# Occupational Stress and Job Performance of Administrative Assistants in a University

#### MARIEA. A. BAKAH & SAMPSON AMPONSAH ATIAKO

#### Abstract

Work-related stress undoubtedly could negatively affect job performance in any given institution and thereby have serious implications for the overall output of the institution, if not well managed. The study sought to find out the factors that contribute to occupational stress among administrative assistants of a public university in Ghana and the coping strategies adopted by the staff to deal with stress-related problems. Stratified sampling technique was used to select 150 respondents from a total population of 300 for the study. Questionnaires were used to collect data which were analyzed using frequencies, percentages and simple linear regression. Results of the study revealed that workload and inadequate remuneration were the major causes of occupational stress among central administration administrative assistants. In order to relieve stress, they often visit other colleagues in their offices to discuss matters unrelated to their work thereby affecting productivity at the university. University management commitment to employee-related issues such as paying attention to workload, conflict, working environment, supervisor's recognition of outstanding work output of staff and the introduction of proper stress management training programmes were perceived as significant steps which if practiced, could contribute to improved productivity of staff.

## Introduction

Occupational stress and other psychological factors are recognised worldwide as a major challenge to workers' health and the health of organisations (Jamal, 2007; Raza, 2012). Occupational stress has been proved to adversely impact on individuals' psychological and physical health, as well as organisational effectiveness (Visotskaya, Cherkashina, Katcin, & Lisina, 2015). Workers who are stressed are more likely to be unhealthy, poorly motivated and less productive. Organisations whose workers are stressed are less likely to be successful in a competitive market (Lackritz, 2004; Beehr, Jex, Stacy & Murray, 2000). Studies estimate that work-related stress alone costs the business and government of European countries about twenty billion Euros (€20 billion) in absenteeism and related health costs, in addition to the price of lower productivity, higher staff turnover and reduced ability to innovate (European Commission's Report, 2004). In the United Kingdom during the year 2000, one in every five workers was extremely or very stressed as a result of occupational influence (World Health Organization's Report, 2005). In Sweden during the year 1999, 14% of the 15,000 workers on long sick leave said the reason was stress and mental strain. The total cost of sick leave to Sweden in the year 1999 was £2.7 billion (World Health Organization, 2005).

In the United States, problems at work seem to be more strongly associated with health complaints than any other life stressors, including financial or family problems. Out of the 200 respondents in a survey, 68% confirmed that they had to work very fast and 32% never had enough time to finish their work. The health care expenditure in the United State of America is 50% greater for workers who report high levels of stress at work (Kortum-Margot, 2007). Seyle (1981) defined stress as "the no specific (physiological) response of the body or any demand made upon it" (p.45). Seyle viewed stress as the individual response to the demand of his environment. Human beings react to stress by exhibiting anxiety, hopelessness, depression, and irritability. For most people, every day of their lives contains some stress. Some of these experiences of stress are welcoming whereas others bring grief. Research indicates that the phenomenon of occupational stress in universities is widespread and is increasing exponentially. A key finding on a national survey conducted in 2002 on occupational stress in Australian universities is that approximately 50% of Australian University staff taking part in the survey were at risk of psychological illness compared with only 19% of the Australian population (Winefield, Gillespie, Stough, Hapuararchchi, & Dua, 2002).

A study executed in 2004 at the University of Luton and the University of Leeds on stress and work-life balance in academic and academic-related employees in the United Kingdom, found 69% admitting that they experienced high levels of job stress (Kinman, & Jones, 2004). Winefield, Gillespie, Stough, Dua, and Hapuarachchi (2003) found that the major cause of occupational stress among Australian University staff was financial difficulties which had been imposed on them and led to serious consequences for their psychological well-being. Occupational stress in higher education is a worldwide problem which needs to be frequently debated and researched (Nabirye,

Volume 6

Brown, Pryor, & Maples, 2011). According to Olivier, De Jager, Grootboom, and Tokota (2005), 'the pressure of change, as well as challenges such as financial constraints, increased workloads, the information and technological revolution, changes in student demographics and student levels of preparedness, changes in management styles and structures, tended to become stressors and taking their toll on many tertiary staff' (p.175).

In Africa and specifically in Ghana, researches on job stress conducted on academic staff show that administratively, the lecturers work as counsellors, examination officers, postgraduate coordinators, departmental heads, directors, deans and many other positions of responsibilities make them extra busy (Kusi, Mensah & Gyakyi, 2014). With regard to their teaching responsibilities, some teach extremely large classes (up to 400 students per semester), supervise theses, dissertations and project work. Indeed, in some extreme cases, some lecturers supervise up to 30 students per semester, owing to the running of both regular and sandwich programmes. Nonetheless, lecturers are expected to publish high-quality research in reputable journals to be promoted within the institution. Thus, the lecturers work is under increasing pressure to meet targets set by the university. However, attempts made by the university to support the academic staff to cope with this increasing pressure appears to prove futile, as a research conducted by Gyakyi (2013) suggested that the lecturers do not patronise the counselling services provided by the university to enable them overcome such pressures. In a similar manner, the workload of administrative assistants is very hectic. They work as secretaries to various committees, rapporteurs, administrators and secretaries in their various offices. It is observed that in a semester, an administrative assistant is known to attend more than twenty meetings for committees and boards to serve as recorder (sometimes under an assistant registrar). After the meeting, they are supposed to put together in a chronological manner the agenda that were discussed in the meeting and report them as was stated by the various authors of the statements during the meeting. In many cases, right after attending the meeting, it is also expected that the administrative assistants are to serve students and sometimes there is the likelihood that majority of them are not able to complete the days' work and will stay in after work to complete it before going home. Even sometimes, these administrative staff have to travel with

their heads of department for meetings and other conferences or seminars outside the university campus.

# Factors Associated with Occupational Stress and their Effects on Job Performance

Numerous studies found that job stress influences employees' job satisfaction and their overall performance (Chaudhry, 2012). Because most of the organisations have become more demanding for better job outcomes and in the quest to meet the demands of the occupation, stress builds up in workers and in some instances affects their performance negatively. Ahsan, Abdullah, Fie, and Alam (2009) have found that the determinants of job stress among public university academicians include management roles, relationship with others, workload pressures, homework interface, role ambiguity, and performance pressure. Ahsan et al. (2009) further found that there was a significant negative relationship between job stress and job satisfaction. Gillespie, Walsh, Winefield, Dua, and Stough (2010) delved into university staff perceptions of the causes, consequences and moderators of stress and discovered that there were higher levels of stress among academic staff than the general staff. Five major sources of stress were identified including: insufficient funding and resources, work overload, poor management practice, job insecurity, and insufficient recognition and reward. According to Gillespie et al. (2010), the majority of groups reported that job-related stress was having a deleterious impact on their professional work and personal welfare. Mechanisms reported to help staff cope with stress related to aspects of the work environment (support from co-workers and management, recognition and achievement, high morale, flexible working conditions), and personal coping strategies (stress management techniques work/non-work balance, tight role boundaries and lowering standards) [Ismail, Yao & Yunus, 2009]. The findings provide a timely insight into the experience of stress within universities.

Occupational stress among university staff can have a profound impact on student learning outcomes and thereby on the contribution that such institutions make to society. Organisational performance can be affected by decreasing productivity and efficiency which affects the organisation negatively. According to Catano *et al.* (2010) stress surveys in U.K. and Australian universities demonstrated high occupational stress levels among faculty which was not the case among Canadian university staff. El Shikieri and Musa (2012) found job stressors among Sudanese university staff to be role conflict and ambiguity, lack of participation in decision making, lack of authority, workload, unsatisfactory working conditions and interpersonal relationships. They also found that job stressors negatively affected the general physical health of employees, their job satisfaction and performance as well as their commitment. They recommended that the university should, for example, increase the number of staff needed to perform the tasks and/or decrease the number of students enrolled. Similarly, Keshavarza and Mohammadib (2011) researched to determine the factors associated with occupational stress and their relationship with organisational performance at the University of Tehran with the results indicating that most of the employees experienced high degree job stress which affected job performance negatively. Due to role expansion of university staff which is occasioned by expanding enrolments in universities without a proportional increase in human resources occupational, stress keeps increasing (Sun, Wu & Wang, 2011). The consequences of occupational stress are dire. Shen, Yang, Wang, Liu, Wang and Wang (2014) discovered that stress can lead to depression or show of depressive symptoms among university staff. Poor coping ability may worsen stressrelated illnesses (Blix & Lee, 1991).

# **Statement of the Problem**

There have been many studies conducted to find the effects of stress on job performance. In their study on the effects of occupational stress on the University Teachers in South India, Reedy and Poornima (2012) found that occupational stress contributes to organisational inefficiency, high staff turnover, absenteeism, decreased quality and quantity of practice, increased costs of health care, and decreased job performance. Malek (2010) found a strong correlation between stress and job performance of university staff in a research on the impact of job stress on job performance among university staff in Malaysia. Similarly, Nortje (2007) concluded from a research conducted on the effects of stress in the workplace at the Tshwane University of Technology that, organisations whose workers are stressed are also less successful in a competitive market. In their research, Jehangir, Kareem, Khan, Jan and Soherwardi (2016) who focused on the effects of job stress on job

performance among female academic staff of the University of Pakistan, found that the causes of job stress among the female academics were excessive workload, unhealthy and dangerous working environment, insufficient resources, conflicting demands, lack of professional respect, lack of promotion chances, inadequate pay and benefit, domestic problems and marital problems. It was found that job stress negatively affected the performance of the female academic staff.

In Ghana, Kusi, Mensah and Gyakyi (2014) found that occupational stress had various effects on the job performance of academic staff of the University of Education, Winneba ranging from absenteeism, aggression, poor quality of work, anxiety, depression, forgetfulness, staff conflict and ill-health. Stress and teacher performance were found to be significantly related in a study conducted on work stress and performance of faculty members of a Ghanaian Technical University by Azila-Gbettor, Atatsi, Dodor, Adade, Tsorhe and Neequaye (2017). Andoh and Appiah's (2017) research on the effects of stress on the performance of staff of the College of Distance Education, University of Cape Coast, revealed that workload caused stress among the staff which affected their performance. Available literature seems to indicate that no research has been conducted to find out the effects of occupational stress on the job performance of administrative assistants of the public universities in Ghana. One of such key public University in Ghana is investigated in this study to find out the effects of occupational stress on the job performance of administrative assistants who work in the central administration, paying attention to the causes, symptoms, effects and management and coping strategies adopted. Since the administrative assistants at the central administration offer a huge support to the functioning of the university management and the university as a whole, this study will help to develop a better understanding of their occupational stress and job performance. The research questions that guided the conduct of the study are:

- 1. What factors contribute to occupational stress among the administrative assistants?
- 2. What stress symptoms are experienced by administrative assistants?
- 3. What are the influences of stress on job performance among administrative assistants?

4. What management and coping strategies are adopted by administrative assistants to deal with stress-related problems?

#### Methodology

The descriptive research design was adopted in this study with the concepts and issues assessed through the quantitative method using mainly questionnaires. According to the Division of Human Resource of the selected University of study, the population of administrative assistants of the central administration was 300 in 10 sections. The 10 sections were the Office of the Pro-Vice-Chancellor, Office of the Registrar, Directorate of Finance, Directorate of Internal Audit, Directorate of Physical Development and Estate Management, Directorate of University Health Services, Division of Legal Consular and General Services, Division of Human Resource, Division of Academic Affairs and Division of Public Affairs. The sample was made up of 150 administrative assistants, as a sample of about 150 is considered appropriate for a population of 300 (Krejcie & Morgan, 1970). Stratified sampling was used to select the respondents by rank. This was to ensure proportional representation as they exist within the population. Simple random sampling procedure was used to select respondents from the sub-groups which are, the Administrative Assistants, the Senior Administrative Assistants, Principal Administrative Assistants and Chief Administrative Assistants. Though most of the completed questionnaires were returned later on appointed dates, a few were collected on the spot. The return rate of the questionnaires was 100%. Data analysis was done with the use of Statistical Package for Service Solutions (SPSS version 23.0). While research questions one, two and four were all analyzed using frequency counts and percentage tables, research question three was analyzed using simple linear regression.

# **Results and Discussion**

# Factors contributing to occupational stress among Administrative Assistants

This research sought to find out the factors that contribute to occupational

54

stress among administrative assistants of the University's central administration. The results displayed in Table 1 indicate that the administrative assistants were mostly dissatisfied with all the stated factors and as such contributed to increasing their stress. The factors they were dissatisfied with included the scope of the job and responsibilities, salary and allowance, consideration of duties and responsibilities, physical working conditions, workloads which could not be completed during working hours, relationship with supervisors, job security of senior staff, feelings about the working situation at the present time, job stretching one's skills and ability to the full and treatment by supervisors.

Table 1:	Factors Contributing to Occupational Stress among			
	Administrative Assistants in Central Administration			

Occupational Stress	VS	S	NSDS	DS	VDS	Total
Factors	N(%)	N(%)	N(%)	N(%)	N(%)	N(%)
Job scope and responsibility	3(2.0)	6(4.0)	9(6.0)	27(18.0)	105(70.0)	150(100%)
Salary and allowance, considering duties and responsibilities	0(0.0)	0(0.0)	3(2.0)	15(10.0)	132(88.0)	150(100%)
Physical working conditions	0(0.0)	12(8.0)	6(4.0)	18(12.0)	114(76.0)	150(100%)
Workload which cannot be completed during working hours	0(0.0)	3(2.0)	0(0.0)	15(10.0)	132(88.0)	150(100%)
Relationship with supervisors	0(0.0)	27(18.0)	21(14.0)	33(22.0)	69(46.0)	150(100%)
Job security for senior staff	0(0.0)	6(4.1)	9(6.1)	51(34.7)	81(55.1)	150(100%)
Feelings about the working situation at the present time	0(0.0)	0(0.0)	3(2.0)	15(10.0)	132(88.0)	150(100%)
Fairly treated by your supervisors	0(0.0)	12(8.0)	0(0.0)	51(34.0)	87(58.0)	150(100%)
Job making full use of your skills and			<i>c(1</i> 0)	24(16.0)	112/74 0	150/1000/
ability Key: VS (Very Satisf	0(0.0)	9(6.0)	6(4.0)	24(16.0)	, ,	150(100%)

Key: VS (Very Satisfied), S (Satisfied) NSDS (Neither Satisfied nor Dissatisfied), DS (Dissatisfied) VDS (Very Dissatisfied).

The responses given are in agreement with the findings of Newman and Kinney (2004), who asserted that the university administrators they studied blamed their occupational stress on various aspects of the work environment which fell in the category of services they provided to students, university management and the university system as a whole. They are work domains to which administrators may attribute their stress. Henry and Evans (2008) noted that an increase in workload, hostile work environment, downsizing and shift work can result in occupational stress. They added that often, workload remains immense even though employees do their best to complete them, and the employees may feel stressed as a result. Codrington (2006) found out that work overloads and time constraints were significant contributors to work stress among community nurses, and this was supported by Al-Aameri (2003), who mentioned in his studies that one of the six factors of occupational stress is pressure originating from workload. Furthermore, Quick (2000) expressed the view that rapidly changing global scene is increasing the pressure of workforce to perform maximum output and enhance competitiveness. Indeed, to perform better on the job, there is a requirement for workers to perform multiple tasks in the workplace to keep abreast with changing technologies.

### Stress symptoms experienced by administrative assistants

This research also sought to find out the common stress symptoms experienced by administrative assistants with results on this aspect displayed in Table 2.

Stress Symptoms	Yes N(%)	No N(%)	Total N(%)
Severe Headache	126(85.7)	24(14.3)	150(100)
Irritability	33(22.0)	117(78.0)	150(100)
Emotional Illness	105(70.0)	45(30.0)	150(100)
Poor Judgement	60(40.0)	90(60.0)	150(100)
Fatigue	96(64.0)	54(36.0)	150(100)
Depression/General Unhappiness	96(64.0)	54(36.0)	150(100)
Less Successful in Competitive Market	84(56.0)	66(44.0)	150(100)

 
 Table 2:
 Common Stress Symptoms Experienced by Administrative Assistants in Central Administration

The results show that apart from irritability and poor judgement, the common stress symptoms that were experienced by administrative assistants were severe headache, emotional illness, fatigue, depression or general unhappiness and low success in a competitive market. The responses confirm findings from other researches carried out in the area of discussion. The finding is slightly similar to that of Jonge, Landsbergis and Vegchel (2005) who researched into this enterprise and noticed that physical symptoms that may occur because of occupational stress in the organisation include stroke, fatigue, headache, stomach aches, chronic mild illness, sleeping problems, muscular aches, disturbances and eating disorders. Psychological and behavioural problems that may be developed include anxiety, irritability, alcohol and drug use, feeling powerless and low morale. They also added that stress is normally associated with cardiovascular diseases, gastrointestinal disturbances, as well as mental and emotional illness. The environment in a developing country such as Ghana, where the family system is supportive and where social interactions are encountered more, may be a contributing factor to the less severe symptoms of stress.

# *Effects of stress on job performance among Administrative Assistants*

The research further sought to find out the effects of stress on job performance among the administrative assistants. The results as displayed in Table 3 show that the computed t-value for the statement on the fact that the university has poor working environment which negatively affects job performance was 1.89 with the computed regression coefficient value being 0.67. Paying attention to the second statement, it was revealed that there was a t-value of 1.74 and a regression coefficient of 0.90. The results on the management style in the university indicated that it contributed to 88% of low job performance among administrative assistants. This is evident from a computed tvalue of 0.81 and a regression coefficient of 0.88. The computed tvalue and a regression coefficient for unavailability of working equipment were 2.23 and 0.90 respectively. The result concerning the university not having good working conditions to enhance job performance also showed computed t-value of 2.08 and a regression coefficient of 0.76.

Table 3:	Occupational Stress and Job Performance of Administrative Assista			
	of the Central Administration			

Volume 6

Occupational Stress and Job Performance	T-value	Regression Coefficient (Sig. 2-tailed)
Poor working environment negatively affects job		
performance	1.89	0.67
Unclear promotion rules leads to low job performance	1.74	0.90
Management style which leads to low job performance	0.81	0.88
Unavailable working equipment leads to low job done	2.23	0.90
No good working conditions to enhance job performance	2.08	0.76
Poor salaries and rewards contribute to low job		
performance	0.48	0.80
Poor conditions of service lead to industrial unrest	1.83	0.87
Stress at work affects work output	0.26	0.89

Additionally, a computed t-value of 0.48 and a regression coefficient of 0.80 were obtained on the statement on poor salaries and rewards contributing to low job performance among administrative assistants. Furthermore, the results showed that for poor conditions leading to unrest among administrative assistants, the computed t-value was 1.83 while the regression coefficient was 0.87. Finally, the results showed a t-value of 0.26 and a regression coefficient value of 0.89 for the statement relating to stress at work place affecting work output.

The above findings show that occupational stress affects job performance and affirm the assertions of Campbell, Machinery, and Wise (2001), who postulated that poor organisational climate will influence and affect the performance of employees. They added that improving the work environment can decrease the risk of illness of employees thereby reducing the rate of stress. Again, Winefield et al. (2002) maintained that stressed staff who remain within the profession, on the other hand, are likely to be less productive in key areas such as administration, students' behaviour management, responsiveness to students and relationships with other stakeholders.

# Management and coping strategies to deal with stress-related problems

The study further sought to find out the management and coping strategies adopted by respondents to deal with stress-related problems. Table 4

58

Table 4:	Management and Coping Strategies to deal with Stress-Relate				
	Problems				

Management/Coping Strategies	Frequency	Percentage (%)
Clear management style in terms of communication		
to staff	3	2.0
Proper working environment for all staff	3	2.0
Workload must be reduced	66	44.0
No discrimination among members	3	2.0
Salaries and allowances must be paid on time	6	4.0
Promotion rules must be specifically based on job performance	6	4.0
Supervisors should give subordinates freewill to perform job	3	2.0
Management should involve subordinates decision making	6	4.0
Putting corrective measures to amend the situations	3	2.0
Reduce role conflict	3	2.0
More remuneration for staff	3	2.0
Staff could request for annual leave days	6	4.0
Opportunities for advancement should be clear and open	6	4.0
Regular sensitisation on occupational stress management	3	2.0
Management should listen to and address staff concerns on time	3	2.0
Management should motivate the staff well	3	2.0
Salaries and allowances to senior staff should be attractive	21	14.0
Total	150	100.0

indicates that 66(44%) of the respondents suggested the reduction of workload of the administrative assistants, with 21(14%) suggesting that salaries and allowances to senior staff should be attractive, while 30(20%) and 3(2%) each suggested that there should be clear management style in terms of communicating with the staff, proper working environment for staff, reduction of job responsibility, supervisors giving subordinates opportunity to freely perform job responsibility, putting in place corrective measures to amend the situation, reducing role conflict, increased remuneration for the staff, staff requesting for annual leave days, regular sensitisation on occupational stress management, addressing the concerns of staff on time and motivating the staff well respectively. Again 6(4%) of the respondents each suggested that salaries and allowances must be paid on time, promotion rules must be specifically based on job performance, management should involve subordinates/senior staff in decision making, staff to have the chance to request for annual leave days, and opportunities for advancement and promotion to be clear and open.

Coincidentally, the suggested measures to address the problem of work-related stress share similarities with what other researchers on the topic have proposed. For example, White (2005) asserted that in order to prevent role conflict, organisations should function according to the classic organisational theory principle of unity of command, which is that employees should be supervised by a single superior and work according to a single plan. White added that an organisation which cares for its employees must spare them the 'crossfire' of two or more superiors who have incompatible work instructions and expectations. Again, White (2000) opined that improving the work environment can decrease the risk of illness of all employees thereby reducing the rate of stress.

# **Conclusions**

Based on the findings of the study, it could be concluded that factors such as the scope of the job and responsibilities, physical working conditions, heavy workloads which could not be completed during working hours, one's relationship with supervisors, job security of administrative assistants and unfair treatment contribute to occupational stress among university administrative assistants. Conditions such as severe headache, irritability, emotional illness, poor judgement, fatigue, depression or general unhappiness and low success in competitive market were common stress symptoms experienced by administrative assistants. These symptoms affect the job performance of administrative assistants negatively. Additionally, it could be observed from the study that poor working environment, unclear job promotion rules, and unavailability of working equipment, poor salaries and rewards and delay in promotion among administrative assistants of the university negatively affect their job performance. The study also revealed that University administrative assistants facing stress on the job do not look unconcerned but make conscious effort to find other sources of coping with the situation.

# Recommendations

Based on the findings and conclusions from the study, the following recommendations are made:

- 1. University administrative work should be made more attractive by providing the administrative assistants with the necessary materials like scanners, photocopiers, and regular Internet access, that will facilitate the administration process of the University. In addition, the infrastructure of the university should be well designed to cater for the facilities to enhance the work of the administrative assistants.
- 2. Another issue of interest is the working condition of administrative assistants. An improvement of the service conditions in the university will be much welcome. The thrust of majority of grievances of university administrative assistants centre around working conditions. The institution of an insurance scheme for the university workers including administrative assistants who have worked for a stipulated period of time is likely to be a major booster in the working conditions of the university workers.
- 3. Administrative assistants of the University should be recognised for good work done. Staff members who excel in the performance of their duties must be recognised and rewarded. Such a reward need not necessarily be monetary or material, but simple words of encouragement and commendation could bring joy and happiness to the hearts of hardworking senior staff. The university authorities and stakeholders must look out for such hardworking staff for reward and commendation.
- 4. Periodic seminars should be organised on stress and its management by the Training and Development Unit of the

university in collaboration with the University Health Services. This will go a long way to enlighten the University administrative assistants on the subject of stress, its causes and symptoms, which will help in managing stress-related problems among administrative assistants in the University.

5. Finally, it is recommended that the university staff including senior administrative assistants should be encouraged to visit the university's guidance and counselling centre whenever they are faced with stress-related problems.

For the administrative assistants, it is recommended that the following self-helped tips should be observed as a way of dealing with stressful situations:

- 1. They should make time to rest or take their leave.
- 2. They should try to delegate responsibilities or share them, where possible. If one makes oneself indispensable, there is the likelihood of one feeling highly stressed.
- 3. Physical exercises have been proven to have a beneficial effect on a person's mental and physical state. For administrators, physical exercises are an extremely effective stress-buster.
- 4. Administrators could adopt some breathing technique in time of stress. This technique can slow down one's system and help one to relax.

### REFERENCES

- Al-Aameri, A. S. (2003). Sources of job stress for nurses in public hospitals. Saudi Medical Journal, 24(11), 1183–1187.
- Ahsan, N., Abdullah, Fie, D. Y. G., & Alam, S. S. (2009). A study of job stress on job satisfaction among university staff in Malaysia: Empirical study. *European Journal of Social Sciences*, 8(1), 121–131.
- Amedahe, F. K. (2002). *Fundamentals of educational research*. Cape Coast: UCC mimeograph.
- Andoh, R. P. K., & Appiah, R. (2017). Effects of stress on the performance of staff of College of Distance Education, University of Cape Coast. *European Journal of Business and Management*, 9(6), 58–64.

- Azila-Gbettor, E. M., Atatsi, E. A., Dodor, C. T., Adade, T. C., Tsorhe, D. K., & Neequaye, K. (2017). Work stress and performance of faculty members of a Ghanaian Technical University. *International Journal of Research in Business Studies and Management*, 4(10), 38–49.
- Beehr, T. A., Jex, S. M., Stacy, B. A., Murray, M. A. (2000). Work stressors and coworker support as predictors of individual strain and job performance. *Journal of Organizational Behavior*, 21, 391–405.
- Blix, A. G., & Lee, J. W. (1991). Occupational stress among university administrators. *Research in Higher Education*, 32(3), 289–302.
- Campbell, J. P., Mchenery, J. J., & Wise, L. L (2001). Modeling job performance in a population of jobs.*Personal Psychology*, 43, 313–333.
- Catano, V., Francis, L., Haines, T., Kirpalani, H., Shannon, H., Stringer, B., & Lozanzki, L. (2010). Occupational stress in Canadian universities: A national survey. *International Journal of Stress Management*, 17(3), 232–258.
- Chaudhry, A. Q. (2012). The relationship between occupational stress and job satisfaction: The case of Pakistani universities. *International Education Studies*, 5(3), 212–221.
- Codrington, G. (2006). The five most important people trends of the next five years. *People Dynamics*, 24(9), September: 21.
- El Shikieri, A. B., & Musa, H. A. (2012). Factors associated with occupational stress and their effects on organizational performance in a Sudanese university. *Creative Education*, 3(1), 134–144.
- European Commission (2004). *Guidance on work-related-stress: Spice of life or kiss of death?* Luxemberg: Office for official publications of European communities.
- Gillespie, N. A., Walsh, M., Winefield, A. H., Dua, J., & Stough C. (2010). Occupational stress in universities: Staff perceptions of the causes, consequences and moderators of stress. *International Journal of Work*, *Health & Organisations*, 15(1), 53–72.
- Gyakyi, A. A. G. (2013). Professional counselling in Nigeria: Past, present and future. *Journal of Counseling and Development*, 90(3), 362–381.
- Henry, O., & Evans, A. J. (2008). *Occupational stress in organizations*. Retrieved from http://www.indianjournals.com
- Ismail, A., Yao, A., & Yunus, N. K. Y. (2009). Relationship between occupational stress and job satisfaction: An empirical study in Malaysia. *The Romanian Economic Journal* 34(4), 3–29.
- Jamal, M. (2007). Job stress and job performance controversy revisited: An empirical examination in two countries. *International Journal of Stress Management*, 14(2), 175–187
- Jehangir, M., Kareem, N., Khan, A., Jan, M. T., & Soherwardi, S. (2016). Effects of job stress on job performance. *Interdisciplinary Journal of Contemporary Research in Business*, 3(7), 453–465.
- Jonge, J., Landsbergis, P., & Vegchel, N. (2005). Occupational stress in action: The interplay between job demands and job resource. *Journal of Organizational Behaviour*. Retrieved from http://dx.doi.org

- Keshavarza, M., & Mohammadib, R. (2011). Occupational stress and organizational performance, Case study: Iran. *Procedia — Social and Behavioral Sciences* 30, 390–394.
- Kinman, G., & Jones, F. (2004). Working to the limit stress and work-life balance in academic and academic-related employees in the U.K. Retrieved from: http://www.aut.org
- Kortum-Margot, D. A. (2007). *The U.S. health system in perspective: A comparison of twelve industrialized nations.* New York: The Commonwealth Fund.
- Krejcie, R. V., & Morgan, D. W. (1960). *Determining sample size for research activities*. London: George Allen and Unwind.
- Kusi, H., Mensah, D. K. D., & Gyakyi, E. (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.
- Lackritz, J. R. (2004). Exploring burnout among university faculty: Incidence, performance, and demographic issues. *Teaching and Teacher Education*, 20(7), 713–729.
- Malek, M. H. B. A. (2010). The impact of job stress on job satisfaction among university staff: Case study at Jabatan Pembangunan. *University of Sains Malaysia Palau Pinang*, 1–89.
- Nabirye, R. C., Brown, K. C., Pryor, E. R., & Maples, E. H. (2011). Occupational stress, job satisfaction and job performance among hospital nurses in Kampala, Uganda. *Journal of Nursing Management*, 19, 760–768.
- Newman, D. A., Kinney, T., & Farr, J. L. (2004). Job performance ratings. In J. C. Thomas (Ed). Comprehensive hand book of psychological assessment: Industrial and organizational assessment (pp. 373–389). Hoboken, NJ: John Wiley & Sons.
- Nortje, L. O. (2007). Effects of stress in the workplace using Tshwane University of Technology. Unpublished master's thesis, Tshwane University of Technology, Pretoria.
- Olivier, M. A. J., DeJager, M. J., Grootboom, P., & Tokota, K. B (2005). Work wellness: A prerequisite for effective education in higher education institutions. South African Journal of Higher Education, 19(5), 912–930.
- Raza, A. (2012). Relationship between occupational stress and job satisfaction of faculty: The case of universities of Punjab. *Elixir Human Resource Management*, 43, 6913–6920.
- Reddy, G. L., & Poornima, R. (2012). Occupational stress and professional burnout of university teachers in South India.
- Seyle, H. (1981). *Seyle's guide to stress research* Vol. 1. New York: Van Nostrand Reinhold.
- Shen, X., Yang, Y., Wang, Y., Liu, L., Wang, S., & Wang, L. (2014). The association between occupational stress and depressive symptoms and the mediating role of psychological capital among Chinese university teachers: A cross-sectional study. *BMC Psychiatry*, 14, 329.

- Sun, W., Wu, H., & Wang, L. (2011). Occupational stress and its related factors among University teachers in China. Journal of Occupational Health, 53(4), 280-299.
- Visotskaya, N., Cherkashina, E., Katcin, O., & Lisina, L. (2015). Studies on university professors' emotional burnout. Procedia - Social and Behavioral Sciences, 214,769-778.
- Winefield, A. H., Gillispie, N., Stough, C., Dua, J., & Chi, J. (2002). Occupational stress in Universities: A national survey. Melbourne: Tertiary Education Union.
- Winefield, A. H., Gillespie, N., Stough, C., Dua, J., & Hapuarachchi, J. (2003). Occupational stress in Australian university staff: Results from a national survey. International Journal of Stress Management, 0(1), 51-63.
- World Health Organization (2005). European Ministerial Conference on Medical Health (2005). Mental health and working life. Finland: Helsinki.