UNIVERSITY OF GHANA

STRESS MANAGEMENT AND WORK PERFORMANCE IN THE PORT OF TEMA

BY

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THIS DISSERTATION IS SUBMITTED TO THE UNIVERSITY OF GHANA IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE REQUIREMENT FOR THE AWDARD OF M.A. PORTS AND SHIPPING ADMINISTRATION DEGREE

FEBRUARY, 2016
DECLARATION

I, MARCELLINUS BADOMBIIE, hereby declare that this dissertation “STRESS MANAGEMENT AND WORK PERFORMANCE IN THE PORT OF TEMAN” consists entirely of my own work produced from research undertaken under supervision and that no portion of this work has been submitted in support of an application for another degree or qualification to this or any other university or institution of learning, except for the permissible references from other sources, which have been duly acknowledged in the text.

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DEDICATION

This dissertation is dedicated to my wife, Mrs. Joyce T. Badombile, and my children.
ACKNOWLEDGEMENT

I am most grateful to the Almighty God for His protection and guidance throughout my entire M. A. Programme.

I extend my deepest gratitude to my supervisor, Mr. Stephen Osei Kofi Yeboa, Head of Nautical Science Department of the Regional Maritime University, Ghana, for his good supervision and encouragement throughout this dissertation.

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My special thanks go to all GPAA managers, especially my Head of Department, Lt. Col. Timothy Ba-Taa-Bana, the Port Security Manager, Tema for his encouragement and support.
ABSTRACT

As the Port of Tema continues to develop in line with its objective to become the most preferred port in the West African sub region, it is undisputable that the trend of operations in the port will not only mount pressure on the facilities but also on the port labour. A recent health talk at a staff durbar revealed that about 80% of the GPHA personnel have a very high blood pressure which suggests a possible manifestation of the element of stress existing in GPHA work-places and the entire port.

Using the research instruments of questionnaires and personal interviews, this research was set to study the nature of stress: its causes, manifestations, effects and impacts on the workforce and its management in the Port of Tema with the ultimate aim of proffering enduring techniques for the management of stress related issues in a maritime environment.

The study revealed amongst other things that the occupational stress in the Port of Tema is high and mainly caused by factors of work, the roles employees play in the organisation, and the relationships in the organisation. The study also highlighted that many organisations in the Port of Tema lack a systematic approach to effectively and efficiently manage the menace of stress.

In the end, the study suggested amongst others that Ghana needs to establish a legal framework that will enjoin organisations to adopt guidelines to effectively and efficiently manage the menace of occupational stress and the need for organisations to organise public awareness or education on stress management techniques that will not be counterproductive to their work performance.
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<tr>
<td>A' Level</td>
<td>Advanced Level</td>
</tr>
<tr>
<td>A.P.S.</td>
<td>Atlantic Port Services</td>
</tr>
<tr>
<td>E.A.P</td>
<td>Employee Assistance Programmes</td>
</tr>
<tr>
<td>G.A.S</td>
<td>General Adaptation Syndrome</td>
</tr>
<tr>
<td>GPHA</td>
<td>Ghana Ports and Harbours Authority</td>
</tr>
<tr>
<td>J.S.S.</td>
<td>Junior Secondary School</td>
</tr>
<tr>
<td>M.P.S.</td>
<td>Meridian Port Services</td>
</tr>
<tr>
<td>NIOSH</td>
<td>General Adaptation Syndrome</td>
</tr>
<tr>
<td>O' Level</td>
<td>Ordinary Level</td>
</tr>
<tr>
<td>P-E</td>
<td>Person and Environment</td>
</tr>
<tr>
<td>S.S.S.C.E.</td>
<td>Senior Secondary School Certificate Examinations</td>
</tr>
<tr>
<td>T.C.T.</td>
<td>Tema Container Terminal</td>
</tr>
<tr>
<td>W.A.S.S.C.E.</td>
<td>West African Senior Secondary School Certificate Examinations</td>
</tr>
</tbody>
</table>
CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND

Human resource is the most vital part of every organisation as their performance determines the productivity of other resources. In fact, Ali (2013) indicated that without human resource, other resources will be untapped and wasted. Organisations therefore introduce employee benefit programmes as the basic and most important tool for motivating employees and increasing their productivity. Employee benefits have become a regular tool in recruitment and retention to attract and keep skilled and responsible employees (Shukla, 2015). Shukla (2015) however, acknowledged that although employee benefit programmes have the tendency to motivate workers, the state of health of employees tend to directly affect their productivity. Therefore, as human resource remains the core of every organisation, the state of its health, safety and wellbeing becomes a critical element in the success of organisations.

As today’s world of work is increasing in competition resulting in the need to improve on quality, innovation and to increase the pace of doing business, the worker is not only required to work for longer hours as their responsibilities rise but to meet deadlines in their rightful expectations (Dwamena, 2012). According to Chuang (2006), the integration of the world economies and the creation of mergers and consolidations have produced intense pressure on many industries (workers) to out-plan, out-innovate and outperform. These demands on workers, according to Dwamena (2012) have brought about a worldwide phenomenon called stress which occurs in various forms in every workplace.
Stress is one of the leading occupational health issues that has received increasing attention over the past three decades (Swanepoel, Botha, & Mangonyane, 1998). Stress is a complex phenomenon that can result from several sources including a person’s home and workplace. Kolboworola & Alayode (2012) stated that “stress is an inevitable part of life” and also mentioned that it has been defined as a “global epidemic” by the United Nations International Labour Organisation. More generally, stress is described as the adverse psychological and physical reactions that occur in an individual as a result of his or her inability to cope with the demands being made on him or her (Omolara, 2008) as cited by (Shukla, 2015). According to NIOSH (1999), job or occupational stress can be defined as “the harmful physical and emotional responses that occur when the requirements of the job do not match the capabilities, resources, or needs of the employee”.

Dahlgren (2006) brought to light that increases in blood pressure (which can lead to the development of hypertension) is often influenced by occupational stress. High blood pressure counted as the manifestation of job stress is however classified as part of the controllable risk factors that cause high blood pressure.

According to Ongori & Agolla (2008), “many organisations in the world are witnessing an alarming increase of the negative effects of stress on employee’s productivity”. In Ghana, several nationwide surveys have indicated that, about 58% of the workforce in organisations suffers from stress related problems (The Weekly Mirror, 2006) as cited by Gyan & Baffoe (2011). This portrays that many organisations especially those operating in a very competitive environment or requiring longer hours of work including The Port of Tema have suffered from the negative impacts of occupational stress. Given that stress can negatively affect labour output, organisations must act decisively to deal with the menace of occupational stress. Gyan and
B. Adjei (2011) however identified that whilst most people in industrialised countries have devised stress coping and management strategies and are increasingly becoming aware of the effects of occupational stress, most developing countries are not.

1.2 PROBLEM STATEMENT

The Port of Tema is the busiest port amongst the two (2) in Ghana. About 70% of the national trade transit through the Port of Tema with additional volumes of traffic to and from the landlocked countries of Burkina Faso, Mali and Niger (GPHA, 2014). Maritime trade is purely international and therefore places the management and operations of the Port of Tema in the regional and global port competition for transshipment or transit cargoes (OECD, 2011). Following a transformative restructuring, the Port of Tema now provide services 24 hours long in a day with the result of a significant reduction in vessel turnaround time from two weeks to 11.8 hours (5 days) and a clearance period of 76 hours (3 days) from the previous 2 weeks (GPHA, 2014). This restructuring was simply in line with the port’s objective to become the most preferred port in the West African sub region.

It is however undisputable that the above trend of operation in the port will not only mount pressure on the facilities but also on the port labour. A recent health talk by the head of the medical services of the GPHA in June, 2014 during a staff durbar revealed the about 80% of the GPHA personnel at the operations and security departments have a very high blood pressure. This prevailing phenomenon largely suggests the possible manifestation of the element of stress existing in GPHA work-places.
Dwamena's work on stress in the Port of Takoradi revealed that there were many stress factors that GPHA employees endured which had negatively impacted on their productivity to the extent that majority of the respondents thought of quitting the job.

Given the above facts about the Port of Tema, it is obvious that the nature of stress in the Port of Tema would not be the same with the experiences of the Port of Takoradi as already highlighted in Dwamena's work. Hence this study is to mainly study the nature of occupational stress and how it is been managed in the Port of Tema.

1.3 RESEARCH QUESTIONS

The main question that borders the researcher is what is the nature, effects and management of stress in the Port of Tema?

Specifically, the researcher seeks to answer the following questions:

✓ What are the causes of occupational stress in the Port of Tema?
✓ What are the effects of occupational stress on port labour performance?
✓ How does the port worker handle the phenomenon of occupational stress?
✓ How do the organisations in the Port of Tema manage occupational stress?

1.4 RESEARCH OBJECTIVES

The main objective of this research is to study the nature of stress: its causes, manifestations, effects and impacts on the workforce and its management in the Port of Tema with the ultimate aim of proffering enduring techniques for the management of stress related issues in a maritime environment.
The research seeks to achieve the following specific objectives:

✓ To ascertain the causes of occupational stress in the Port of Tema;

✓ To discuss the effects of stress on port labour performance;

✓ To find out how the port worker manages stress;

✓ To find out how the companies in the Port of Tema manage the phenomenon of occupational stress.

1.5 SIGNIFICANCE OF THE STUDY

The successful completion of this study will generally highlight the nature of occupational stress and its effects on work performance in the Port of Tema.

The study will also specifically present the causes of occupational stress in the port and also highlight on how port workers and organisations in the port manage such a phenomenon.

Moreover, the study will highlight the effects of occupational stress on port labour performance to further inform stakeholders of the need or otherwise to ensure effective and efficient management of occupational stress.

The result of this study may be a source of information that proffers enduring techniques for occupational stress management and related issues in ports.

The outcome of this study may serve as the basis for further research work relating to this subject matter both locally and internationally.
1.6 SCOPe AND LIMITATION OF THE STUDY

This study is mainly concerned with occupational stress but it is limited to its causes, effects on port labour performance and its management by individuals and organisations within the community of the Port of Tema.

The study being limited to the Port of Tema shall include only the staff (both managers and non-managers) of the organisations that are directly engaged in port operations. This shall be limited to the stevedoring companies and the cargo handling companies.

Other organisations of best practices in managing stress both locally and internationally may be mentioned in the work but only for the purposes of comparative analysis. This may also be for the function of drawing from their practices in order to inform the basis for recommendations.

The study shall however be limited to the period from 2000 to date marking the significant periods that the Port of Tema has been programmed to become the preferred port in the West African sub region.

1.7 ORGANISATION OF THE STUDY

The study was organized into five chapters. Chapter one is the introduction of the study and this was where the researcher discussed the background to the study, the problem statement, research questions, objectives, significance, and the scope and limitation of the study. Chapter two presents the literature review of relevant issues pertaining to the problem statement, research questions including the concepts of occupational stress and how it applies to organisations and its management. Chapter three is also a discussion of the methodology in which the means through which the researcher achieved the set objectives were presented. Chapter four also presents the
analysis, interpretation and presentation of data. Lastly, Chapter five is the summary of findings, conclusion and recommendations.
CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

This chapter is a review of all pertinent literature regarding the concept of occupational stress and work performance. It therefore presents an in-depth discussion of the various spectrums of definition of stress, the materialisation, manifestations and reactions of occupational stress. This chapter also examines the models and theories propounded about occupational stress. The effects of occupational stress on job performance and how individuals and organisations manage the menace of stress at work are also reviewed with particular reference to the case of Africa and other ports around the world. A brief comparative review was also made on stress in port sector activities.

2.2 THE CONCEPT OF STRESS

Stress has become a generic term that is commonly used in a variety of settings and assumes different meanings. Lyon (2012) indicated that although the term stress has been in scientific literature since 1930's, its use as relates to human condition started in nursing since the 1950's and did not become a popular vernacular until the late 1970's and the early 1980's. However, according to Whitehead (2001), the term was first applied in Engineering and was construed as a load of force exerted on an object. The term was also earlier used by an American psychologist, Walter Cannon, to refer to patterns of psychological response of an organism to emotional stimuli (Whitehead, 2001). It was Walter Cannon's initial academic work in 1914 (which passively treated the problems of emotional stress) that inspired the notable studies of Hans Selye, an endocrinologist, on stress. According to Whitehead (2001), Hans Selye who is now
popularly regarded as the father of stress established the most widely used definition of the stress concept. The father of stress described stress as "the non-specific (that is common) result of any demand upon the body; be the effect mental or somatic" (Selye, 1956) as cited by (Whitehead, 2001). The limitation set by this description of the stress concept relates to the psychological response by a body to stress which is initiated by a stimuli called stressor (Cope, 2003). The boundaries set by this definition of the stress concept gave grounds for behavioural scientists to shift attention from the physical stressors towards psychological stressors such as role ambiguity and the impacts of psychological and social influences on the individual (Whitehead, 2001). It has been observed that individual variations in characteristics (sex, age, education, past experiences, social situations, etc) have greatly impacted on their responses including coping behaviours to the implications of stress. Whitehead (2001) brought to light that the recognition of the complexities of the interacting or intervening factors associated with the forms of responses to stress by stress researchers led them to approach the concept of stress from a broad, many sided perspective and the desist from simplistic and one sided definitions.

2.2.1 Definitions of Stress

Although the concept of stress is becoming more accepted as relational in nature involving some sort of transaction between individual and the environment, it continues to be defined in several fundamental different ways, with each implying different measurement and explanation (Whitehead, 2001). Many stress researchers therefore have discussed the definition of stress from three (or in few occasions four) broad dimensions. They include the response, stimulus and transactional based definitions as presented in sections 2.2.1.1 - 2.2.1.3. Although, the response based definitions are usually presented before the stimulus based definitions (which in no doubt
is misarranged), it basically implies how the study of stress begun with the evidence of body response to stressors.

2.2.1.1 Response Based Definition

In his first publication in 1936, Selye defined stress as the non-specific response of a body to any demand made on it (Rice, 2012). According to Lyon (2012), Selye viewed stress as a response to noxious stimuli and therefore considered stress as a dependent variable. In giving a further elaboration on Selye’s definition, Whitehead (2001) indicated that Selye recognised that the stimuli (stressors) were specific but they all had in common a requirement of the body to adapt physiologically by raising the level of neuroendocrineal activities. This means that no matter the stressor, the reactions within the nervous system were essentially the same. This situation was called the General Adaptation Syndrome (G.A.S) which was focused on retaining or attaining stability of physiological systems that maintain life referred to as homeostasis (Lyon, 2012). In extension, Selye’s definition indicated that although each individual has adaptive energy to respond in a non-specific manner, when the stressor is prolonged and the G.A.S is depleted, it can lead diseases of adaptation (e.g. hypertension, arthritis, cancer, and death).

Selye’s definition of stress has been criticised for varying reasons including conceptual confusion as he sometimes defined stress as the wear and tear, damage or disease consequence of prolonged G.A.S responses (Lyon, 2012). Lyon (2012) also added that Mason (1971) disconfirmed the non-specificity of physiological responses to noxious stimuli in rats and monkeys.

Following the criticisms of Selye’s response based definition being too vague, confusing and ambiguous, Rice (2012) brought to light that Selye offered an operational definition of stress as
“a state manifested by a specific syndrome which consists of all the nonspecifically induced changes within the biological system”. To further explain his definition of stress, Selye chose to use ten (10) statements to delineate what stress was not (Rice, 2012). Amongst these eliminated definitions are: “stress is not:

- simply nervous tension; it can occur in organisms without nervous systems or in anesthetized or unconscious patients.
- an emergency discharge of hormones from the adrenal medulla; although catecholamines are a part of the stress reaction.
- always the nonspecific result of damage; normal activities, such as tennis or a passionate kiss, can produce a stress response without conspicuous damage.
- necessarily bad: The stress of success, challenge, and creativity is positive, whereas that of failure, anxiety, and infection can be negative.
- always the nonspecific result of damage; normal activities, such as tennis or a passionate kiss, can produce a stress response without conspicuous damage”

It is therefore more enlightening that the concept of stress from the perspective of response based definition presents stress as part of everyday life that all individuals are subjected to (in forms of psychological, physiological, or behavioural responses) more especially when certain performances are expected of them.

2.2.1.2 Stimulus Based Definition

In the 1960’s, following the initial works of the aforementioned researchers on the concept of stress, psychologist become very interested in applying the concept of stress in psychological experience and to find out what happens when a person experiences changes in the pattern of life.
(Lyon, 2012). Masiuda and Holmes (1967) as cited by (Lyon, 2012) treated life changes or life events as the stressors to which a person responds to. Therefore, unlike the response based approach, this approach views stress not only as a stimulus but also as a dependent variable. The stimulus definition also focuses on the external sources of stress (stressors) and encapsulates well its cumulative nature (Butler, 1993). This is the definition that According to Whitehead (2001), the stimulus based definition rests on the physical sciences particularly engineering and suggests that humans have a limitation on the stress they can carry just as the physical objects. Whitehead further discusses that stressors in the environment will impinge upon the individual in a disruptive way and bring about changes in the individual if the limits of the elasticity of the individual is below the stressors. Whether a stimulus is pleasant or threatening depends on the individual appraisal of the situation, which is based on previous experience and expectations of the outcome (Ursin & Eriksen, 2004).

The stimulus based definition identifies environmental factors such as noise; social factors such as racism; physical factors such as having a disability; economic factors such poverty, and natural disasters such as floods and earthquakes as potentially stressful stimuli (Whitehead, 2001). However, Ursin & Eriksen (2004) indicated that if there is anything common to the stimuli that produced the state of stress and the stress responses, it was not their physical characteristics. This approach to understanding the concept of stress has gained more popularity because of its scientific way through which stress can be measured. Whitehead (2001) referred to this as approach as a more mechanistic way, in much the same way as observing the stress imposed on bridge and its effects.

The stimulus based definition has not gone without criticisms. Whiteman (2001) discussed that according to Lotman (1979), stimulus based approach like any other sociological approaches,
fails to consider the way in which social experiences come to have an impact on the individual. Besides, it is argued that stimulus alone is insufficient to predict an individual’s response hence it fails to take account of individual differences and ignores the perceptual cognitive processes which underpin such differences (Whitehead, 2001).

2.2.1.3 Transaction Based Definition

Stokes & Kite (2001) as cited by Staal (2004) suggested that the preceding definitions and approaches to the concept of stress have failed to provide a complete understanding of the human stress response and do not necessarily equate to psychological stress. This has led to the emergence of the transactional or interactional based definitions which basically views stress as the dynamic interaction between the environment and individual, emphasizing the role of the individual’s appraisal of situations in shaping their responses.

From the view of the transactional approach, stress is defined as “the result of a mismatch between individuals’ perceptions of the demands of the task or situation and their perceptions of the resources for coping with them” (Staal, 2001). According to Lazarus & Folkman (1984) as cited by Butler (1993) stress is “a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well being”. Whitehead (2001) elaborated that stress is essentially the degree of fit between a person and his environment. He further explained the implication to be that the experience of stress occurs when the magnitude of the stress stimuli exceeds the individual’s capacity to resist. Thus stress is the product of the interacting systems of the environment and the person.
The transactional based definition however emphasis that stress is a dynamic process that reflects both the internal and external factors and hence is a sum of all the strong holds of the previous definitions herein discussed. In spite of this attempt to bring the aforementioned definitions together and fit well into contemporary times, it has been criticised by its assumption of the existence of some sort of a static situation in this dynamic and ever changing life.

2.2.2 Types of Stress

So far, the types of stress highlighted by stress researchers also have been approached from two major perspectives. The first and most common relates with the degree of individual responses to the disturbing impacts of stress and the second that relates more with the factors that ignite the experience of stress.

2.2.2.1 Response Oriented Types of Stress

According to Taylor Shelley (1995) as cited by (Dwamena, 2012) there are four (4) types of stress. This category of the types of stress mainly emphasises on the response to the stimuli that sets on the stress condition. They include: Chronic Stress, Acute Stress, Traumatic Stress and Episodic Acute Stress and discussed in table 2.1 below:
Table 2.1: Response Oriented Types of Stress

<table>
<thead>
<tr>
<th>TYPES OF STRESS</th>
<th>MEANING</th>
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<tr>
<td>Acute Stress</td>
<td>It is the kind of stress which the individual knows exactly why they are stressed. It may include something scary but not thrilling. Usually, it does not cause severe or permanent damage to the body but gives resilience to the body.</td>
</tr>
<tr>
<td>Chronic Stress</td>
<td>When unrelenting demands and pressures on an individual occur for seemingly interminable periods of time, it results in wearing the individual down day after day and year after year with no visible escape. It grinds away at both emotional and health of the individual leading to breakdown and even death.</td>
</tr>
<tr>
<td>Traumatic Stress</td>
<td>It is a severe stress reaction that results from a catastrophic event or intense experience such as a natural disaster, sexual assault, life-threatening accident, or participation in a combat. After the initial shock and emotional fallout, many trauma victims gradually return to normal but others may experience trauma stress disorders with the symptoms of flashback or nightmares.</td>
</tr>
<tr>
<td>Episodic Acute Stress</td>
<td>Individuals experiencing this type of stress are very chaotic, out of control and they always seem to be facing multiple stressful situation. Thus they may be wedded to a lifestyle that promotes stress.</td>
</tr>
</tbody>
</table>

Source: Adopted from (Dwamena, 2012)
2.2.2.2 Stimuli Oriented Type of Stress

This second category of the types of stress is organised under the themes of the stimulation of stress rather than the response to phenomenon of stress. Smith (2012) highlighted on Albrecht's four types of stress. They include: Time Stress, Anticipatory Stress, Situational Stress and Encounter Stress.

Table 2.2: Stimuli Oriented Types of Stress

<table>
<thead>
<tr>
<th>TYPES OF STRESS</th>
<th>MEANING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time Stress</td>
<td>This relates to the stimuli of deadline and punctuality which normally puts people in situation of rush and struggling to complete a task. It is therefore associated with worrying about time. The potential for being late and the worry of being on time fills individuals with stress conditions.</td>
</tr>
<tr>
<td>Anticipatory Stress</td>
<td>Anticipatory stress is concerned with fear of events in the future. Worrying about future events that they may fail or lack of knowledge of the event can put an individual to the state of anxiety, panic or nervousness and result in a stressful experience.</td>
</tr>
<tr>
<td>Situational Stress</td>
<td>This also relates with stress brought up by conflicts and emotions that get situations out of control. This mainly refers to the sudden situation where a normal condition changes into what will jeopardise the purpose of the events.</td>
</tr>
<tr>
<td>Encounter Stress</td>
<td>Encounter stress has to do with the stress of having to deal with a person or a group of people one would rather not for some reasons.</td>
</tr>
</tbody>
</table>

Source: Adopted from (Smith, 2012)
It can clearly be observed that all the types of stimuli oriented stress have a direct linkage and highly prevalent in business settings. However Smith (2012) pointed that time stress is the most common type of stress in busy business organisations.

2.3 OCCUPATIONAL STRESS

The already established fact that stress is a fact and part of life means that it exists in all endeavours of life including workplaces. Occupational stress, also known as job stress is therefore viewed as basically the stress at workplaces or caused by an occupation (Smith K. I... 2012). Abdulai (2011) indicated that since stress has to do with the demands on a body to adjust, cope and adapt, it follows then that occupational stress is to do with the demands of the workplace on the employee to do same.

The broad definition of occupational stress by NIOSH (1999) as "the harmful physical and emotional responses that occur when the requirements of the job do not match the capabilities, resources, or needs of the employee" has received a wide acceptance, but like other related definitions, it has been criticised for ignoring the non work stressors which combines with work stressors to induce in the employee the condition of occupational stress (Abdulai, 2011). He further brought to light that the definition by NIOSH (1999) is corroborated by the simple definition offered by Rice (1992) that occupational stress results from job features that pose a threat to the individual and that threat may be due to either excessive job demands or insufficient supplies to meet employee's needs. This offers a good insight of how organisational offers such as wages and salaries, promotions or opportunities for growth can also influence stressful conditions. According to Kendall, Murphy, O’Neill, & Bursnall (2000), Lazarus (1991) postulated that occupational stress is a process, involving a transaction between an individual and
his or her work environment. In no doubt, this is a definition under the influence of the transactional or interactional definitions already discussed in section 2.2.1.3.

2.3.1 Stressors in the Workplaces

As defined by Hans Selye, a stressor is a stimulus that causes stress (Whitehead, 2001). Hence, any sources from the work that induces the existence of occupational stress can be referred to as work stressor. Dwamena (2012) highlighted five (5) widely known potential stressors in the workplaces. They include the following as he discussed to lead his investigations at the Port of Takoradi:

2.3.1.1 Factors Intrinsic to the Job

Dwamena (2012) discussed the factors intrinsic to the job to involve poor working conditions, shifts, long working hours, the level of risk and danger attached to the job, the introduction of new technology, job under-load (which is associated with repetitive routine, boring and under stimulating work) and work overload. The results of the research of Nnuro (2012) on stress at Koforidua Polytechnic revealed that work overload was the major cause of occupational stress among the staff of the institution. Dwamena’s research on stress at GPHA, Takoradi however failed to emphatically identify the types of stressors among the GPHA staff. Rather, he stated generally that stress is a factor that employee’s at GPHA, Takoradi endured.

2.3.1.2 Role in the Organisation

According to Dwamena (2012), Arnold, Robertson and Cooper (1993) explained the stressor of the role in the organisation to include: role ambiguity, role conflict and responsibility. It was explained that role ambiguity arises when employees do not know what is expected of them at
the workplace and how their work performances are evaluated. Role conflict also was extensively discussed to occur in an organisation when a worker experiences the situation where two superiors are demanding conflicting things and when attending to one will mean being disobedient the other superior. Finally, responsibility is split into the responsibility for people and responsibility for other things such as budget, equipment, etc. it was further established that responsibility for people has more impetus to cause stress than responsibility for other things.

2.3.1.3 Relationship at Work

Under the potential stressor of relationship at the workplace, Dwamena (2012) brought to light that workers require a stable relationship with their bosses or subordinates and peers but any poor working relationship in their work teams can result in a stressful condition.

2.3.1.4 Career Development

As workforce becomes more diversifying and jobs get scarcer, greater challenge is posed to workers to seek opportunities of learning new skills (since it is becoming as requirement) to get updated and to increase their levels of job security. Lack of job security, fear of redundancy, obsolescence and numerous performance appraisals can cause pressure and strain.

2.3.1.5 Organisation Structure and Climate

This relates to sense of belongingness and the adequacy of opportunities to participate in the organisation. It was elaborated that when an employee lacks such things as belongingness and participating opportunities in the organisational structure and climate, it becomes a good source to put employees under stressful conditions.
Dwamena’s investigations at the Port of Takoradi however indicated that GPHA employees have encountered all such potential stressors at their work at the port in varying forms and stress effects. Dwamena however, further discussed some other potential causes of work stress including economic uncertainties, technological uncertainties and organisational leadership. He indicated that the economic uncertainties pertain to the situations where people become anxious about their job security as the economy in which they live contracts whiles the technological uncertainties relate to the same effects when innovations in technology make the skills of workers obsolete.

Although some overlap with the forgoing factors causing work stress, the common causes of work related stress include the following: long hour, heavy work load, changes within the organisation, tight deadlines, changes to duty, job insecurity, job autonomy, boring work, insufficient skills for the job, over supervision, inadequate working environment, lack of resources or equipment, few promotional opportunities, harassment, discrimination, poor relationship with colleagues or bosses, crises incidents such as armed hold up or workplace death (Better Health Channel, 2012).

2.3.2 Reactions to Occupational Stress

The reactions to the phenomenon of occupational stress are invariably the description of the process involved in stress formation or development. The G.A.S process as postulated by Hans Selye is therefore a perfect process to discuss the reactions to stress at work. According to Selye as cited by Rice (2012), the G.A.S identifies three (3) distinct phases as the alarm reaction, the resistance stage and the exhaustion stage.
2.3.2.1 Alarm Response

White (2001) discusses that the alarm reaction stage is triggered by the exposure to the stressor. During this stage of initial encounter with a stressor, the body's nervous systems are being alerted to a state of emergency or shock can last from a few moments to as long as 24 hours depending on the intensity of the stressor and the vulnerability of the individual. Michie (2002) cited that at this stage, when confronted with a threat to our safety, our first response is physiological arousal: our muscles tense and breathing and heart rate become more rapid.

It is during this stage that Dwamena (2012) further brought to light that adrenaline will be produced in order to bring about the "fight-or-flight response". Rice (2012) however indicated that the fight or flight response results from either the persistence of the stressor or the weakness of the individual or both.

2.3.2.2 Resistance Stage

This is the stage involving the body's full response to the stressor in an attempt to adapt or cope with the stress and hoping to successfully return to equilibrium for the individual (Whitehead, 2001). Rice (2012) however puts it that this stage is evidenced by the dramatic reduction in the alarm response as full resistance to the stress stimuli is being established. This stage therefore implies an attempt at survival through a carefully balanced use of the body's defense mechanisms in the presence of the stressor. If however, the defense mechanism does not work, or fails to cope, it will lead to the third stage which is exhaustion (Dwamena, 2012).
2.3.2.3 Exhaustion Stage

At this final point, all of the body’s resources to respond to the stressor are eventually depleted and the body is unable to maintain normal function. This results in psychological breakdown and the body becomes highly susceptible to infections (Whitehead, 2001). According to Dwamena (2012), the result can manifest itself in obvious illnesses such as ulcers, depression, diabetes or even cardiovascular problems, along with other mental illnesses.

2.3.3 Signs and Symptoms of Occupational Stress

Stress manifests itself in a number of ways as the response based definition has captured and it is broadly be limited to psychological, physiological, or behavioural symptoms. Dwamena (2012) also highlighted the manifestations of occupational stress in the same three general categories as discussed below:

2.3.3.1 Psychological Symptoms

This category of stress symptoms has to do with the mental health conditions of the worker. Psychological symptoms could bring about a deteriorating work performance and are exhibited in forms of anger, anxiety, depression, nervousness, irritability, aggressiveness, and boredom. These conditions according to Dwamena (2012) do not only result in low employee performance but also declines in self-esteem, resentment of supervision, inability to concentrate, trouble in making decision and job dissatisfaction (burnouts). Michie (2002) also cited poor concentration and memory as psychological (cognitive) symptoms of stress. However psychological symptoms are not easily recognised as physiological symptoms and as such can be more harmful and disturbing and can result in serious damage to a person and the organisation (Kushivan, 2003).
2.3.3.2 Physiological Symptoms

The physiological symptoms refer to the changes in metabolism as a result of the influence of stressors. The symptoms include increased heart rate, blood pressure etc. With this, the wear and tear on the body becomes noticeable and problematic. The effects of these are back pains, migraine headaches, insomnia, heart disease, hypertension, diabetes and even cancer which affect employees' productivity.

2.3.3.3 Behavioural Symptoms

The behavioural signs of stress include eating more or less, cigarette smoking, use of alcohol and drugs, rapid speech pattern nervous fidgeting which leads to absenteeism from work, hopping from job to job and causes performance to deteriorate. Michie (2002) also cited frequent making of mistakes causing lots of accidents and living problematic social behaviours (withdrawal and aggression) as behavioural symptoms of occupational stress.

2.4 MODELS OF OCCUPATIONAL STRESS

The number of stress models described illustrates how many different viewpoints there are of occupational stress, and show how complex these processes may be, and while the range of stress models in the workplace is impressive, certain viewpoints have historically been more popular.

2.4.1 Person-Environment Fit Model

French, Rodgers & Cobb. (1974) as cited by (Cope, 2003) viewed stress and resulting strain as a product of the interaction between the individual and the potential sources of stress in the environment. According to this model, occupational stress is primarily a result of inadequate
person-environment fit (Cope, 2003). According to Cope (2003) this model postulates that one kind of fit is the extent to which the individual’s skills and abilities match the demands and requirements of the job and the second fit is the extent to which the job environment provides support to meet the individual’s needs.

As discussed by Edwards & Cooper (1990), the Person and Environment (P-E) fit model is described as both objective and subjective P and E. That is the objective \( P \) and \( E \) refers to variables that exist independently of the individual's perceptions whereas the subjective \( P \) and \( E \) exist as perceived by the individual. The variables in the case of the person (P) include all the attributes of the individual in relation to skills, abilities, experience or self-concept and identity whilst that of the environment (E) include; the physical or social situations or events (Edward, Caplan & Harrison, 1998).

Edward, Caplan & Harrison, (1998), indicated that the relationship between the objective and subjective \( P \) and \( E \) is imperfect and casual due to perceptual distortions, limited human information processing capabilities and limited access to objective information. Since the person always relates with its environment, the P-E fit model stipulates that that objective P-E fit has little impact on mental health unless it is perceived by the person and thereby translated into subjective P-E fit. In essence, P-E fit embodies the premise that attitudes, behaviour and other individual level outcomes result not from the person or environment separately, but rather from the relationship between the two (Ahmad, 2010).

Although the P-E model is the most widely cited model in the field of stress, it continues to be ancillary to the P-E model and consistently lacks empirical evidence (Edwards & Cooper, 1990).
2.4.2 NIOSH Model of Stress

The NIOSH stress model which is a refinery of what was called the Michigan model mainly relates to the fact that the workers are not always confined to the job environment and so they are not only affected by job stressors. NIOSH job stress model suggests that job stress is a mixture of stressful job conditions mixed in with individual and situational factors (NIOSH, 1999).

NIOSH upholds the view that job stressors can have direct influence on the individual but does not in any way ignore the role of individual factors. In identifying job conditions that may lead to stress, NIOSH included environmental conditions which was explained to involve unpleasant or dangerous physical conditions, such as crowding, noise, air pollution, or ergonomic problems. NIOSH (1999) suggests that individual and situational factors can act to minimise the effects of stressful working condition through ensuring a balance between work, family and personal life, having a support network of friends and coworkers and maintaining a relaxed and positive outlook.

2.4.3 Managerial Model of Stress

Sources of stress in the workplace have been identified by most of the recent stress researchers. According to Cope (2003), various approaches have been used to classify the sources of stress into a useful model including physiological versus psychological sources, task characteristics, work environment characteristics, extraneous factors to the job and individual characteristics.

Cooper and Marshall (1978) as cited by (Cope, 2003), this model identifies seven (7) major categories of managerial stress. They include stress factors intrinsic to the job, role in the organisation, career development, organisational structure and climate, relationship within the
organisational interface with outside and organisational boundary. This model still serves as a sound framework for discussion of the concept of stress.

Although the model has been used for many studies, it has been criticised because of the fact that it tries to measure too many aspects at a time defend. This criticism has however been defended by the statement that "its broad brush approach may be useful to identify problem areas in an organisation that can then be investigated further using more focused approaches" (Jones & Bright, 2001) as cited by (Cope, 2003).

2.5 THEORIES OF OCCUPATIONAL STRESS

The theories of occupational have over the years been propounded by stress researchers from the different perspectives from where the viewed the concept of stress. Although, lots of the theories exist, most of them are very much interrelated and so an attempt has been made to discuss how related some are.

2.5.1 Transactional Theory

The main features of the transactional theory by Lazarus & Folkman (1984) of psychological stress are the appraisals and coping frameworks. This model is also referred to as the demand-control model since they are all focused on the structural features of an individual’s interactions with their environment (Mark & Smith, 2008). As elaborated by Babatunde (2013), this theory explains how individuals initially evaluate stressful encounters in terms of potential risk through an initial assessment (primary appraisal) which then informs the processes that frames an individual’s development of coping strategies (secondary appraisal). The secondary appraisal helps to accommodate, reduce or remove impending stressors. Therefore, within the context of work stress, the transactional approach examines the relationship between the employee and their
work environment through the personal assessments that such employees make of their work environment or working conditions evaluated as potential health hazards. Subsequently, problem-solving and emotional-focused coping efforts were suggested as suitable resources utilised by individuals to deal with such health threatening demands.

However, it was noted by Babatunde (2013) that a limitation of the transactional model is that although it embraces variables such as subjective perceptions and the potential influence of individual differences in assessing stress responses, the complexities inherent in this personality and behavioural variations make it hard to empirically evaluate the vast nature of how people react and cope under stressful conditions. Often used quantitative methodology in occupational stress research has been criticised as obtaining data that captures only a static moment in time (Mazzetti & Blenkinsopp, 2012) as cited by (Babatunde, 2013).

2.5.2 Inverted-U Theory of Stress

The Inverted-U theory (also known as the Yerkes-Dodson Law), was created in 1908 by psychologists Robert Yerkes and John Dodson. It relates to the law of performance and shows the relationship between stress (pressure) and performance (Staal, 2001).

According to Staal (2001), the theory states that performance improves as stress (pressure) increases until a point at which time it decreases. Hence, the Yerkes-Dodson law implies that cognitive performance in difficult tasks is best when an individual is under optimal stress: performance would be impaired under conditions above or below optimal stress levels (Salehi, Cordero, & Sandi, 2010).

Despite the great popularity of the inverted-U curve to describe the relationship between stress and performance, Salehi, Cordero & Sandi (2010) highlighted that the validity of the law has
been criticised due its significant methodological problems in the study performed by the
generators and their data being judged insufficient to substantiate conclusions.

2.5.3 Role Theory

The basic premise of the role theory is that various occupational roles that individuals engage in
may be stressful regardless of their actual occupation, suggesting that stress found in various
work roles may be stressful for all workers (Nnuro, 2012). According to Nnuro (2012), Osipow
& Spokane (1987) described six work roles that they felt were stressful regardless of an
individual’s actual vocational choice. These six roles are: role ambiguity, role insufficiency, role
overload, role boundary, responsibility and physical environment.

2.6 EFFECTS OF STRESS ON JOB PERFORMANCE

The occurrence of occupational stress has significant effects on the performance of the worker
and consequently on the performance of the entire organisation. Discussing the symptoms of
occupational stress, Kushuvan (2003) rather presented the behavioural symptoms discussed under
section 2.3.3.3 as performance symptoms. In this regard, Kushuvan (2003) brought to light that
“there is a close and negative relationship between stress and work performance”.

Notwithstanding this popular hypothesis, empirical research by Rizwan (2014) proved
that “there is no significant relationship between job stress and job performance”. He however
stated that it is important to test these conceptualisations across different organisations to assess
their validity.

While too much stress is perceived to have negative consequences on employee performance,
no or too little stress is also not wanted in the workplace (Kushuvan, 2003). Various studies and
many stress researchers in the United States (US) have reported that annual cost of stress related alcoholism, Drug abuse, disease and low productivity come to about $142 billion.

NIOSH (1999) highlighted that stressful working conditions are actually associated with increased absenteeism, tardiness, and intentions by workers to quit their jobs. Nnuro (2012) cited that in some circumstances time pressure and or workload would trigger anxiety or frustration that might further distract or interfere with performance. This therefore implies that stress resulting from time pressure limits the time available to perform a given task In fact, Dwamena (2012) also revealed that most Ghana workers tend to take time off their duties to relax their stressful conditions and eventually leads to the desire of most of them to quit their jobs.

In spite of all the negative attributes of occupations stress on job performance, occupational stress has in some aspects been given the credits of providing mental alertness, motivation and efficiency that tend to positively impact on employee performance (Mills, Reiss, & Dombeck, 2008). This phenomenon of positive impacts of stress on job performance is widely discussed in the Inverted-U theory of stress as in section 2.5.2

2.7 MANAGEMENT OF STRESS

Following the fact as put by Manzor, Awan, & Mariam (2012) that stress is normal to human existence and only totally absent at the state of death, Braaten (2000) stated that it is unrealistic to eliminate stress from either personal or professional life. Most interventions to reduce the risk to health associated with stress in the workplace involve both individual and organisational approaches (Michie, 2002)
2.7.1 Individual Role in Stress Management

Individual role in stress management is usually aimed at increasing an individual’s ability to cope with stressors. According to Robbins (2004) as cited by Dwamena (2012), most of the coping strategies involve the objective of reaching a state of deep relaxation in which the employee feels physically relaxed, somewhat detached from the immediate environment and detached from body sensations.

According to Michie (2002), individual approaches include training and one-to-one psychology services (clinical, occupational, health or counseling). They usually aim to change individual skills and resources and may also help the individual change their situations. Michie (2002) also elaborated that the training programmes that individuals may undertake to help them manage job stress aim at developing stress coping techniques regarding assertiveness, communications skills, time management, problem solving, and effective management. Segal, Smith & Robinson (2015) highlighted five practices (that involve bad habits) employees can break from to help reduce job stress. They include: resisting perfectionism (aim to do best no project, situation or decision is ever perfect), cleaning up acts of lateness, flipping negative thinking and desisting from controlling what is uncontrollable.

It is noted that most often individual roles in managing stress is concentrated on changing the individual without any aptitude to effect changes on the environment (job factors) from where the stress are sourced. Many are of the view that the more effective individuals are at managing their own job stress, the more positively they affect the people around them and the less other people’s stress will negatively affect them (Segal, Smith, & Robinson, 2015). However, Michie (2002) highlighted that individual stress management practices without the efforts to deal with
environmental or job factors are of limited effectiveness and may be counterproductive. Therefore, the primary aim of the individual approaches to managing job stress should be to develop people's skills and confidence to change their situations at work but not to help them adapt to and accept a stressful situation (Michie 2002).

2.7.2 Organisational Role in Stress Management

Organisational focus also attempts to remove the stressors in a role or the environment of work or reduce the effects of stress on job performance.

In modern world a lot of specialized companies offer Employee Assistance Programmes (EAP) to business organisations to provide stress management training or create stress management programmes for use by the organisations (Shehuka, 2010). Shehuka (2010) however indicated that EAP does not answer to all the problems of the company and also has the disadvantages of often ignoring important root causes of stress as they focus on the worker at the expense of the environment and short living of their beneficial effects on stress symptoms.

As successful strategy for preventing stress within the workplace would ensure that the job fits the person rather than making people fit jobs that they are not well suited to. (Michie, 2002) highlighted the basic principles used in Scandinavia to prevent occupational stress. The principles include:

- Working conditions are adapted to people's differing physical and mental aptitudes.
- Employee is given the opportunity to participate in the design of his/her own work situation, and in the processes of change and development affecting his/her work.
Technology, work organisation, and job content are designed so that the employee is not exposed to physical or mental strains that may lead to illness or accidents. Forms of remuneration and the distribution of working hours are taken into account.

- Closely controlled or restricted work is avoided or limited.

- Work should provide opportunities for variety, social contact, and cooperation as well as coherence between different working operations.

- Working conditions should provide opportunities for personal and vocational development, as well as for self-determination and professional responsibility.

Managing stress by employers following some national guidelines as in Scandinavia has also taken the form of imperative legislation in the whole of Europe following a framework directive on the introduction of measures to encourage improvements in the safety and health of workers at work from the European Union (EU), then European Economic Community (EEC) in 1989 (European Agency for Safety and Health at Work (EU-OHSA), 2014). This directive is supported by the social partners' framework agreements on work-related stress and harassment and violence at work and aims to increase awareness and understanding, and to provide employers and workers at workplace level with an action-oriented framework to identify and prevent or manage problems of work-related stress (European Commission, 2011). It therefore suffices to say that in the advanced economies, organisational roles in managing the menace of job stress is not just a moral obligation and a good investment for employers but inspired mainly by specific legal framework which is unfortunately lacked in the continent of Africa including Ghana and organisations therein.
2.8 OCCUPATIONAL STRESS IN PORTS

Seaports are one of the common job sectors often cited for the existence of high occupational stress besides the banking sector (Akpene, 2014). As the trends of shipping operations keep advancing, the use of high technology and longer hours required to be in operation become a necessity for all ports. Globalization and associated phenomena like greater need for flexibility of skills and function, higher work load and more pressure and job insecurity have contributed more to the burden of stress for both developed and developing countries. As port business is international in nature requiring all time operation and the use of sophisticated tools and equipment, the port working environment becomes a key not only to determine the output of the worker but to help measure the amount of stress the environment can put on port labour.

According to Houtman & Jettinghoff (2007), the phenomenon of stress is more alarming for developing or transition countries who are subject to rapid and drastic economic and social changes, where there is an increased demand for adaptation of workers and generally poor working environment. This implies that port workers in developing countries with great or ambitious visions and working assiduously at it are more subjected to the phenomenon of occupational stress than the developed economy. Clearly, the body with the mandate to oversee the realization of the visions of the port (Port Authority) will carry a greater burden of the cake than other port community members. Dwamena (2012) brought to light that there is a greater misfit between GPA employee and the environment and mentioned that the workers are not happy but stressed by it.

Almeida, Cezar-Vaz, Rocha, & Cardoso (2012) identified in their studies at Brazil Ports that the harmful physical elements such as exposure to the noise of machineries, and mooring boats, as
well as the anti-ergonomic aspects, related to excessive work, under pressure and intense responsibility and in shifts peculiar to port working environment, circulatory diseases and systematic hypertension (which are symptoms of stress) are highlighted against the health of port workers. Almeida, et al concluded in their work that the stress of working in the port environment contributes to the development of occupational and non-occupational illnesses, which interact and interfere directly with the workers' quality of life and in the productivity of professional activities. Also revealing that every port worker in Nigeria is affected by occupational stress (Aina, 2015) emphasised the need for radical steps to be taken to manage occupational stress effectively as the cost of not managing it outweighs the otherwise.

The World Health Organisation is still committed to creating stress awareness to the employer and the worker at an early stage for developing countries as the phenomenon is far from being resolved in the developed economies (Houtman & Jettinghoff, 2007). For ports in the developing countries, the major focus to help deal with occupational stress should be to create early awareness amongst port workers.
CHAPTER THREE

METHODOLOGY

3.1 INTRODUCTION

This chapter presents an elaboration on the methods adopted and utilised in gathering, processing, analysing and the presentation of data as obtained in response to the research questions raised in chapter one. In doing this, the significance or relevance of every means adopted in the data acquisition and usage has been outlined with a provision for a highlight on field challenges.

3.2 STUDY AREA

This research is limited to the port community in Tema. The Port of Tema is the bigger of the two seaports in Ghana and it is located on the east coast of Ghana. The Port of Tema is about 21 nautical miles off the east coast of the capital city, Accra. In absolute location, Port of Tema is on the Greenwich Meridian and latitude 5.1 degrees north of the equator. It spans a land area of 3.9 million square metres and is flanked by the industrial city of Tema (Asuliwonno, 2011).

Given the facts that the Port of Tema is bigger than its sister port in Takoradi and a similar research of this kind on the concept of occupational stress has already been undertaken by Dwamena (2012) in the Port of Takoradi and while there is no such research undertaken in the Port of Tema, the researcher deems it more appropriate to conduct this research in the Port of Tema to highlight its unique case of occupational stress.
3.3 RESEARCH APPROACH AND DESIGN

Thomas (2010) discussed that research approach and design is the *master plan* of a research work and likened it to an *architectural outline* that shows how the samples or population, measures, treatment of data and mode of presentation of data relate together in attempt to solve the research problems or questions.

This research is based on qualitative approach (one of the two dominating research approaches in social research including quantitative approach) in which descriptive methods were used to achieve the research objectives. Qualitative methods allow the researcher to present findings through reflecting and analysing the lived experiences, attitudes, feelings and opinions of respondents.

According to Tewksbury (2009), the means through which data is collected and analysed makes the knowledge gained through qualitative investigations more informative, richer and offers enhanced understanding than using quantitative approach. Since this research is purely a social study (interacting with people), the researcher seeks to provide a more in-depth and more meaningful understanding of their lived experiences, views and culture regarding the nature of occupational stress in the port. Hence, the need to use the qualitative approach.

3.4 RESEARCH INSTRUMENTS

Research instruments represent the sources of all the data used in generating answers to research questions and achieving research set objectives. In order to carry out evidence-based research, the researcher relied on the traditional sources of data consisting of primary and secondary data.
3.4.1 Primary Data

Primary source of data was gathered through the conduction of interviews and the administration of questionnaires to the sampled population. The personal interviews undertaken were in the form of in-depth interviews with key informants. The interviews conducted were mainly for the validation of the data obtained from the administration of questionnaires and the in-depth understanding of the turn of unfolding information.

3.4.1.1 Interviews

Research interview is a form of conversation during which the interviewer draws out detailed information and comments from the interviewee (Bowen, 2005). The researcher in attempt to gather in-depth information from the respondents mainly used personal interviews. There are however many approaches to conduct research interviews which include the unstructured and semi structured interviews (Grimsholm & Poblete, 2010).

According to Kajornboon (2004), using the semi structured interview, the researcher has a list of key themes, issues, and questions to be covered. In this type of interview the order of the questions can be changed depending on the direction of the interview. An interview guide is also used, but additional questions can be asked which often were not anticipated initially. Grimsholm & Poblete (2010) highlighted that the use of interview guide strategy to conduct semi structured interview is one way to ensure a high degree of flexibility in the conversation to ensure that more detailed information is obtained from the interviewee.
Within each topic, the interviewer is free to conduct the conversation as he thinks fit, to ask the questions he deems appropriate in the words he considers best, to give explanation and ask for clarification if the answer is not clear, to prompt the respondent to elucidate further if necessary, and to establish his own style of conversation.

The strengths of semi-structured interviews are that the researcher can prompt and probe deeper into the given situation. This however is considered not extended to the benefit of interviewers who may not probe into situations and could also be time consuming when there are a large number of respondents to interview. However, according to Sharma (2011), to the use of interviews are the most appropriate when exploring practitioners' perspective for qualitative information. The researcher therefore considered the use of semi-structured interview more suitable for this research.

As presented in Table 3.1, the researcher used the instrument of personal interview to obtain information from all the sampled population.

3.4.1.2 Questionnaires

Questionnaire is a set of structured or standardised questions that have been designed on a piece of paper and a provision made for respondents to make an input on research questions. According to Bird (2009), questionnaires are popular and fundamental tools used in social sciences to acquire public knowledge, perception and reasons for actions with respect to the topic under investigation.

The structured questionnaires helped the researcher to direct questions in a more objective manner so as to get the right information needed for the study from the sampled workers at the
Port of Tema. Bird (2009) discussed that questionnaires can be distributed in four modes of which self-administered questions have the advantage of a wider coverage, anonymity of respondents, and sufficient time for respondents to answer the questions more appropriately. Bird (2009) however presented that the use of questionnaires is usually prone to poor response rate.

During the field itself, the questionnaires were administered directly to the respondents who were allowed a week to complete. This was to ensure that the respondents had ample time to provide the necessary information. Respondents were contacted on the phone three times during the week to remind them about the date for collection and the need to complete the questionnaires in time.

### 3.4.2 Secondary Data

Secondary data was also gathered mainly through the review of books, public documents, publications, articles, journals, newsletters, policies and regulations, and reports relevant to the study. The secondary data obtained as a traditional activity in most social research formed the literature review as presented in chapter two.

Secondary data were collected using periodicals, books, internet sources, etc. This aided in gaining a fore knowledge of the research topic and serve as basis for conducting the field study.

### 3.5 POPULATION AND SAMPLE

The research targeted mainly the workers who are directly involved in the operations of the port thus perform direct activities involving ship and cargo operations in the Port of Tema. By definition, this target population constitute the operational divisions of GPHA (port, marine and security departments), and a list of the major stevedoring companies that include the Meridian Port Services (MPS), Sir Lab Stevedoring, Speed Line Stevedoring, Atlantic Port Services
(APS), Gateway Gate Services, Red Sea Maritime Services, Tema Container Terminal (TCT), Africa Coastal Services, and APM Terminals.

### 3.5.1 Sampling Procedure

The procedure adopted for sampling from the target population was mainly purposive sampling. Following this, only the departments (of the target population) that are directly involved in port operations were sampled as respondents.

The purposive sampling method is a form of non-probability sampling technique in which members are selected from the population in some non-random manner but in a convenient manner for a set from the population with some specific characteristics for the study. In this work, the specific characteristics used for the sample is based on the staff whether managerial or not whose work role is directly involved in port operation.

Apart from the respondents from GPHA, all individual respondents were further selected by means of simple random sampling. Random sampling according to Moulton (1998) is the purest form of probability sampling in which each member of a target population has an equal and known chance of being selected and deemed as the best single way to obtain a representative sample from a population of similar characteristics and experience.

### 3.5.2 Population, Sample Size and Sampling Method

Table 3.1 is a presentation of the target population, sample size and method and the survey type used to obtain information from the respondents to the questionnaire and personal interviews.
<table>
<thead>
<tr>
<th>TARGET POPULATION</th>
<th>SAMPLE SIZE</th>
<th>SAMPLING METHOD</th>
<th>SURVEY TYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPIIA Port Operations (25)</td>
<td>75</td>
<td>Purposive</td>
<td>Semi-structured interview (SSI)</td>
</tr>
<tr>
<td>GPIIA Marine Operations (20)</td>
<td></td>
<td>Purposive</td>
<td>Questionnaires (Q)</td>
</tr>
<tr>
<td>GPIIA Security Operations (30)</td>
<td></td>
<td>Purposive</td>
<td>SSI/Q/Q</td>
</tr>
<tr>
<td>Meridian Port Services</td>
<td>20</td>
<td>Purposive</td>
<td>SSI/Q/Q</td>
</tr>
<tr>
<td>Sir Lab Stevedoring</td>
<td>5</td>
<td>Purposive/random</td>
<td>SSI/Q/Q</td>
</tr>
<tr>
<td>Speed Line Stevedoring</td>
<td>5</td>
<td>Purposive/random</td>
<td>SSI/Q/Q</td>
</tr>
<tr>
<td>Atlantic Port Services</td>
<td>5</td>
<td>Purposive/random</td>
<td>SSI/Q/Q</td>
</tr>
<tr>
<td>Gateway Gate Services</td>
<td>5</td>
<td>Purposive/random</td>
<td>SSI/Q/Q</td>
</tr>
<tr>
<td>Red Sea Maritime Services</td>
<td>5</td>
<td>Purposive/random</td>
<td>SSI/Q/Q</td>
</tr>
<tr>
<td>Tema Container Terminal</td>
<td>15</td>
<td>Purposive/random</td>
<td>SSI/Q/Q</td>
</tr>
<tr>
<td>African Coastal Services</td>
<td>10</td>
<td>Purposive/Random</td>
<td>SSI/Q/Q</td>
</tr>
<tr>
<td>APM</td>
<td>10</td>
<td>Purposive/Random</td>
<td>SSI/Q/Q</td>
</tr>
</tbody>
</table>

TOTAL: 155

Source: Author
This is where data collected on the field involving several sources is converted into information so that it can serve as the real and factual basis for adducing conclusions, recommendations and advising policy directions.

The analysis of data in this research was mainly based on the grounded analysis approach. According to Gray (2004) as cited by Radwan, Jones & Minoli (2008), there are two main approaches to analysing qualitative data, namely context and grounded approaches. The context approach is linked to a deductive approach in which the researcher identifies specific categories and criteria of selection before beginning the analysis process whilst using the grounded theory, no criteria are prepared in advance of the analysis processes and is also called the inductive approach. In regards to this study, using the grounded theory, the researcher used the constant comparative system which comes from the grounded theory.

The analysis of data began with the coding or identification of persistent phrases, words, themes and concepts within the data as obtained from the interviews and questionnaires into various categories relating to the research questions they address. The various categories of the data was finally integrated according to their relations.

By the use of the Microsoft Excel and Statistical Package for Social Science (SPSS), the researcher was able to translate the organised data involving statistics into simple forms of tables, pie charts, bar charts, percentages and figures. Since the study is qualitative in nature, the simple descriptive statistics involving the tables and charts were followed immediately by description in words.
3.7 DATA RELIABILITY AND VALIDITY

Data reliability has to do with the consistency in which research procedures produce their findings or results. It also relates to the repeatability of the research findings by different researchers under similar conditions (Moonga, 2007). To achieve data reliability as indicated by Oosthuizen (2005), the researcher adopted the triangulation method in which the researcher employed multiple modes of data collection methods including personal interviews, focus group discussions, and questionnaires. The use of the multiple methods is also intended to compare and contrast data obtained to achieve reliability of data and its output of validity.

3.8 DATA COLLECTION OR FIELD CHALLENGES

As much as possible, some measures were put in place to minimise the adverse effects of some of the field challenges by the researcher. However, some of the following challenges were beyond the solution of the researcher.

During the sorting out of the responses from the questionnaires, some of the responses were completely unclear and impossible to read whilst some of them ignored some of the questions. The effect of this phenomenon was considerably reduced by the use of a larger sample size as shown in table 3.1.

Also, it was noticed that some of the respondents were very reluctant to give out in-depth information as they probably doubted the true purpose of the interview for whatever reasons.

It became very challenging to obtain some other information which the researcher felt could enrich this research. For instance, there was no response to fill the additional comment left for the respondents in the questionnaires nor did any interviewee provide any additional information.
during the personal interviews. In spite of all the field challenges encountered, the purpose of this research was adequately achieved.
CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.1 INTRODUCTION

This chapter is a presentation of data obtained from the respondents through the methodology discussed in the previous chapter. The obtained data is discussed and analysed in the order of the research questions they answer and the objectives they help to achieve. However, it is broadly organised in three sections according to the research instruments used with each commencing with an overview of the statistics on the respondents.

4.2 FINDINGS FROM QUESTIONNAIRES

This section discusses the responses as received from the questionnaires distributed amongst 155 port workers at the Port of Tema as already elaborated in the previous chapter.

4.2.1 Rate of Responses to the Questionnaires

The rate of responses to the administered questionnaires is as summarised in table 4.1 below.
<table>
<thead>
<tr>
<th>TARGET POPULATION</th>
<th>SAMPLE SIZE</th>
<th>NUMBER OF RESPONDENTS</th>
<th>PERCENTAGE OF RESPONDENTS PER SAMPLE SIZE (%)</th>
<th>PERCENTAGE OF RESPONDENTS PER TOTAL RESPONDENTS (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPIIA Port Operations</td>
<td>25</td>
<td>15</td>
<td>60</td>
<td>12.0</td>
</tr>
<tr>
<td>GPIIA Marine Operations</td>
<td>20</td>
<td>18</td>
<td>90</td>
<td>14.4</td>
</tr>
<tr>
<td>GPIIA Security Operations</td>
<td>30</td>
<td>26</td>
<td>87</td>
<td>20.8</td>
</tr>
<tr>
<td>Meridian Port Services</td>
<td>20</td>
<td>19</td>
<td>95</td>
<td>15.2</td>
</tr>
<tr>
<td>Sir Lab Stevedoring</td>
<td>5</td>
<td>4</td>
<td>80</td>
<td>3.2</td>
</tr>
<tr>
<td>Speed Line Stevedoring</td>
<td>5</td>
<td>3</td>
<td>60</td>
<td>2.4</td>
</tr>
<tr>
<td>Atlantic Port Services</td>
<td>5</td>
<td>5</td>
<td>100</td>
<td>4.0</td>
</tr>
<tr>
<td>Gateway Gate Services</td>
<td>5</td>
<td>4</td>
<td>80</td>
<td>3.2</td>
</tr>
<tr>
<td>Red Sea Maritime Services</td>
<td>5</td>
<td>3</td>
<td>60</td>
<td>2.4</td>
</tr>
<tr>
<td>Tenna Container Terminal</td>
<td>15</td>
<td>11</td>
<td>93</td>
<td>11.2</td>
</tr>
<tr>
<td>African Coastal Services</td>
<td>10</td>
<td>8</td>
<td>80</td>
<td>6.1</td>
</tr>
<tr>
<td>APM</td>
<td>10</td>
<td>6</td>
<td>60</td>
<td>4.8</td>
</tr>
<tr>
<td><strong>SUM TOTAL</strong></td>
<td><strong>155</strong></td>
<td><strong>125</strong></td>
<td><strong>81</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Field data

From table 4.1 above, it is indicated that out of the 155 distributed questionnaires, 125 were retrieved representing the response rate of 81%. It can also be clearly seen that because all the
distributed questionnaires were retrieved from Atlantic Port Services, they represent the highest percentage rate of response (100%). However, it is also indicated that the responses from Meridian Port Services, Tema Container Terminal and the operations department of GPHA, which are all the biggest sampled organisations, are amongst the leading rate of responses retrieved. All together, the responses retrieved from GPHA and MPS consist of 62% of the total responses received. Since GPHA and MPS are the organisations with the largest personnel, it can be said that the data obtained from the questionnaires are a good representation of the occupational stress situation in the Port of Tema.

4.2.2 BACKGROUND OF RESPONDENTS

This sub section describes the background of the respondents in respect of their gender, age, marital status, education qualification and the status of their employment. These background information of the respondents mainly guided the researcher’s level of appreciation accorded to the answers provided by the respondents given the fact that occupational stress can be indirectly influenced by them.

4.2.2.1 Gender of Respondents

Figure 4.1 is a graphical representation of the responses about the gender of the respondents.
Source: Field data

From figure 4.1 above, it can be clearly seen that there were more male respondents than the female. Eighty six percent of the respondents were males whilst 14% were females. Whilst this indicates a vast difference between the two, it can be mentioned that the Port of Tema is greatly dominated by male employees.

4.2.2.2 Age (Years) of Respondents

Figure 4.2 below is the summary of the responses about the age distribution of the respondents. It shows that more of the respondents fall between the range from 20 to 29 years old, representing 34% of the total respondents. Twenty nine percent of the total respondents however were within the range from 30 to 39 years while 24% were under the range from 40 to 49 years old. There were 16 of the respondents, representing 12% who were between 50 and 59 years old. Generally,
it can be deduced that majority of the respondents were very young, with few of them at their retiring age.

Figure 4.2: Age Distribution of Respondents

![Age Distribution Chart]

Source: Field data

4.2.2.3 Marital Status

With respect to the respondents’ marital status, figure 4.3 below summarises the respondents. This was asked to help determine whether or not pressures from home add to increase occupational stress.
From figure 4.3 above, it is indicated that majority of the respondents, representing 63% were single. It can therefore be said that the influence of family cannot be much emphasised in this work.

4.2.2.4 Education Qualification

The summary of the responses in relation to the educational background of the respondents is as graphically presented in figure 4.4 below.
From figure 4.4 above, it has been indicated that majority of the respondents (32%) hold O’level/SSCE/WASSCE as their highest educational qualification. The next highest, 23% respondents hold diploma qualification and the least (10%) were those with post graduate qualification.

**4.2.2.5 Employment Statuses of the Respondents**

The responses on the employment status of the respondents is summarised in figure 4.5 below.

From figure 4.5 below, it is indicated that the majority of the respondents occupy junior rank position in their organisation, representing 64% of the total respondents whilst those in management positions were the least of the total respondents representing 10%.
4.2.3 The Causes of Occupational Stress in the Port of Tema

This sub-section discusses responses that helped to ascertain the causes of occupational stress in the Port of Tema.

4.2.3.1 The Existence of Occupational Stress in the Port of Tema

In order to find out whether or not the respondents experience stress in their work, they were asked to indicate either yes or no if their work is stressful. The responses obtained are as presented in figure 4.6 below. It is clearly evident from figure 4.6 below that vast majority of the respondents said their work was stressful. The few of the respondents who said that their work was not stressful were mostly the respondents with graduate and post graduate qualifications.
However, it was noticed that all the respondents from GPHA security, and port operations department, and nearly all the respondents who are junior staffs indicated that their work was stressful.

Figure 4.6: The Existence of Stress in the Port of Tema

![Pie chart showing the extent of stress among respondents.](image)

Source: Field data

The respondents were further asked to indicate the extent to which their work is stressful. This was to determine the level at which it can be taken seriously or otherwise. The summary of the responses is as depicted in figure 4.7 below.
From figure 4.7, it can be noticed that the majority of the respondents, representing 37% of those who said that their work was stressful, are of the view that their work is *highly* stressful whereas 18% think that their work is *very highly* stressful. This gives a sum of 55% of the respondents who think that their work is stressful thereby indicating that the stress level in the port is above average. Whilst very few said that the stress level is *low* or *very low*, it can be clearly deduced that the stress level in the Port of Tema is averagely on the high.

### 4.2.3.2 The Causes of Occupational Stress in the Port of Tema

In order to ascertain the causes of the stress experienced in doing work at the Port of Tema, the respondents were asked to indicate a list of aspects of the factors causing occupational stress that get them stressed. The responses are as summarised in the following tables and figures.

Firstly, in respect of their work roles, the responses are shown in table 4.2 below.
Table 4.2: Occupational Stress caused by Work

<table>
<thead>
<tr>
<th>ASPECTS OF THE FACTOR OF WORK</th>
<th>FREQUENCY</th>
<th>PERCENTAGE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work overload</td>
<td>30</td>
<td>24</td>
</tr>
<tr>
<td>Overtime</td>
<td>12</td>
<td>9.6</td>
</tr>
<tr>
<td>Shifts</td>
<td>3</td>
<td>2.1</td>
</tr>
<tr>
<td>Working environment/machine</td>
<td>4</td>
<td>3.2</td>
</tr>
<tr>
<td>Risks associated with work</td>
<td>56</td>
<td>44.8</td>
</tr>
</tbody>
</table>

Source: Field data

From table 4.2, it can be clearly seen that the majority of the respondents, representing more than half said that the risks associated with their work make them get very stressed at work whiles a good number also mentioned work overload. Relatively few of the respondents who said their work was stressful, representing 2.1% and 3.2% are also of the view that shifts and working environment are the work related factors that put them under stressful conditions. Few of the respondents however added that the phenomenon of long hours of standing makes them feel stressed.

Secondly, figure 4.8 below presents the responses in respect of the roles played by the respondents in their organisations and how they result in stress.
From figure 4.8 above, it is indicated that 29 of the respondents, representing 23% of the respondents who think that their work is stressful, mentioned that the conflicting instructions from different superiors put them under stressful situations whereas 11 also representing 11% rather said that stress under this factor is caused by the unclear definition of role.

Thirdly, table 4.3 below presents the responses in respect of the relationship at the workplace that bring about stress.
Table 4.3: Occupational Stressed Caused by the Relationship in the Organisation

<table>
<thead>
<tr>
<th>ASPECTS OF RELATIONSHIP</th>
<th>FREQUENCY</th>
<th>PERCENTAGE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationship with subordinates</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Relationship with colleagues</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Relationship with superiors</td>
<td>16</td>
<td>15</td>
</tr>
</tbody>
</table>

Source: Field data

From table 4.3 above, it is shown that the majority of the respondents, representing 15% of the total respondents who think that their work is stressful, were of the view that their relationship with their superiors has resulted into stressful situations whilst 7 of them, representing 5% hold the view that their relationship with their subordinates has brought about stress. However, about 10 of the respondents added that their relationship with their clients or customers has brought about stressful conditions.

Moreover, table 4.4 below presents the responses with regards to the career development of respondents and the aspects that put them under stressful conditions.
Table 4.4: Occupational Stressed Caused by Career Development.

<table>
<thead>
<tr>
<th>ASPECTS OF CAREER DEVELOPMENT</th>
<th>FREQUENCY</th>
<th>PERCENTAGE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job insecurity</td>
<td>15</td>
<td>14</td>
</tr>
<tr>
<td>Numerous performance appraisals</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Insufficient skills for the job</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Few promotional opportunities</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

Source: Field data

From table 4.4 above, it is indicated that 15 of the respondents, representing 14% of the total respondents who think that their work is stressful, and the majority, mentioned that job insecurity is an instance that cause stressful conditions at the workplace. Few respondents however are of the view that numerous performance appraisal, insufficient skills for the job and few promotional opportunities result in stressful situations at the job.

Lastly, table 4.5 below is a summary of the responses with regards to the aspects of organisational structure or climate that comes with stressful conditions in the Port of Tema.

Table 4.5: Occupational Stressed Caused by Aspects of Organisational Structure or Climate.

<table>
<thead>
<tr>
<th>ASPECTS</th>
<th>FREQUENCY</th>
<th>PERCENTAGE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequent changes within the organisation</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Over supervision</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Bureaucracy</td>
<td>11</td>
<td>11</td>
</tr>
</tbody>
</table>

Source: Field data
It is illustrated in table 4.5 that the majority of the respondents, representing 12% of the total respondents who think that their work is stressful, are of the view that over supervision as an organisational climate has resulted in stressful conditions. A good number of the respondents also hold that frequent changes within the organisation and bureaucracy have caused stressful situations.

Inferring from all that is discussed under sub section 2.2.3.2, one can say that as the following prevailing aspects as summarised in figure 4.9 below have mainly been the factors causing occupational stress in the Port of Tema. These aspects have had more than 10 respondents pointing to them as causing job stress.

Figure 4.9: The Major Aspects Causing Job Security in the Port of Tema

![Figure 4.9: The Major Aspects Causing Job Security in the Port of Tema](image)

Source: Field data
In order to find out from the respondents, which of the set of factors were the major cause of job stress in their workplaces, they were asked to list the factors in order of priority. The responses generally indicated that the factor of work was the major, followed by the factor of role in the organisation, and the factor of relationship in the organisation. It can therefore be clearly noticed that this confirms the inference made and presented in figure 4.9 above.

4.2.4 Effects of Occupational Stress on Work Performance

The respondents were asked to indicate the signs they exhibit when they are under work stress. This was to find out the symptoms that may be injuries to their work performance and consequently help to determine appropriate solutions to reduce the negative effects of job stress. Table 4.6 below summarises the responses obtained.

Table 4.6: Signs shown by Respondents under Occupational Stress

<table>
<thead>
<tr>
<th>SIGNS OF STRESS</th>
<th>FREQUENCY</th>
<th>PERCENTAGE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feeling anxious, angry, depressed, nervous, etc</td>
<td>67</td>
<td>64</td>
</tr>
<tr>
<td>Increased heart rate &amp; blood pressure, headaches, etc</td>
<td>25</td>
<td>24</td>
</tr>
<tr>
<td>Eating more or less, cigarette smoking, use of alcohol &amp; drugs, sleeping, etc</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

Source: Field data

From table 4.6 above, it shown that the majority of the respondents, representing 64% of the total respondents who think that their work is stressful, show such signs that are referred to as
psychological symptoms. A good number of the respondents, also representing 24%, said that they show such signs that are commonly called physiological symptoms whereas very few of them show such symptoms called behavioural. Since it was earlier established that the psychological symptoms results in lower employee performance, it can be therefore inferred that the predominant symptoms exhibited by the respondents has had more negative impact on the performance of the respondents.

The respondents were therefore asked to indicate how work stress has impacted on their work performance. The responses indicated the majority, representing 13% and 7%, normally make avoidable mistakes and lose interest in the work respectively. Few others also indicated that, they either absent themselves from coming to work or face the difficult challenge of giving total concentration to the work. Therefore, it implies that when employees are put under stress, it often results in actions that will get them out duty so that they can avoid making avoidable mistakes at the workplace.

It was also asked of the respondents to state whether or not stress has any positive impact on their work performance. This was to find out whether or not the respondents consider the level of stress at their workplaces beneficial. Vast majority of the respondents, representing 73% of the total respondents who think that their work is stressful, indicated hold the view that job stress has no positive impact on the work performance whilst a very few, representing 5% thought otherwise. Those who thought that job stress has positive impacts on their work performance discussed that, job stress offers them the chance to find the need to exercise and return to work more poised than before whilst others mentioned that it enables them to do the impossible at work. Given the responses of the majority, it can be deduced that, the phenomenon of job stress at the Port of Tema is widely known for negative impacts on work performance.
4.2.5 Individual Management of Occupational Stress at the Port of Tema

In order to find out what the port workers do to manage stressful conditions, they were asked to state their personnel initiatives to help manage the menace. Very few of the respondents mentioned the following:

- "Chatting with friends"
- "Exercising at all times"
- "Going for leave"
- "Request for changes within the organisation"
- "Taking short breaks from work"
- "Observing good eating habits".

Generally, it was noticed that all the personnel initiative towards the management of job stress as mentioned by few of the respondents, who are less than 10% of the total respondents who think that their work is stressful, are reactionary and spontaneous. Again, it can also be deduced that almost all of their initiatives are just as the same as negative impacts of job stress on work performance.

The respondents were also asked to indicate the extent to which their personnel initiatives were helpful. The responses generally indicated that their initiatives were much helpful. This also implies that as the individual employee benefits from their initiatives, the organisation eventually looses the total hours of work expected from the employee.

4.2.6 Organisational Management of Occupational Stress at the Port of Tema

The respondents were asked to state whether or not their organisations have any specific policy guideline to manage the menace of job stress. The majority of the respondents, representing 65% of the total respondents who think that their work is stressful, including majority of the GPHA
respondents indicated that their organisations do not have any specific policy guidelines while 10% of them said that their organisations do have.

The few of the respondents who said that their organisations have some specific policy guideline to manage job stress mentioned the following actions that are being initiated by their organisations to help manage the phenomenon of the occupational stress.

- "Entertainment"
- Granting off-days for rest including leave period
- Organising keep fit/endurance exercise
- Organising workshops and courses to make workload flexible"

It can be noticed from the above organisational initiatives that the respondents are not quite aware of any specific policy guideline that the organisations have undertaken to manage job stress but undertakes traditional activities that can only help in reacting to stress but not to prevent it from occurring. Apart from the organising workshops and courses to make workload flexible, the rest of the companies’ initiatives do not seem to target the management of the stress phenomenon from combating the stress stimuli.

However, the respondents were further asked to indicate the extent to which the organisational initiatives were helpful. The responses generally indicated that their initiatives were much helpful with a few others stating that they are not helpful.

Lastly, the respondents were asked to mention what they think their organisations can do to better manage the menace of work stress. The responses include the following:

- "Shifts should be increased from 2 to 3 per day"
- Job security should be granted by making casuals permanent staff
- Regular training and exercises should be organised
It can be clearly seen from the recommendations given by the respondents that they rather need a holistic approach to dealing with job stress as they laid more emphasis on the organisations adopting measures that can help forestall the stress menace as well as training and exercises to help reduce its effects.

4.3 RESPONSES FROM PERSONAL INTERVIEWS

The responses discussed in this section also relates to the data gathered through the personal interviews with 6 GPHA employees, 3 MPS employees and 3 TCT employees. Generally, the personal interviews conducted were more or less a follow up on the findings that resulted from the questionnaires.

4.3.1 Ascertaining the Causes of Occupational stress

In order to ascertain the causes of occupational stress in the Port of Tema, the interviewees were posed with the question of how the major factors earlier discussed in sub section 4.2.3 bring about stress.

In respect of the factor of work, the respondents discussed that there is too much of work required of them to do under tight schedules or deadlines. All the respondents indicated that because time is of so much essence in port operation, they are often faced with work overload with respect to time and that mounts pressure on them. With respect to the risk associated to the work, the GPHA respondents indicated that port work is very risky and further explained that they only get stressed when issues of fatal accidents occur at operations. They were however of
the opinion that, the major problem that causes stress is not the risk associated with the work but the work over and tight schedule. One of the TCT respondents mentioned by saying that:

"Because overtime is compulsory at my workplace, one ends up working the whole day without enough rest to continue in another day".

In respect of the roles they play in the organisation, the majority of the interviewees mentioned aspects where conflicting instructions has put them under stressful conditions. One of the TCT respondents mentioned by saying that:

"Sometimes I am in loggerheads with my supervisor because I am unable to defy the orders from the Terminal Manager.

Also with regards to the factor of relationship at the workplace, all the interviewees mentioned that the way some of their superiors relate to them (especially how they communicate) brings about stressful conditions. One of the respondents said that:

"My senior colleagues are the main cause of my stress because of how they talk to me and their expectation from me".

Others who are in management positions also thought that their relationship with their subordinates put them under serious stress especially when they are stubborn and will not take instructions.

One of them who put it that:

"The boys I supervise are very stubborn and won't take common instructions even after several shouts on them".
Also in respect of the factor of *career development*, almost all the respondents indicated that except when one has been a casual for a long time, issues with career development does not cause much stress to the employee. It was however, discussed that all the issues pertaining to career development can easily be prevented by a hard worker without being stressed by them.

Lastly, in respect of the factor of *organisational structure or climate*, not more than 5 of the interviewees are of the view that the element of bureaucracy in their organisations can bring about stressful situations. One of the interviewees mentioned by saying that:

"even when you want common needle to help you do today's already overloaded work, the processes through which one must go through can last about 3 days before it is duly gotten. Plenty boring so called administration requirements!"

While the interviewees confirm the causes of the occupational stress as presented in figure 4.9, some of them added that most at times stress from home resulting from family demands (external factors) also influences the experience of job stress.

### 4.3.2 Impact of Occupational Stress on Work Performance

The interviewees were asked about the impact of occupational stress on their work performance. This was to find out their psychological, physiological and behavioural reactions to the menace of job stress.

The responses indicated that their reactions are similar to those already discussed in Chapter 2, sub section 2.3.3. It is however important to mention some few reactions as discussed during the interviews.
Most of them said that, when they are stressed at work, they feel so tired that they tend to act rudely towards customers. Almost all of them also mentioned that it reduces their satisfaction to be derived from the work, thus they tend to give excuses to close early from doing the work. Few others also mentioned that they have been hospitalised a number of times for stress related diseases.

In spite of the above negative impacts on their work performance and even on their health, some of them mentioned by saying that:

"I get hard work and better performance from my subordinates when I mount pressure on them"

However, it was discussed that mounting pressure on others in itself puts pressure on the supervisor or manager and can result in putting oneself in a needless stressful condition.

Another also mentioned that:

"I sometimes see stress as a motivation for me to work harder in order to get promotion".

Inasmuch as some few respondents think that stress has a good impact on their performance, they generally are convinced that stress has more negative effects than positive.

4.3.3 Stress Management in the Port of Tema

It was discussed during the personal interviews that the respondents under no different personal activities to manage the menace of stress from what was discussed in sub section 4.2.6. However, the majority of them indicated they have not at all done anything consciously to manage their stressful conditions. All they know very well is that stress is caused by factors they have limited control of.
In fact, apart from the interviewees from MPS, all the respondents indicated that there is no specific policy guideline to deal with the menace of job stress. The majority however, confirmed that their organisation under similar activities as highlighted in sub section 4.2.6.
CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

This chapter is a presentation of the highlight of the findings as discussed in the previous chapter. Based on the research objectives set out in chapter one and the findings as discussed, a conclusion is reached on the overall purpose of the research. In the end, this chapter also discusses the researcher's recommendations on the way forward in respect of the conclusions reached.

5.2 SUMMARY

The findings revealed that the stress level in the Port of Tema is averagely high. It was also ascertained that the factors of work, the role in the organisation, and the relationship in the organisation were the major stressors in the Port of Tema.

The findings also revealed that when employees are put under stress, it often results in actions that will get them out from duty so that they can avoid making avoidable mistakes at the workplace. It was therefore highlighted that although the phenomenon of job stress at the Port of Tema has a good impact on the performance of port workers, it is widely known that stress has more negative effects than positive.

Again, the study brought to light that almost all of the so called personal initiatives undertaken by individual port workers are tantamount to the negative impacts of job stress on work performance.
Lastly, the research noted that the organisations in the port do not have any policy guidelines to help systematically manage the menace of job stress. However, the study also presented that the prevailing initiatives by the sampled organisations are mainly reactionary and not targeting at preventing the occurrence of occupational stress in the port.

5.3 CONCLUSIONS

Based on the research objective of studying the nature of stress: its causes, manifestations, effects and impacts on the workforce and its management in the Port of Tema, and the findings, the following conclusions can be drawn.

- The occupational stress in the Port of Tema is high and mainly caused by factors of work, the roles employees play in the organisation, and the relationships in the organisation.
- Stressful conditions are manifested in employees' attitude or willingness to want to stay off from duty besides the usual psychological, physiological, and behavioural symptoms.
- Stress at the Port of Tema is generally not desirable and worth investing in mechanisms that will help forestall it.
- The actions of individual to manage stressful conditions have not done any good to their work performance and are counterproductive.
- The sampled organisations in the Port of Tema lack a systematic approach to effectively and efficiently manage the menace of stress.
5.4 RECOMMENDATIONS

Following the research findings and the conclusions reached, the researcher makes the following recommendations to help effectively and efficiently deal with the menace of occupational stress in the Port of Tema:

✓ First and foremost, it is a high time the country, Ghana, established a legal framework that will enjoin public and private organisations to systematically adopt guidelines to effectively and efficiently manage the menace of job stress. The framework should address the need for organisations to systematically identify the sources of occupational stress and undertake counter actions first at the stressors.

✓ In the meantime however, there is the need for organisations within the Port of Tema to undertake the initiatives to run a public awareness or education on stress management techniques that will not be counterproductive to their work performance. The management of these organisations also needs to undertake similar education and training on the effective and efficient measures to apply to combat the menace of stress in their organisations.

✓ Moreover, there is the need for the organisations in the port to conduct a survey to explore the causes of dissatisfaction and the reason for a possible rises in the off-duty exercises that employees take to unearth the element of stress and deal with it.

✓ In addition to this, there is the need for the organisations to undertake measures to redesign their jobs to perfectly fit into the work schedules assigned to their employees to help prevent work stress resulting from work overload.
✓ It is also recommended for the individual port workers to develop modern ways of managing stress with the inclusion of the use of external services of professional counselors.
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APPENDIX I

QUESTIONNAIRES FOR ORGANISATIONS

INTRODUCTION

I am a student of the Regional Maritime University studying MA. Ports and Shipping Administration. I am researching on the topic “Stress Management and Work Performance in the Port of Tema” as part of my requirement for the award of the master’s degree stated above.

I shall be very grateful if you can find time to fill this questionnaire to enable me to successfully complete this research.

I hereby assure that all information given shall be treated as confidential and shall only be used for academic purposes.

Contact: mbadomble@ghanaports.net

SECTION A: Respondent’s Background Information

1. Gender: male | | female [ ]
3. Marital Status: single | | married |
4. Education qualification: JSS/JHS | | O’ level/SSCE/WASSCE | | A’ level | |
   Diploma | | Graduate | | Post Graduate |
5. Status: Junior staff | | Senior Staff | | Senior Member
6. Mention your department in your organisation: ..............................................

SECTION B: Ascertaining the Causes of Occupational Stress
1. Is your work stressful? yes | | no | | 
2. To what extent is your work stressful? very high | | high | | moderate | | low | | very low | | 
3. Which aspect of your work makes you feel stressed at the workplace? Work overload | | overtime | | Shifts | | working equipment/machine | | risk associated with work | | none of the above | | mention others 

4. Which aspect of your role in the organisation puts you under stress? Unclear definition of role | | conflicting instruction from different superiors | | none of the above | | mention others 

5. Which aspect of your relationship at the workplace brings about work stress? Relationship with subordinates | | relationship with colleagues | | relationship with superiors | | none of the above | | mention others 

6. In respect of your career development, which of the following put you under stress? Job insecurity (fear of redundancy) | | numerous performance appraisals | | insufficient skills for the job | | few promotional opportunities | | none of the above | | mention others 

7. Which aspect of the organisational structure or climate comes with work stress? Frequent changes within the organisation | | over supervision | | bureaucracy | | none of the above | | mention others 

8. From question 4 to 6, which of the set of factors do you think are the most stressful? list in order: 1 | | 2 | | 3 | | 4 | | 5 | | 79
SECTION B: Effects of Stress on Performance

1. Which of the following is/are the sign(s) that show that you are under work stress?
   - Feeling anxious, angry, depressed, nervous, etc.
   - Increased heart rate & blood pressure, headaches, etc.
   - Eating more or less, cigarette smoking, use of alcohol & drugs.
   - Sleeping, etc.
   None of the above
   Mention others

2. How does work stress impact on your work performance?
   - Making avoidable mistakes
   - Causing frequent accidents
   - Absenteeism
   - Apathy, loss of interest in work
   - Trouble concentrating
   None of the above
   Mention others

3. Do you think work stress has any positive impacts on your performance?
   Yes
   No

4. If yes, briefly explain the positive side of work stress on your performance

SECTION C: Individual Management of Job Stress

1. What are your personal initiatives to manage the menace of stressful conditions at work?

2. To what extent have your personal initiatives been able to help you manage stressful situations?
   Much helpful
   Less helpful
   Not helpful

SECTION D: Organisational Management of Job Stress

1. Does your organisation have any specific policy guideline to manage occupational stress?
   Yes
   No
2. What actions have your organisation undertaken to manage the phenomenon of occupational stress?

3. To what extent have your personal initiatives been able to help you manage stressful situations? Much helpful | | less helpful | | not helpful | |

4. What do you think your organisation could do to better manage the menace of job stress?

SECTION E: Additional Comments

1. Any additional comment?
APPENDIX II

INTERVIEW GUIDE

Ascertaining the Causes of Occupational Stress

1. How stressful is your work?

2. How does the following make you feel stressed at work?
   a. Work
   b. Role in the organisation
   c. Relationship
   d. Career development
   e. Organisational structure or climate

3. Which of the above stressors are most stressful?

4. How has external stressors influenced stressful conditions in your workplace?

Effects of Stress on Performance

1. What are your psychological and physiological reactions when you are under stress?

2. How does job stress impact of your job performance?

3. Discuss the positive impact of job stress and its influence on you performance

Individual Management of Job Stress

1. What personal initiatives to manage the menace of stressful conditions at work?

2. How have your personal initiatives been able to help you manage stressful?
Organisational Management of Job Stress

1. Does your organisation have any specific policy guideline to manage occupational stress?

2. What actions have your organisation undertaken to manage the phenomenon of occupational stress?