; a study of national Gallery of Arts, Abuja, Nigeria. *Budapest International Research and Critics Institute-Journal (BIRCI Journal)*. IP. 1303-1315.
- viii. Onyia, G. N. (2016). Job Stress and coping strategies among staff of polytechnic ilibrariesi in Nigeria. *Journal of Information and Knowledge Management*, 7 (1):176 – 190.
- ix. Radha, S. (2014). A study on the effect of stress on the productivity of employees in the commercial bank of Ceylon in the eastern province', *European Journal of Business Management*, 1 (27): 87-95.
- x. Sahbudin, F., & Halim, M. (2017). Work stress and job productivity: The case study among Malaysian Polytechnics academic staff. *International Journal of Scientific & Engineering Research*, 8, (1): 919-928.
- xi. Sayogo, Y. (2020). The concept of employee productivity of service companies in Indonesia. *Research gate*, May, 1–6.
- xii. Suroyo, D. (2016). Discipline that has an impact on employee productivity. *Parameters*, 2(001), 195.
- xiii. Sulaiman, N., & Baksh, A. (2019). Role of stress management in increasing employee productivity at workplace. *Journal of Recent Technology and Engineering*, 8, 2: 744: 746.
- xiv. Syahputra, F., Andika, R., & Amelia, O. (2022). Analysis of the effect of compensation, organizational culture, work stress on employee productivity in the administration section of the environmental polytechnic of Medan. *Rowter Journal*, 1, (1): 35-42.