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Occupational Stress on Job Performance of Staff of the University of Mines and Technology (Umat), Tarkwa, Ghana

Theophilus Andoh-Robertson

Head, Guidance and Counselling Unit, University of Mines and Technology (UMaT), Ghana

Bright Thomas Eshun

Senior Assistant Registrar, University of Mines and Technology (UMaT), Ghana

Samuel Effah

Head, Audit Unit, University of Mines and Technology (UMaT), Ghana

Papa Yaw Attobrah

Senior Architect, University of Mines and Technology (UMaT), Ghana

Abstract:

The main aim of this study was to assess the occupational stress levels of university staff and to analyse its effect on job performance. Descriptive survey design was adopted as the research design of the study. The primary data were collected through a self-designed questionnaire survey from 234 staff of University of Mines and Technology (UMaT), Tarkwa, Ghana. The Research instruments were validated and tested at 0.05 level of significance. The reliability of the instrument was estimated using split half method and coefficient value 0.81 was obtained. The study population was 468 teaching and non-teaching staff. A sample of 234 staff (representing 50% of the population) was drawn through quota sampling technique. The findings revealed that UMaT staff had high levels of stress; the major stress factor was work overload; there was low positive relationship between job stress and job performance; also, there was no significant difference between the level of stress experienced by both the teaching and non-teaching staff. Based on the findings, it was recommended that Counsellors should introduce stress management strategies for staff to help manage their stress levels. Also, Government should give financial clearance for management of universities to recruit adequate qualified staff to reduce work overload among others to reduce stress levels of staff.

Keywords: Job stress, job performance, stressors, teaching and non-teaching, work overload

1. Introduction

1.1. Background to the Study

In other words, occupation has become an integral part of our lives. Employees are the most valuable assets in any institution due to their main roles in the institution's effectiveness. Their occupational stress can therefore not be underestimated. Stress is a condition of physical, psychological and mental disorder which occurs in a situation of pressure, when resources are unable to fulfill the demand of an individual. Most of the time of workers lives is spent at work where job stress is mostly experienced and so pervasive that it's been found to affect people in every sector (Naqvi, S.M.H. et al. 2013). Job stress produces large number of undesirable effects for both individuals and the organization. The incidents of low productivity, hypertension and other health related challenges are the severe problems related to stress. Job stress affects not only the employees' but also the organization in monetary and non-monetary costs (Kissi-Abrokwa. et al, 2015). Adebola (2011) regarded stress as a psychological process that involves an individual's personal interpretation and response to any threatening event. He added that stress sometimes depends on individual's perception and interpretation of the situation.

Occupational stress usually occurs when an individual cannot cope with pressure or tension of assigned work. Some of the factors which cause stress at workplace could be work overload, meeting deadline, excessive responsibility, poor relationship with colleagues, poor relationship with management, inappropriate work system, poor management style, overtime and working on holidays, harassment, giving too much challenging and creative works (De Silva & Thilakasiri, 2014). One of the most sensitive and stressful, yet important occupation is that of the universities. Mostly, university staff consist of three categories, namely; the junior staff, senior staff and senior members. On the basis of their work, they are further classified into teaching and non-teaching staff. The study of their occupational stress levels as the basis of their job performance can therefore not be overlooked.

1.2. Statement of the Problem

The world at large is filled with people who are always working to make ends meet. It is packed with people who work for themselves, for others, in Government or private sectors and so on. A disturbing trend in many organisations, especially, in universities is the issue of stress among workers. It is therefore necessary to give attention to staff stress at universities for proper decision making. According to Akuezuilo (2019) stress is the effect and reactions between an individual and his environment mentally, physically, psychologically, socially and financially. Stress is actually inevitable in life, though it is not always bad. It sometimes serves useful purposes. It could lead to great progress in life. However, if the stress is allowed for a long time, it could seriously interfere with one's job, family life and health (Meneze, 2006). To overcome these situations, it is important to assess the causes of stress at workplaces and their influence on job performance. It is worthy of note that among the staff of the tertiary institutions in Ghana, particularly the University of Mines and Technology (UMaT), Tarkwa, the issue of work-related stress is yet to be properly assessed to ascertain its impact on their job performance. While lecturers teach large classes up to 500 students per semester, administrators or non-teaching staff work up to 40 hours per week and beyond, in addition to inadequate staff and space they operate with. Therefore, the study sought to assess levels of stress on staff and their relationship on job performance on staff of UMaT for effective decision making.

1.3. Aim and Objectives of the Study

The aim of this study was to assess the levels of stress on UMaT staff and how they affect the job performance of the staff. In order to achieve the main aim, the researchers were guided by 4 specific objectives:

- To evaluate the level of stress among the staff of UMaT;
- To investigate the most significant stressors which increase the level of stress of a university staff;
- To determine the relationship between stress and job performance among the staff of UMaT; and
- Compare the stress levels of the non-teaching and teaching staff in UMaT.

1.4. Research Questions

- What is the level of occupational stress of staff in the University of Mines and Technology, Tarkwa?
- What are the key stressors amongst the staff of UMaT?

1.5. Hypotheses

- H2: occupational stress will significantly affect job performance of staff in UMaT.
- H1: non-teaching staff in UMaT would be more significantly stressed than their teaching counterparts

1.6. Significance of the Study

In UMaT, occupational stress is not being given the attention it deserves and so very little has been done as far as assessing the effect of stress on job performance within the University is concerned. It is in the light of this that the study is deemed very significant, as it will:

- Unearth the major stressors among university staff and knowledge of its effect on job performance might provide opportunity to shape the positive organisation tone by adopting policies on stress management to enhance job performance.
- Create awareness among management and policy makers on the need to provide the needed platform to help staff deal with their stressors.
- Finally, the study contributes to literature on occupational stress on job performance in the Ghanaian university context.

2. Literature Review

2.1. Theoretical Framework

2.1.1. Job Stress

Job stress is a phenomenon that every employee or employer faces at job and handles it differently in one's own way. It is basically a mismatch between the individual capabilities and organizational demand (Jayashree, 2010). Stress puts drastic effects on employees. Mostly, employees under stress are unable to meet the expectations of their organization, because of physical, psychological and organizational burnouts (Khattak et al., 2011). There are several factors which cause stress in employees at job. Watts (1991) found that 75% of university workers who reported long working hours, work overload and lack of support were nevertheless satisfied with their jobs. Further studies among staff at higher education institutions by Earley (1994) showed the most significant stressors include management styles, unmanageable workload, too much administrative work, lack of information, change in conditions of service, lack of administrative support, inadequate resources, and uncaring organisation among others.

Kusi, Danso & Gyaki (2014) assert that excessive workload was one of the major causes of stress among academic staff of the university. In addition, De Silva & Thilakasiri (2014) found that there was low positive relationship between stress and productivity. Stress was found not to be a significant factor of employee performance. However, Coetzee & Rothmann (2005) reiterated that working in a higher institution has been considered relatively stress-free and highly satisfying.

2.1.2. Job Performance

Job Performance is about perceivable practices that workers achieve in their employments that are significant to objectives of the organization. Job performance have the capacity to make the flexible workplace, organized trainings, enhances innovation aptitudes with respect to production to influence the representatives to feel more comfort and ought to expand the employees' quality and contribute towards job performance. In reality, the job performance alludes to the employees' participation and the degree could accomplish with them by taking care of the considerable number of issues that happen in the work environment (Arvey& Murphy, (1998); Laeeque (2014)

2.2. Conceptual Framework

Conceptually, University staff is likely to experience occupational stress because they are operating in a very challenging professional context. For instance, for the teaching staff at the public Universities, some teach large classes up to 800 students per semester, while administrators or non-teaching staff work up to 8 hours a day and beyond in addition to inadequate staff and space they operate with. Therefore, due to unfavorable conditions and work overload, they are operating from could cause them to be stressful that could affect their job performance or productivity.

3. Research Methods and Materials

This study used survey questionnaire to collect data. Ofori & Dampson (2011) defined survey as the collection of standardized information from a specific population. The questionnaires were in three parts. The first part sought demographic information from the respondents. The second part 'B', sought responses on occupational stress of the respondents and the last part 'C', respondents answered questions on job performance.

The total population for the study was 468; this included three hundred and forty-six (346) non-teaching and one-hundred and twenty-two (122) teaching staff of UMaT. Through quota and convenient sampling technique, a sample size of 234 staff (138 non-teaching and 96 teaching) representing 50% from each staff category were drawn for the study. The quota sampling technique was employed to produce a sample that reflects relative proportions of the teaching and non-teaching staff populations for the study (Ofori & Dampson, 2011). In all, 234 questionnaires were distributed to assess levels of job stress and its effects on job performance. The data collected were analysed using Statistical Package for Social Sciences (SPSS Version 26.0). SPSS was adopted because it is able to handle large amount of data and capable to perform all of the analysis covered in the text.

3.1. Validity and Reliability

The questionnaire was validated by pilot testing with some GES staff. The pilot testing unearthed the flaws in terms of wording, poor choices and ambiguities in the instruments. Also, the University Counsellor as well as some test experts scrutinized the instruments before use, hence, promoting the validity of the instruments. The calculated Cronbach's coefficient alpha in this research was calculated to be equal to 0.78. Therefore, the reliability of the questionnaire was evaluated to be highly desirable.

4. Presentation and Discussion of Results

The purpose of the study was to examine the relationship between the job stress and job performance amongst the staff of UMaT. The statistical methods used in this research were inferential and descriptive methods. T-test was used to examine the significance of the difference in mean score of respondents' opinions based on job category and stress levels. The data were analyzed using SPSS software 26.0. The assumption of the normality of the data was tested at a significant level of 5% using self-designed questionnaire. In all cases, the significance value was obtained as to be greater than 0.05. Therefore, the distribution of research data was normal.

Category of Staff	Population	Percentage
Non-teaching	138	58.9%
Teaching	96	41.1%
Total	234	100

Table 1: Distribution of Respondents on Non-Teaching and Teaching Staff

Using quota sampling technique, table 1 indicates that 58.9% and 41.1% non-teaching and teaching staff respectively were sampled for the study.

Level of stress	SA	%	A	%	D	%	SD	%	Total
Very high level	14	22.7%	44	68.2%	6	9.1%	0	0.0%	64
High level	41	40%	52	51.4%	6	5.7	3	2.9	102
Moderate level	15	26.3%	29	52.6%	9	15.9%	3	5.3%	56
Low level	0	0.0%	6	50.0%	3	25.0%	3	25.0%	12
Total	70	(29.9%)	131	(55.9%)	24	(10.3%)	9	(3.8%)	234

Table 2: Level of Job Stress

List wise: 234

From Table 2, 70(29.9%) and 131(55.9%) are SA (Strongly agree) and A(Agree) responses respectively while 24(10.0%) and 9(3.8%) are D (disagree) and SD (Strongly Disagree) responses respectively. It could be observed that the summation of SA (Strongly Agree) and A(Agree) responses of 201(85.8%) is greater than D (Disagree) and SD (Strongly Disagree) responses 33(14.1%). The implication is that the respondents agreed that the staff is experiencing high levels of occupational stress. This study therefore corroborates with the findings of Blaud, Kenyon & Lekhi, (2007) that the level of psychological distress amongst staff of higher institutions is comparatively high.

Causes of Job Stress	SA	%	A	%	D	%	SD	%
Excessive responsibility due to inadequate administrative staff	120	51.3	94	40.0	14	6.2	6	2.5
Pressure to perform to meet rising expectations	53	22.5	114	48.8	41	17.5	26	11.2
Pressure to work at optimum level all time	32	3.8	85	36.2	81.9	35.0	54	22.5
Too many course allocations per semester	96	41.2	74	31.3	44	18.8	20	8.7
Too many administrative duties	79	33.7	105	45.0	38	16.3	12	5.0
Writing of articles, conference papers, committee, minutes and reports etc.	41	17.5	82	35.0	58	25.0	53	22.5
Frequent meetings	91	38.8	85	36.2	44	18.8	14	6.2
Demand for extension services	17	7.5	51	21.2	99	42.5	67	28.8
Poor Remuneration	9	3.7	35	15.0	126	53.8	64	27.5

*Table 3: Major Factors of Occupational Stress among Staff of Umat
List Wise N: 234*

Table 3 showed that majority of the responses: Strongly Agreed (SA) and Agreed (A) on the causes of job stress among UMaT staff to be too many course allocations(72.5%), excessive responsibility due to inadequate administrative staff (91.3%), too much administrative duties(78.7%), frequent meetings (75%)and Writing of articles, conference papers, minutes and reports (52.5%). This is an indication that major stressors among the UMaT staff is work overload; thus, excessive responsibility due to inadequate administrative staff, too many administrative duties, too many course allocations, frequent meetings, as well as writing of articles, conference papers and committee reports. In line with this study, Earley (1994) and Watts, et al. (1991) found that university workers who reported long working hours, work overload and lack of support were stressed and nevertheless satisfied with their jobs.

	Job Performance (JP)	Stress Level (SL)
Job Performance (JP) Pearson Correlation	1	.023
Sig. (2-tailed)		.831
N	234	234
Stress Level (SL) Pearson Correlation	.023	1
Sig. (2-tailed)	.831	
N	234	234

*Table 4: Correlation between Stress and Job Performance
**Correlation Is Significant At 0.01 Levels*

Table 4 represents the correlation between stress level (SL) and job performance (JP). From the table, the correlation of coefficient is 0.023 which meant that there is low positive relationship between stress and job performance. The significant level of p value is equal to 0.851 which is greater than 0.01. Hence, there is low positive statistically significant relationship between stress and job performance among UMaT staff. Therefore, the null hypothesis has been rejected. This is an indication that though staff of UMaT is stressed, they are able to perform their assigned tasks effectively. This could be due to the fact that the staff is more self-motivated among other things to achieve results. The study findings therefore conform to the study by De Silva & Thilakasiri (2014) that there is low positive relationship between stress and productivity. Stress is not the significant factor of employee productivity. However, it is in contrast with the findings of Meneze (2006) that job stress was negatively associated with the employees' productivity and decreases the productivity of employees.

	Staff	N	Mean	Std. Deviation
Occupational stress	Non-teaching	138	22.64	4.86
	Teaching	96	22.90	4.95

Table 5: Significant Difference in the Level of Occupational Stress of Non-Teaching and Teaching Staff of Umat

Independent sample t-test was performed to test whether or not there was a significant difference between mean scores in job stress obtained by both non-teaching and teaching staff. The mean scores of non-teaching staff was $M = 22.64$; $SD = 4.86$ and teaching staff was $M = 22.90$; $SD = 4.95$. The mean difference of 0.11 of the tests indicated that there was no statistical significant difference in their job stress, ($df = 238$, $t = -.43$; $n=234$; $p < 0.05$). This is likely to be as a result of the fact that both non-teaching and teaching staff are exposed to the same environmental conditions, among others. Thus, it was concluded that both non-teaching and teaching staff have almost the same levels of job stress. Therefore, the hypothesis which states that non-teaching staff would be more significantly stressed than their teaching counterparts is rejected. The study contrasted the findings of Akuezuilo (2019) in a study conducted to assess the stress levels of teaching and non-teaching mothers in tertiary institutions in Anambra State and found that there was significant difference in the mean score of teaching and non-teaching working mothers on their levels of stress. They concluded that the non-teaching staff experience more stress than their teaching counterparts.

5. Summary Findings, Conclusion and Recommendations

This study assessed the relationship between occupational stress and job performance among university staff in the University of Mines and Technology, Tarkwa, Ghana.

5.1. Summary of Findings

The empirical results of the study show interesting occupational stress levels of the respondents. The results showed that:

- Majority of the staff in UMaT have high levels of job stress in the working environment. The main reason for their stress was work overload. The key stress factors were identified as excessive responsibility due to inadequate administrative staffing; too much administrative duties; too many course allocations; frequent meetings as well as writing of articles, conference papers and reports. All these negative stress factors had causal relationship with the job stress. The research indicated that as increase in these stressors happened, job stress also increased
- Based on the result of the hypothesis testing, there was a low positive relationship between stress and job performance. It also showed that there is no statistical significant relationship between stress and job performance. Hence, stress is not the main important factor on the Job performance of UMaT staff. Therefore, hypothesis has been rejected. This is an indication that though staff of UMaT are stressed, they are able to perform their assigned tasks effectively. This could be due to the fact that the staff are more self-motivated among other things to achieve results. The results of this research are inconsistent with the finding of Jamal (2011), which sought to investigate the relationship between occupational stress, job performance and organizational commitment in international companies, and concluded that there was a significant positive correlation between occupational stress and job performance.
- The mean difference of 0.11 of the tests indicated that there was no statistically significant difference in non-teaching and teaching staff job stress, ($df = 238$, $t = -.43$; $n=234$; $p < 0.05$). This is likely to be as a result of the fact that both non-teaching and teaching staff are exposed to the same campus conditions, among others. Thus, it was concluded that both non-teaching and teaching staff of UMaT have almost the same levels of job stress. Therefore, the hypothesis which stated that non-teaching staff will be more significantly stressed than their teaching counterparts was rejected.

5.2. Conclusion

Occupational stress has become one of the vital concerns for many institutions these days. On the basis of empirical findings, it is concluded that job stress is a real challenge for staff in UMaT. It is worthy of note that working conditions is continuously monitored for stress related factors. Further, it is important to create a healthy environment in which employees work in a more efficient way. For this purpose, the study was conducted to assess the effects of job stress on staff performance in the University of Mines and Technology UMaT, Tarkwa, Ghana. Majority of the respondents indicated that excessive responsibility due to inadequate administrative staff; too many administrative duties; too many course allocations; frequent meetings as well as writing of articles, conference papers and reports. All these negative stressed factors have causal relationship with the job stress. Though the staff were found to be highly stressed, the correlation analysis indicated there was no statistical significant relationship between stress and job performance. The results also showed that, both non-teaching and teaching staff have almost the same levels of job stress. Therefore, the hypothesis which states that non-teaching staff would be more significantly stressed than their teaching counterparts was rejected.

5.3. Recommendations

The general conclusion of the study was that UMaT staff were stressed due to work overload. It is therefore recommended to the University management to employ adequate number of staff to help ease the pressure of work load

on the few available staff for effective job performance. University Counsellors should initiate stress management strategies for staff to enable them curb their stress levels. This could be done through individual or group counseling, seminars and workshops. Equally, individual staff should combat stress with good eating habits, exercises, engaging in some positive social activities among others.

The present study recognized several limitations, first of all, the population of staff from UMaT (n = 468), the sample size of present study (234) is small so the findings could not be generalized to all tertiary institutions in Ghana. Future researchers should therefore choose bigger sample size and collect data from both public and private Universities in Ghana to be able to generalize the results. Also, other variables such as effects of stress on occupational health and safety of employees could be considered.

6. References

- i. Adebola, T. M. (2011). *Examination stress, its rape and management*. Calabar, Rapid Educational Publisher Limited.
- ii. Akuezuilo, J. A. (2019). Comparative Study of Level of Stress among Teaching and Non-Teaching Mothers in Tertiary Institutions in Anambra State. *International Journal of Research and Scientific Innovation (IJRSI) | Volume VI, Issue X, | ISSN 2321-2705*
- iii. Arvey, R. D., & Murphy K.R. (1998). Performance evaluations in work settings. *Annual Review of Psychology, 49, 141-168*
- iv. Blaud, R., Kenyon, A. and Lekhie, R. (2007). *Stress at work: A report prepared for the work Foundation principal partners*. London: The Work Foundation.
- v. Earley, P. (1994). *Lecturers' workload and factors affecting stress levels*. Slough: NFER.
- vi. Jamal M. (2011) Job stress, job performance and organizational commitment in a multinational company: An empirical study in two countries. *International Journal of Business and Social Science. 2:20-29*.
- vii. Jayashree, R. 2010. Stress management with special reference to public sector bank employees in Chennai. *International Journal of Enterprise and Innovation Management Studies. 1(3): 34-39*.
- viii. Khattak, et al. 2011. Occupational stress and burnouts in Pakistan's banking sector. *African Journal of Business Management. 5(3): 810-817*.
- ix. Kissi-Abrokwah, B. Andoh-Robertson, T. Tutu-Danquah, C. Agbesi, C.S. (2015). Examining Work and Family Conflict among Female Bankers in Accra Metropolis, Ghana. *Journal of Education and Practice. ISSN 2222-1735 (Paper) (Online) Vol.6, No.1*
- x. Kusi, H., Danso Mensah, D. K., & Gyaki, K (2014). Work-related Stress among the Academic Staff of the University of Education, Winneba Campus Ghana. *Journal of Education and Practice, 5(13), 15-23*
- xi. Laeeque, S. H. (2014). Role of Work-Family Conflict in Job Burnout: Support from the Banking Sector of Pakistan. *International Letters of Social and Humanistic Sciences (ILSHS), 29, 1-12*.
- xii. Meneze, M. N. M. (2006). The impact of stress on productivity of employees at the education training and development practices: Sector education and training authority. *Presented at: University of Pretoria., 1-140*.
- xiii. Naqvi H. M. S., Khan A. M., Kant Q. A. Khan N. S (2013). Job Stress and Employees' Productivity, Case of Azad Kashmir, Public Health Sector. *Interdisciplinary Journal of Contemporary Research in Business. Vol. 5, No.3, PP 526-542*
- xiv. Ofori, R. & Dampson. D. G. (2011) *Research method & statistics using SPSS*. Kumasi: Payless Publication.
- xv. Pediwal, G. L. 2011. Excessive stress and its impact on employee behavior. *Journal of Global Economy. 1(1): 13-40*.
- xvi. De Silva R. D. & Thilakasiri K. K. (2014). Analysis of Stress on Employees' Productivity: A Study based on Air Force Officers in Sri Lanka. *Kelaniya Journal of Human Resource Management. Vol. 09(01) 118*
- xvii. Coetzee S. & Rothmann (2005). Occupational stress, organizational commitment and ill-health of employees at a higher education institution in South Africa. *Journal of Industrial Psychology, 31 (1), 47-5*
- xviii. Watts, W.D., Cox, L., Wright, L.S., Garrison, J., Herkimer, A. & Howze, H.H. (1991). Correlates of drinking and drug use by higher education faculty and staff: Implications for prevention. *Journal of Drug Education, 21, 43-64*.