STRESS AND PERFORMANCE AMONG CIVIL SERVICE EMPLOYEES IN GHANA A CASE STUDY OF OHCS AND ITS ALIGNED INSTITUTIONS PRAAD, CSTC, ITS, GSS, AND MSD

ABSTRACT

This study aims to identify the relationship between Occupational Stress, and Performance of Civil Service staff in Ghana. The occupational stress factors consist of: ***work life balance***, ***overall job performance***, ***quality of work*** and ***resource inadequacy***. Employees' performance was operationalized in terms of job performance, and quality of work. The results indicate that, matching income to expenses and healthy work life balance were the significant predictors of stress. The study concludes that; stress affects the performance of staff in the Civil Service. Although a certain amount of stress enables staff to perform better, high levels of stress is associated with poor performance of staff. The study recommends that, staff should be educated on personal financial management, institutionalizing of an in-house loan facility with lower interest rate to support staff and also, a revision of the salary structure of the Service to ensure staff are rewarded according to the prevailing economic conditions. It is also recommended that, mandatory taking of leave be enforced and free medical check-up for staff organized once in a year. This is essential to help staff recuperate and recharge to ensure improved productivity. Also, experts in the field of stress management should be invited to engage staff in sessions that would help identify stressors and its' management.

1. INTRODUCTION

Work-related stress is a pattern of physiological, emotional, cognitive and behavioral reactions to some extremely taxing aspect of work content, work Organisations and work environment. When people experience work-related stress, they often feel tensed and distressed and are not able to cope with the situation. Due to globalization, and changes in the nature of work, people in developing countries have to deal with increasing work-related stress.

In industrialized countries people are becoming more familiar with what work-related stress is and how to manage it. However, in developing countries, particularly in Africa, there are still not enough in-depth studies to fully analyze the cultural differences, work behaviour and how it relates to stress. Along with existing difficulties in controlling other more well-known occupational risks, there is lack of awareness of work-related stress, and shortage of resources to deal with it (UNESCO, 2018).

2. LITERATURE REVIEW

The term "occupational stress", is stress caused by occupations that employees are holding now and commonly used for a decade or more. In Organisations, work stress, also known as job stress, and/or occupational stress are often used interchangeably but their meanings refer to the same thing (Abu-Al-Rub, 2004; Larson, 2004).

Occupational stress is described as any discomfort that is perceived by individuals, whose capabilities and resources cannot cope to demands, events, and stressful situations in their workplace. Occupational stress is a serious health issue for organizations and employees. For instance, the stressful situations of the workplace due to occupational stress may lead to negative consequences like anxiety, headache, stomach distress and cardiovascular disease (Spector, 2002).

Occupational stress can reduce productivity, increase mistakes and accidents at work, encourage absenteeism, lower morale, increase conflict with others and cause physical and emotional problems (Pflanz and Ogle, 2006) and finally poor life satisfaction (Pawar and Rathod, 2007). It may also result to lower performance of individuals, Organisations and the country at large.

2.1 Occupational of Stress Model (Cooper and Marshall 1976)

The occupational stress factors chosen in this study is based on Cooper and Marshall's (1976) original model of work-related stress that includes five sources of stress at work. Although the model is used generally in health-related studies, it is also applicable to this study as it covers almost all the important areas of individuals' employees and organisations. Individuals in a working environment are deemed inter-related one to another.

2.1.1 Intrinsic to the Job Factors

The first variable employed in this study of occupational stress factor is intrinsic to the job, which includes factors such as poor physical working conditions, work overload or time pressure. The factors classified in these categories namely, working conditions, hours worked, and work under load/overload. The principles of job satisfaction and motivation are closely linked to each other, and to an effective and productive workplace (Kinicki and Kreitner, 2007; Koys, 2001; Chen and Francesco, 2003, Tziner et. al. 2008; Mowday et. al. 1982; Mathieu and Zajac, 1990; Bono et. al. 2001; Greguras et. al. 2004). Therefore, in order to improve job involvement, management should foster a satisfying work environment for a

range of personality types (Kinicki and Kreitner, 2007).

The basic premise or the most important strain in this model is when the employees suffer a high amount of stress and demands while they have low amount of control to cope themselves in the stressful situations, so they are more stressed (Kain and Jex, 2010).

2.1.2 Role in Organization Factors

The second factors of role in organization have always been an important variable which is always been used throughout the occupational research. Role of ambiguity refers to situations when an individual does not have clear information about his or her work objectives, work scope, or supervisors, which leads to higher job-related stress.

It is indeed critical to identify job duties clearly and specifically. Job descriptions and orientation programs should be utilized at the beginning of employment.

According to Piskar (2006), an organization must monitor its activities in order to observe whether the activities are executed according to the set plans. Regular team meetings may also help clarify role conflicts and role ambiguity between work units (Lee and Akhtar, 2007).

2.1.3 Performance measurement

Performance measurement was a key consideration, and the scheme selected for a particular study can influence the results substantially (Cavalieri et. al. 2007; Jusoh and Parnell, 2008; Pongatichat and Johnston, 2008; Ramanujam and Venkatraman, 1987; Venkatraman and Ramanujam, 1986). Source of stress were found to be highest among employees because of lack of knowledge about performance evaluations.

3. Research Methodology

3.1 Research Design

The research design provides the basic directions in carrying out the research. It involves the location of the study (the study setting), type of study, the duration of the study, data collection methods, and the variables that will be measured and analysed to test the hypothesis (Sekaran, 2003; Saunders et. al. 2007). Primary data were collected through self-administered questionnaire by respondents from the Professional and Sub-Professional Classes in OHCS and its aligned institutions, namely Public Records Archives and Administrative Department (PRAAD), Civil Service Training Center (CSTC), Management Services Department (MSD), Institute of Technical Services

(ITS), and Ghana Secretarial School (GSS) in the Ghana Civil Service.

A research model was developed for the study. This model was used to assist in determining research instruments, formulating relationships between variables as well as to enable research questions to be tested. The model was also used for validation and model testing and, in this study, it served as an exploratory character for exploring relationships between the variables.

4. DATA ANALYSIS AND FINDINGS
4.1 Demographic Profile of Respondents
Analysis (Descriptive Analysis)

From the percentage distribution of age of respondents, the analysis shows that, fifty-three percent (53%) of the respondents were 30-39 years of age, 28% were 20-29 years of age, 16% were 40-49 years of age, and 3% were 50 years and above.

In the analysis of gender, there were 52% male and 48% female respondents. There were more male respondents compared to females in the study, but less than 10% more.

4.1.1 Professional profiles of respondents

The analysis indicates that, 79% of respondents were in the Professional category and 21% in the Sub-Professional category.

It also indicates that, 28% of staff were in the AD2B and analogous grade, 20% were in the AD2A and analogous grades, 12% of respondents in the AD1 and analogous grades, 7% and 1% for the Deputy Director and Director and their analogous grades respectively. 32% of staff were in the "Other staff category",

The analysis on Institutions indicates that, 44% of staff were from OHCS, 21% from PRAAD, 13% from GSS and 10%, 6% and 6% of staff were from MSD, ITS, and CSTC respectively.

4.1.2 Stress Incidence and Causes of Stress

The analysis indicates that, 43% of the staff experience work-related stress whiles 57% did not experience any work-related stress.

The analysis also shows that, 33% of stress were caused by volume of work, 26% by the nature of job and its responsibilities, whiles 24%, 11% and 6% were caused by the physical environment, personal health issues and others respectively.

5. Bivariate Analysis

This analysis takes into consideration how demographic and socio-economic characteristics affect the incidence of stress among staff in the Civil Service.

5.1 Grade of Staff and Stress

Figure 1.1 Grade of Staff and Stress
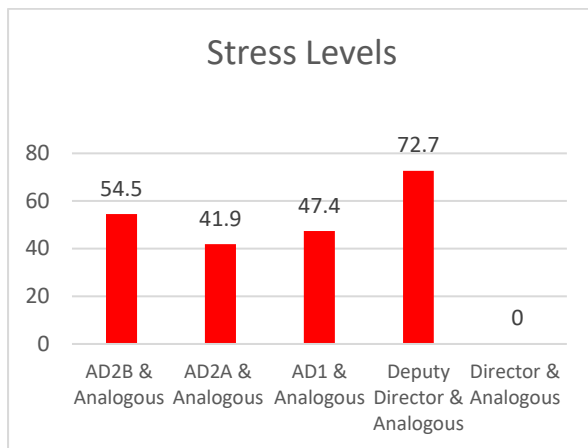
Stress Levels

The figure 1.1 depicts that, AD2B and Analogous grades had 54.5% stress, the stress level then reduces at AD2A and Analogous grades with 41.9%, then increases again at AD1 and Analogous grades with 47.4% and finally reaches its highest peak at Deputy Director and Analogous grades with 72.7%. There is a statistical significance relationship between grade of staff and stress, which indicates that, grade of staff influences a staffs' stress level.

## 5.2 Institution and Stress

Figure 1.2 Institution and Stress
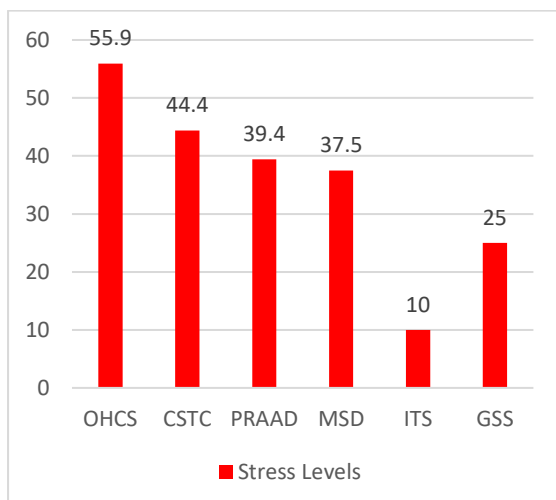
The figure 1.2 shows that, staff at OHCS reported the highest incidence of stress with 55.9% followed by CSTC with 44.4%. The staff at PRAAD reported the third highest stress incidence with 39.4%, followed by 37.5%, 25.0%, and 10% for MSD, GSS, and ITS respectively.

This finding may be due to the psychosocial environment, volume of work and the nature of job and its responsibilities. Respondents in some institutions may perform task that may trigger their stress levels compared to other institutions. The relationship between Institution and stress shows a statistically significance association. This implies that, institutions influence a staffs' stress level.

5.3 Matching Income to Expenses and Stress

### Figure 1.3 Income to Expenses and Stress
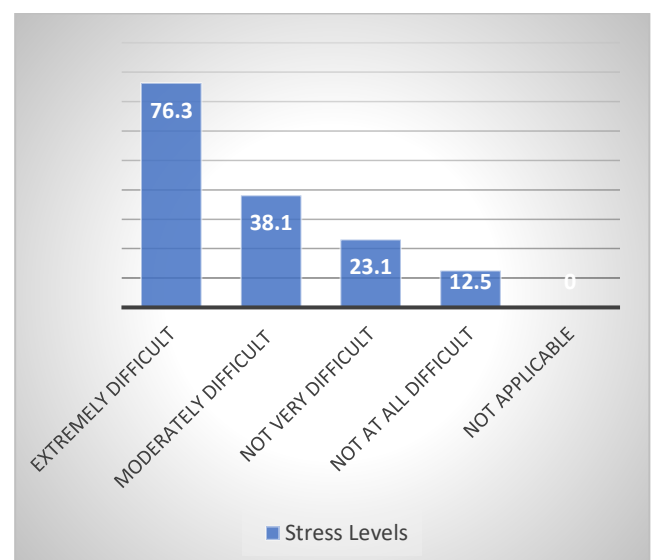
The figure 1.3 shows that, staff who find it extremely difficult to match their income to expenses have the highest stress

incidence with 76.3%, followed by staff who find it moderately difficult with 38.1% and continues to decrease to its lowest peak at no percentage for respondents who reported not applicable. There is a highly statistically significant relationship between matching income to expenses and stress. This implies that, matching income to expenses plays a critical role in stress levels amongst staff.

5.4 Healthy Work life balance and Stress

The figure 1.4 shows that, staff who have a healthy work life balance reported less stress incidence with 28.3% compared to staff who did not have a healthy work life balance with 74.0% incidence of stress. There is a strong statistical relationship between work life balance and stress. This also implies that, healthy work life balance influences staff stress levels.

Figure 1.4 Healthy Work life balance and Stress
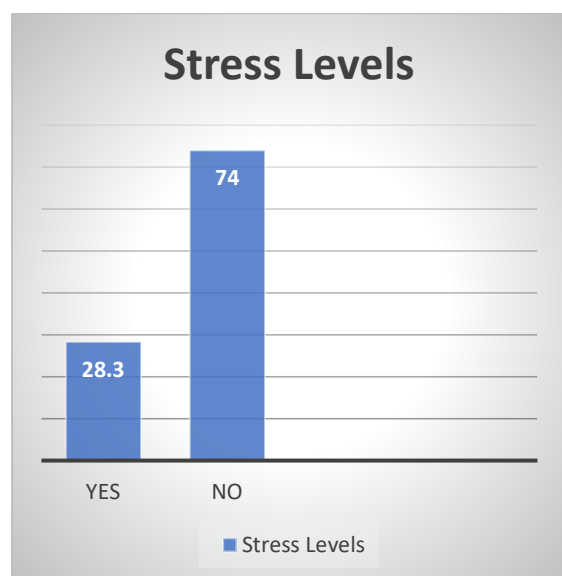
5.5 Quality of Work and Stress

The figure 1.5 shows that, staff whose quality of work is poor most of the time reported the highest stress incidence with 77.8%, followed by staff who reported some of the time, with 59%, then a little of the time with 34.9% and 33.3% and 32.4% for all of the time and none of the time respectively. There is a significant relationship between quality of work and stress.

Figure 1.5 Low Quality of work and Stress

6.0 Multivariate analysis of the relationship between stress and performance among Civil Service staff.

The binary logistic regression was employed in this section to examine the joint effects of the various independent variables and stress. Binary logistic regression determines the impact of multiple independent variables presented simultaneously to predict membership of one or other of the two dependent variable categories.

The utilization of a binary logistic regression model is justified by the fact that, the dependent variable is measured by stress incidence of staff, which is dichotomous (whether a staff has stress or not). Reference categories were created for each of the variables for easy comparison using the odd ratios (exponential β).

6.1 Interpretation of binary logistic results: Model

The output from the logistic regression model revealed that, the significant predictors for stress were *matching income to expenses* and *healthy work life balance*. Other variables that were significant at the bivariate level that had lost their significance were grade of staff, institution, low quality of work, and causes of stress.

Figure 1.6 Odds Ratio – Matching Income to Expenses and Stress


Stress Level
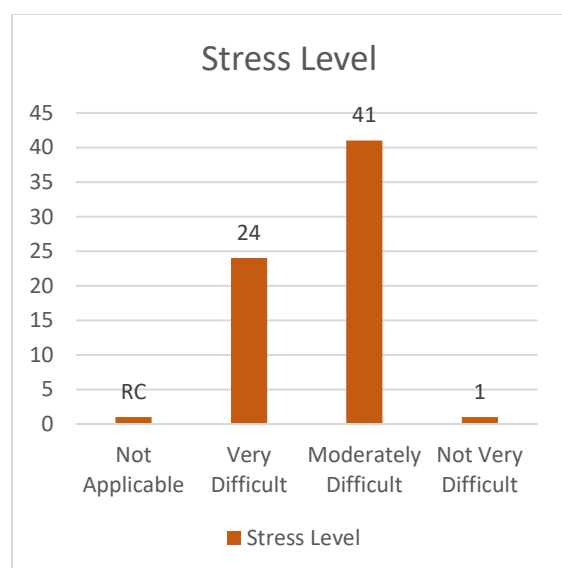
The model indicates that, staff who find it *very difficult* and *moderately difficult*

in matching income with expenses have 24% and 41% chances respectively to experience stress compared to staff who reported *not applicable*. Also, staff who find it *not very difficult* to match income with expenses have 1% chance to experience stress compared to the reference category (not applicable); and staff who find it *not at all difficult* to match income with expenses have equal chance with the reference category to experience stress.

This finding could be attributed to high cost of living and loans contracted by staff from banks with high interest and deduction rates, making it difficult to match income to expenses or upkeep. Chronic financial related stress is detrimental to mental and physical health and impedes interpersonal relationships, ultimately contributing to poorer job performance and quality of work outcomes.

Figure 1.7 Odds Ratio – Healthy-work life balance and Stress

Stress Level
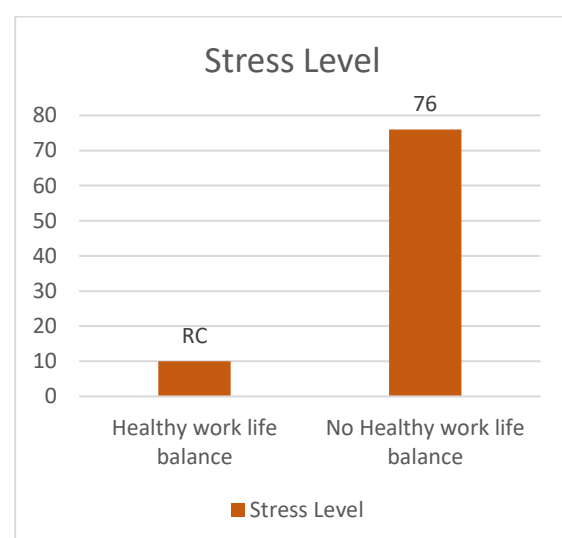
The figure 1.7 shows the relationship between healthy work life balance and stress. It shows that, staff who do not have a healthy work life balance have 76% chance to experience stress compared to their colleagues who have a healthy work life balance.

This may be explained by the fact that, in the quest to achieve set targets, staff work longer hours, and may also forfeit their mandatory leave. Other socio-economic challenges and unhealthy life style could also affect healthy work life balance. When staff are stressed and over-worked, there is the risk exposure to a variety of symptoms which can affect wellbeing and consequently affect a staffs' job performance or quality of work.

**Figure 1.8 Odds Ratio – Quality of work and Stress**
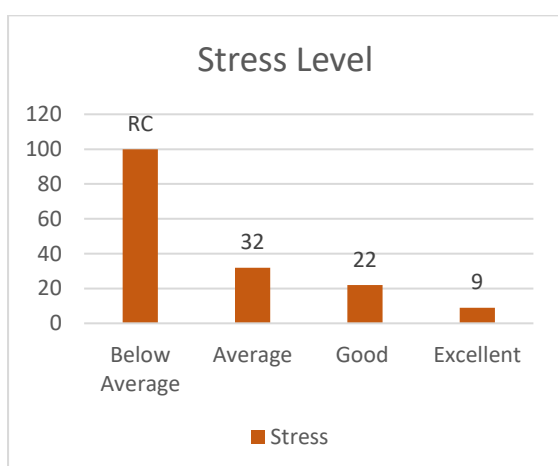
Furthermore, the figure 1.8 indicates that, staff who performed excellent had a probability of 9% stress

compared to staff who performed below average. Staff who performed good had a probability of 22% stress, whereas staff with average performance had a probability of 32% stress compared to below average. This implies that, increased stress level was associated with poor performance and reduced stress level was associated with excellent performance as depicted in figure 1.8 above.

It is also worth noting that, stress occurred at all levels of quality of work. This may be explained by the fact that; some level of stress is experienced by staff in their line of duty. However, with a certain level of stress, staff were able to surmount their stressors and perform better, whiles with higher levels of stress, staff were not able to cope and hence perform below average.

Figure 1.9 Odds Ratio – Causes of Stress
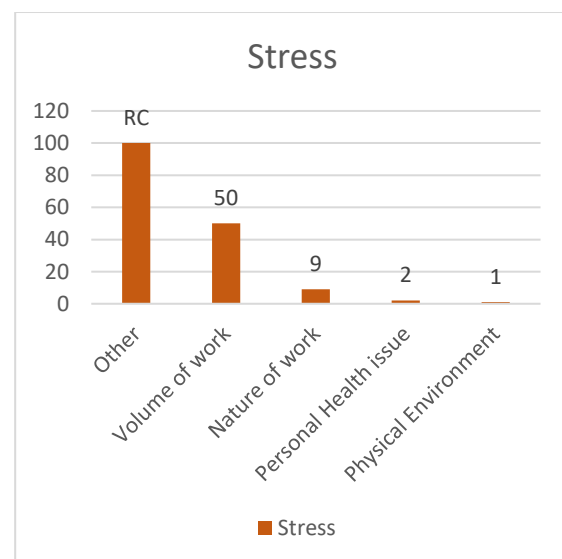
Finally, the model indicates that, volume of work causes a probability of 50%

stress among staff. Also, a probability of 9%, 2%, and 1% of stress were caused by nature of work, personal health issue and physical environment respectively if compared to the reference category (other).

This shows that, a staff 's stress may be caused by various combination of factors within the working environment and it's dependent on the institution a staff is located.

6.2 Implication, Recommendation and Conclusion

The model considered only the variables that showed significant statistical relationship with stress at the bivariate level. In the model, matching income to expenses and healthy work life balance remained significant when all other variables were not statistically significant. Some variables were significant at the bivariate level but lost their significance at the multivariate. These were grade of staff, institution, quality of work, and causes of stress.

6.2.1 Implication

The following implications could be deduced from the study.

Poor work-life balance could lead to some serious consequences such as:

- Fatigue: tiredness among staff reduces the ability to think clearly

which affects over all work performance.

- **Health:** long working hours can cause stress which may have adverse effects on one's immune system. Stress also puts one at risk of substance abuse.

- **Family related issues:** working long hours or overtime might make one miss important family moments and events which could damage family relationships and affect one's work performance

Financial stress may cause:

- Loss of sleep - impairs one's ability to solve problems, causes moodiness or bad temper which affects work performance.

- Difficult situations for employees to collaborate and communicate effectively to achieve results.

- Staff to be less likely to save on a regular basis and this may create anxiety which could lead to poor work performance.

6.2.2 Recommendation

The following recommendations are made for Management's consideration. Since matching income to expenses and healthy work-life balance were found to be an important factor in determining the incidence of stress among staff, it is recommended that, Management should:

I. Engage professional financial counsellors to educate staff on personal financial management, investment and loans.

II. Management should also consider a review of the salary structure of the Service to ensure staff are motivated.

III. Management should enforce mandatory leave for staff, since staff who have healthy work life balance were less likely to experience stress compared to staff who do not have healthy work life balance. This can be done by a "use it or lose it" system, whereby any unused days will not be carried over at the end of the year. Leave is a vital human resource management mechanism that ensures the promotion of a healthy and productive workforce and organisational development. In accordance with the Labour Act, 2003 (Act 651), all public servants are entitled to leave.

IV. Management should provide free health checkup for staff at least once in a year. These are essential to help staff recuperate and recharge to ensure improved performance.

V. Management should consider engaging the services of a counsellor/psychologist or life coach to build the capacity of staff on how to find a better work-life balance.

VI. Management should consider a flexi-time option, which is a scheduling policy that enables staff to choose starting and ending times within guidelines specified by the organization. It permits employees to focus on non-work requirements without taking time off work. Staff who have this flexibility would perform effectively and are less likely to miss work due to family related issues.

VII. Since the incidence of stress were caused by volume of work, nature of job and its responsibilities, physical environment, personal health issues and others, it is recommended that further studies be conducted to understand the stress and performance nexus. However, Management could consider improving the physical environment especially washrooms, office equipment and furniture, and the psychosocial factors that affect staff negatively.

6.2.3 Conclusion

The objectives of the study were achieved. The study revealed that, matching income to expenses, and healthy work life balance were good predictors (7/10) of stress among

the staff of OHCS and its aligned institutions.

These results were consistent with several other academic findings. The 71% variation of stress and performance generated by this model indicates that, there may be other relevant predictors of stress and performance that may be missing in this study due to some limitations of the study.

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