STRESS AND GENDER IN BUILDING CONSTRUCTION INDUSTRY IN TANZANIA

Prepared by

Challo Kihanda D.

In partial fulfillment of the requirement for Master of Science in

Construction Economics Management

October 2022

CERTIFICATION

The undersigned certificate that he has read and hereby recommended for acceptance by the Ardhi university a dissertation entitled "**Stress and gender in building construction industry in Tanzania (Case of Dar es Salaam City)**" in partial fulfillment of the requirements of the degree of Masters of Science in Construction Economics and Management of the Ardhi University.

…….

Dr.Valentine G.M.Luvara

(Supervisor)

Date…….

DECLARATION AND COPYRIGHT

I**,Challo kihanda D** hereby declare that this dissertation is my own original work and has not being presented and will not be presented to any other university for similar or any other similar or any other degree award.

……

Challo kihanda D

ACKNOWLEDGMENT

This study would not have been feasible without the efforts and assistance of a number of people. But first and foremost, I want to express my gratitude to Almighty God for providing me with the health and strength to complete this task.

First and foremost, I would like to express my profound thanks to my supervisor, Dr.Valentine G.M.Luvara, for his enthusiasm, support, and understanding in designing the study design and ensuring its successful completion. My thanks and appreciations go out to my lecturer and other members of Ardhi University for their guidance and advice.

I am also grateful to my parents, Mr. and Mrs. Challo, my sister, Aneth Challo, Irene Challo, Lucy Challo, and my brother and a lecture, Dr.Jonathan,M.P Kansheba PhD for their financial and moral support throughout my studies. Thank you for being such a great source of inspiration, support, and affection.

MAY GOD BLESS YOU ALL

DEDICATION

This work is dedicated to my Parents who was the most supportive instrument and my sisters Irene, Aneth and Lucy who inspired me through prayers, encouragement, love and affection.

ABSTRACT

The study aimed to explore the issue of stress and coping strategies in different types of gender in building construction activities. The specific objective of the study is to assess types of stressors as perceived by different genders in building construction, examine how different genders cope with different kinds of stressors in building construction and to propose possible and suitable ways different genders cope with stress.

As a result, employees in the construction sector, especially women, suffer from stress more compared to men and this has in turn affected their job quality, health and performance.

The finding revealed that in organizations kinds of stressors, homework conflicts cause stress mostly for all female, while to males construction workers are mostly faced with personal kinds of stressors. Problems with supervisors seem to be mentioned to both males and females as the source of stress in gender-related kinds of stressor by gender inequalities and sexual harassment, are the causes of stress to both males and females in task-related stressors-working overload and long working hours are the mostly mentioned factors of stress to both males and females and Physical kind of stressors poor working environment and inadequate safety equipment's are the most mentioned factors of stress to both females and males construction workers.

Every stakeholder should prioritize steps to reduce work-related stress in both men and women, and every construction firm should establish provisions for stress management among construction workers. Regular training of stress coping skills for construction workers should also be provided by organizations in the construction industry.

LIST OF TABLE

LIST OF FIGURE

CHAPTER ONE:

INTRODUCTION

1.1 Background Information

The building construction sector has seen enormous institutional and organizational development in many nations throughout the world as a result of economic and market globalization, technical advancement, and changing consumer tastes. The complex and dynamic nature of construction projects, as well as technical advancements and adversarial attitudes among participants, all contribute to rapid changes in the construction industry (Wong et al., 2010).

The construction industry has long been known as a demanding industry due to its complexity (Enshassi and Al.Swaity, 2015). Chronic negative stress is regarded to be damaging in general. Employees in lower levels of the workplace hierarchy, where they have less control over their working environment, are significantly more likely to be stressed (Beheshtifar, et al., 2013).

Workers that are anxious are more likely to be sick, unmotivated, less productive, and unsafe at work, according to Verma (2015). Job stress is thought to be a factor in absenteeism, low employee morale, high accident rates, and high turnover rates.

The UK Health and Safety Executive (2018) defines work-related stress as "the negative reaction people have to excessive pressure or other types of demand placed on them." Physical conditions, safety, and inadequate equipment accounted for only 10–20 percent of all factors, according to the Chartered Institute of Building (2016). The most problematic issues were associated with interpersonal and cultural/organizational reasons such as lack of feedback or poor communication, while physical conditions, safety, and inadequate equipment accounted for only 10–20 percent of all factors (Campbell, 2006).

In dealing with stress, construction workers have been observed taking alcohol, cigarette smoking, listening to music as well as physical training as the way of reducing their stresses, but some of these coping mechanisms may lead to a new kind of stress or may not give the relaxation required (Healthwise, 2014). While there are many different ways that workers use in handling their stresses, and while some are more effective than others, much depend on the nature of stress and the person who is employing the method (UCLA, 2015).

According to several surveys, the construction industry has a long history of being viewed as a male-dominated industry (Chun et al., 2009). Despite progress in gaining access to non-traditional professions by women, certain jobs and industries remain largely male-dominated. One of them is the building industry (French and Strachan, 2015).

The workplace is becoming more stressful as a result of increased job responsibilities (European Agency for Safety and Health at Work, 2007). Because of the high prevalence of work-related injuries in the construction industry (Arndt et al., 2005), mental health is a key concern (Beswick et al., 2007). A pleasant state of mind, well-being, composure in behavior, and actions toward others and the environment are all referred to as MH (WHO, 2004).

Architects (who are more likely to work in consultancies) reported substantially higher levels than other professional groups in the present poll, according to Burke and Greenglass (2001). According to De Cuyper and de Witte, the finding that architects reported higher levels of stress while working less hours suggests that the relationship between work demands and stress is multifaceted and governed by other factors (2007).

The findings show that perceived stress levels are determined by the quality of work experience rather than the quantity of work, and that there may be qualitative differences between occupations. Architects in the study reported much poorer job security than other occupations. This is significant since job uncertainty has been found to have a negative influence on permanent workers' job satisfaction, raise worker stress, and negatively affect work–life balance (Schreurs et al. 2010).

In many countries, including Tanzania, employers are required by law to ensure the safety and health of their employees. Furthermore, companies in the construction industry that do not implement stress-reduction strategies may find that their employees are looking for better opportunities elsewhere because some working environments cause workers to become more stressed, resulting in a loss of interest in their jobs and lower performance (Olusegun, et al., 2014).

1.2 Research Gap

Researchers have discovered many causes and coping methods among construction workers. Hamoud (2016) investigates the sources of occupational stress and coping mechanisms among construction workers in Dar es Salaam, Tanzania. Brewer and Soares et al. (2007) investigate the various levels of stress experienced by construction employees. Another study was conducted by Ibem et al., (2011) to identify important of stress variables among professionals in the Nigerian building construction sector. Sang et al. (2017) assessed the sources of stress on women architects in the construction business. Gender hasn't been addressed in this regard at various levels of expertise.

This study will fill a vacuum by describing how different genders perceive stress in building construction workers, how different genders manage with stress, and

ultimately, offer measures for different genders on stress coping techniques for employees of various skill levels.

Table 1.1 Showing research gap on stress in building construction activities

Author	Year	Findings or Analysis
Hamoud Sabrina	2016	Examine the causes and coping strategies of workplace stress among construction workers in Dar es Salaam, Tanzania
Soares et al	2007	Examine on the different level of stress to construction workers
Ibem *et al*	2011	Undertaken to identify key stress factors among professionals in the building construction industry in Nigeria
Sang et al	2017	Assess on the causes of stress to women Architect in construction industry.
Challo kihanda	2021	Explore the issue of stress and coping strategies in different gender to different skill levels in building construction projects.

1.3 Statement of the Problem

Because of its inherent nature, such as task complexity, complicated interrelationships among different parties, unsafe working practices/environment, unpredictable tasks, tight and urgent time frames/ deadlines, and complicated workgroup cooperation, the construction industry has long been recognized as a stressful industry, causing a great deal of stress to different genders in building construction activities (Enshassi, et al., 2015).

Tanzania construction industry is no less of this argument (*ibid)* as different gender have stresses at their workplaces that make them have poor concentration at work, working half-minded and working without following construction procedures and which finally lead to poor performance, increased minor and major accidents, job dissatisfaction and poor health (Field, 2021).

This study is therefore aimed to show on what the perceptions of gender to different stressors and what are the copping strategies different gender uses to different stressors in order to improve working performance.

1.4 The main Objective of the study

The main objective of this research is to analyze the issue of stress and coping strategies in different gender to building construction projects.

1.5 Specific objectives

i. To assess the types of stressors as perceived to different gender in building construction sites.

ii. To examine on how different gender cope with different kind of stressors in building construction industry.

iii. To propose possible and suitable way different gender copes with stress in construction industry.

1.6 Research questions

1. What are the types of stressors as perceived to different gender?
2. What are the coping strategies used by gender to different kind of stressors in building construction project?
3. What are the possible and suitable way different gender cope with stress in building construction projects?

1.7 Significance of the study

The significance of this study it has been divided into three facets; contribution to the new knowledge about stress based on gender issues, usefulness to practitioners (building construction workers) and policy makers

1.7.1 Contribution to the new knowledge

The outcomes of this study will add to the existing body of knowledge about stress and how to cope with it for better performance in different genders. It will broaden both theoretical and empirical understanding of the subject issue. It will serve as a foundation for future research on the same topic in other locations.

1.7.2 Practitioners

The study will equip building construction workers in different gender on how to cope with stress so as to archive performance in construction activities

1.7.3 Policy makers

The study finding will provide clear picture on the perception of stress to different genders in building construction works. It will also act as source of data to both policy makers and other stakeholders so that they could use this finding to develop realistic strategies on how to improve performance in building construction works

1.8 Scope and limitation of the study

The study was carried out at Dar es Salaam in different building construction sites, which has one billion, and above contract sum. The data were specifically collected from different construction worker in different gender (males and females, experienced and non-experienced workers). Dar es Salaam region was chosen as the area of data collection because it has a number of building construction sites and there is a lot of construction activities in the region, also there is the issue of financial and time limit of research

1.9 Definition of terms

1.9.1 Stress

Stress is a psychological and physiological reaction to circumstances that disrupt our personal equilibrium. Workplace stress is hazardous to workers' health and, as a

result, to the health of organizations (Sauter, 2015). Stress can be harmful when a person is dealing with social, physical, organizational, or emotional issues, according to Ahmad (2012).

1.9.2 Gender

Norms, roles, and connections within and between groups of women and men are all socially produced qualities of women and men. It varies with society and is subject to change. “Gender has a significant impact on human development. It's a method of examining how social norms and power structures shape the lives and opportunities of men and women from all areas of life. Over the world, women are more likely than males to be poor (Research 2020)

1.9.3 Construction workers

All persons involved in construction, particularly those who undertake actual work, are known as construction workers. The majority of construction employees learn on the job as an unofficial apprentice to a skilled tradesperson (OSHA, 2005).

1.9.4 Coping strategies

Coping is described by the Centre for Studies on Human Stress (CSHS, 2010) as the thoughts and activities people employ to deal with a dangerous circumstance. A stressful circumstance is also regarded as a threat, and those who are stressed must employ stronger coping mechanisms. Coping is a multifaceted process that is influenced by a number of elements, including the situation, available resources, the source of the problem, and time (ibid).

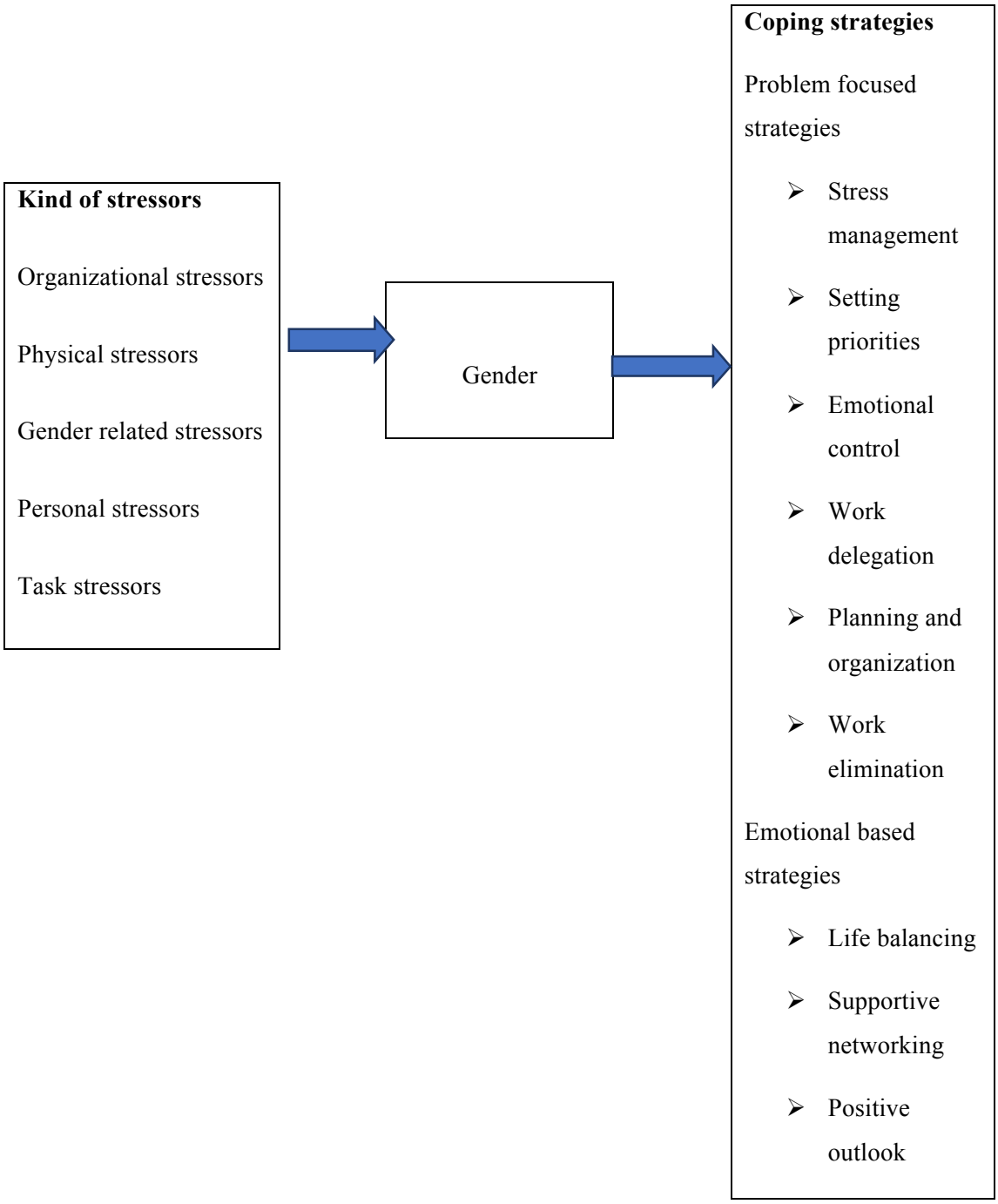
1.10 Conceptual frame work

A conceptual framework, according to Dimitrios et al. (2010) shows how one hypothesis makes sense of the link between components that have been recognized as essential to the situation. It's a narrative outline of the factors to be investigated, as well as their possible relationships. Its purpose is to determine the study's most important emphasis areas.

Two variables, the dependent and independent variables, were created for this study to represent the most relevant subjects to be investigated. The perception of gender to various types of stress is the independent variable in this study, whereas stress coping mechanisms at various genders is the dependent variable.

To deal with stress, construction workers utilize either a problem solving or an emotional-focused Approach. Selection of a stress coping technique is influenced by how different genders perceive stress; this indicates that there is a positive relationship between how different genders perceive stress and the coping strategies they use (Orly 2009)

Figure 1.1: Conceptual Framework



CHAPTER TWO:

LITERATURE REVIEW

2.1 Introduction

Two variables, the dependent and independent variables, were created for this study to represent the most relevant subjects to be investigated. The chapter also provides overview of stressors in building construction industry in Tanzania and identify various stress caused due to different gender in building construction. The chapter further provides a detailed review of empirical literature.

2.2 Overview of the Tanzania construction industry

The construction sector transforms a variety of materials into the physical, economic, and social infrastructure required for socioeconomic progress.

It includes the processes of planning, designing, acquiring, constructing or creating physical infrastructure, as well as modifying, repairing, maintaining, and dismantling it. Tanzanian construction workers are also subjected to work-related stressors such as depression, job burnout, anxiety, working half-heartedly, and a range of family concerns, all of which contribute to poor performance (Tanzania, 2003).

2.3 Stressors on construction workers

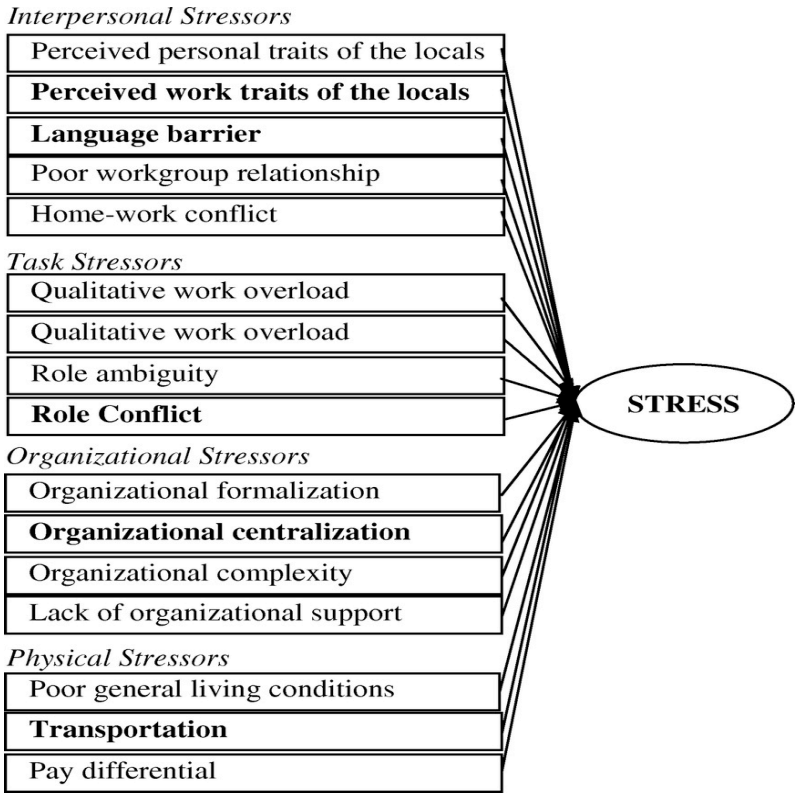
Stressors include things like poor organizational management, job design, and social support, all of which can pose a threat to workers' psychological or physical well-being (Cox and Griffiths, 2005). Construction projects, including safety and project performance, are significantly harmed by mental stress (Goldenhar 2011), and psychological and physical stress can anticipate injuries and accidents (Leung et al, 2016). In other cases, stressors are found to be directly associated to injuries and accidents, with no intervening causes (Leung et al., 2016).

Task stressors, organizational stressors, personal stressors, gender-related stressors, interpersonal stressors/working environment stressors, and physical stressors have all been characterized as stressors in construction operations.

Construction projects are marked by limited resources, rigorous deadlines, and continual multitasking, all of which contribute to the mental health of construction employees (Pinto et al., 2016). Poor organizational management, job design, and social support are all stressors that might jeopardize workers' psychological and physical well-being (Cox and Griffiths, 2005).

In other cases, stressors are found to be directly associated to injuries and accidents, with no intervening causes (Leung et al., 2016). Furthermore, construction project performance, as measured by time, cost, and quality, is critical to the project's success (Eriksson and Westerberg, 2011). Unfortunately, pressures that cause poor mental health among construction workers limit project performance (Leung et al., 2008).

Figure 2.1: Stressor at different construction company



2.3.1 Organizational stressors

Organizational stressors are stressors that originate from within the company (Leung et al., 2009). Organizational stressors originate from organizational characteristics that provide a variety of pressures that lead to poor mental health. Pressures include home-work conflict, a lack of career direction, a lack of organizational support, and a weak organizational structure.

According to Leung et al. (2012), construction employees are compelled to focus on productivity and, as a result, disregard their own safety. They discovered that a major source of organizational stress is a lack of safety equipment, which increases the likelihood of being involved in an accident Construction workers may feel abandoned by their employers due to a lack of goal setting, unequal incentives and treatment, and insufficient safety work training.

2.3.1.1 Organizational policies, procedures, cultural and style operation

Work-life balance is a critical criterion that can boost employee job satisfaction and organizational commitment. Human resource management attempts to recruit and retain loyal employees who contribute to the company's competitive advantages may be jeopardized by a troubled work–family relationship. As a result, a great deal of effort has gone into studying the effects of work–family policy from a variety of perspectives (Esteen 2011).

We believe that a set of policies can work together, thus we provide a thorough examination that covers enrichment and conflict. Flexi-time and hours-pool policies, for example, may be complementary because an employee's hours-pool can be enhanced if he or she arrives earlier or leaves later.

Some work–family policies can be coupled to better structure work and boost the positive effects on various roles of employees (Selvarajan et al., 2013). Employee job

sharing and telework, for example, may be mutually reinforcing if they allow workers to attend meetings at certain times.

This is a method that requires collaboration. Job satisfaction is positively related to organizational commitment, according to recent studies and meta-analyses in the literature (Meyer et al., 2002; Frenkel et al., 2013; Valaei and Rezaei, 2016), although other researchers find that job satisfaction and organizational commitment are direct outputs of the work–family interface (Meyer et al., 2002; Frenkel et al., 2013; Valaei and Rezaei, 2016). (Meyer et al., 2002; Frenkel et al., 2013; Valaei and Rezaei, 2016). (Valaei and Rezaei, 2016; Meyer et al., 2002; Frenkel et al., 2013; Meyer et al., 2002). (Chen and colleagues, 2004).

Because we focus our analysis on affective commitment, we follow the first line of research rather than treating commitment as another effect of the work–family interface.

2.3.1.2 Unfair reward and treatments

Organizational justice has piqued the interest of scientists, and it has witnessed significant growth in recent years. According to Schminke and Sheridan (2017), the number of justice studies published in the last century has more than tripled, with over 2,500 studies published in 2015.

Despite the abundance of study, organizational justice has traditionally been examined through the lens of the same four categories of justice: distributive, procedural, interpersonal, and informational justice (Cropanzano et al., 2015).

Individuals' subjective judgments of whether they were treated fairly or unfairly in a scenario are represented by these types of justice. They are usually only concerned with the present situation and evaluations of earlier wrongful treatment. Organizational justice researchers, on the other hand, have rarely looked at the

behavioral consequences that may develop as a result of attempting to redress the wrongdoing. To put it another way, much of the existing justice literature concentrates on how individuals perceive and experience justice, with little attention paid to how it may be regained (Barclay and Saldanha, 2015).

2.3.1.3 Inappropriate safety equipment

Hazards are things that can endanger people's health, their property, or the environment. Hazards can also cause accidents in certain situations. (Source: International Electro technical Commission, 2004) Accidents frequently occur out of nowhere, resulting in immediate injuries and financial losses. On the other hand, many health issues may appear gradually over time. Accidents are sometimes misunderstood as a management problem. Risky activities, error-prone conditions, and organizational characteristics, according to Reason (1997), cause accidents. Accidents can thus be avoided by removing hazards or conditions, or by interrupting a chain of events with the use of appropriate defenses.

Intentional failures and latent circumstances, on the other hand, can affect the efficiency of the defenses. Industrial maintenance has a variety of job roles and working settings. As a result, businesses require occupational health and safety management systems to assist them in preventing and mitigating accidents by detecting and selecting the most serious risks, as well as managing hazards and preventive activities. Human activities, technological systems, and the environment all have the potential to result in losses, which is known as risk.

Intentional failures and latent conditions, on the other hand, can change the effectiveness of the defenses.

In industrial maintenance, the tasks and working environment are different. As a result, businesses require occupational health and safety management systems to

assist them in preventing and mitigating accidents by identifying and prioritizing the most serious risks, as well as managing hazards and preventive measures.

Human activities, technology systems, and the environment all have the potential to cause losses, which is known as risk.

The risk is comprised of both the potential for harm and the likelihood of such harm occurring. Hazard identification, evaluation of preventative safety measures and their effectiveness, estimation of risk exposure and evaluation of consequences (Modarres, 2006), and risk tolerance assessment should all be included in a risk assessment (Modarres, 2006). BS 8800 was published in 2004. After that, the risk assessment serves as the foundation for lowering unacceptable risks

2.3.1.4 Lack of job security

The term "employment insecurity" is commonly used to describe the assumption that one's current job will be retained (Davy et al, 1997). Unlike employability, job security is limited to the employee's current position. Employability is a notion that has been defined in a variety of ways, but it is universal in that it pertains to the entire labor market, not simply the employee's current job. We use the words employability and perceived employability interchangeably in this study since we are focusing on employees' own perceptions of their employability. We distinguish between basic and aspirational employability, as Drange et al. indicate (2018).

Basic employability is described as "an individual's assessment of his or her chances of finding and keeping work." Vanhercke et al. (2014) developed the concept, which focuses on continuing to work for the same or a different company.

In exchange for their efforts, employees gain improved employability rather than job security, and employers' commitment to their employees' growth potential is emphasized as part of the new psychological contract (Baruch, 2001; Kluytmans and

Ott, 1999). Employees are offered training and development opportunities, and this employer-sponsored education should help them find work (Drange et al., 2018).

However, it is unknown whether or not this contract is actually carried out, and to what extent employers think they are accountable for training and development (Clarke and Patrickson, 2008).

According to the second hypothesis, less work security (as evaluated by a temporary/permanent contract and self-reported job security) is linked to greater employability in terms of self-perceived career options and employer-sponsored training. We should expect the following if employers take the employability argument seriously:

i. Employees with lesser job security have better basic employability than those with higher work security.

ii. Employees with less work security have higher aspiring employability than employees with more job security.

iii. Employees with lower job security receive more employer-sponsored training than those with higher job security.

2.3.1.5 Organizational change

Organizational change is a complicated topic with a large body of research on it. This literature had previously been compiled, but it was mainly done using linear models of change, which produced limited results. Change is depicted in linear models as a series of steps that must be accomplished in the correct order.

Systems models of organizational change, on the other hand, might include a wide range of hypotheses, many of which are contradictory, based on earlier study findings.

Based on a survey of organizational theories, Maes and Van Hootegem (2019) constructed a systems model that includes both systems and specialized organizational transformation ideas.

Because each discourse gives unique insights into how organizations evolve, switching between discourses can help us broaden our view on change. Furthermore, unlike other systems' reductionist approaches, this provides a holistic perspective.

Here are a few more benefits of using a systematic approach. To begin with, change notions can be categorized logically as subsystems or components of the systems model. Second, the characteristics of change are clarified as a result of the systems model's emphasis on interdependencies and interrelationships among elements.

2.3.1.6 Organizational politics

"Informal, insular, often confrontational, and illegitimate activity" (Mintzberg, 2008), as well as "social influence behavior expressly directed to increase self-interest" (Mintzberg, 2008). (Mintzberg, 2008). 2008 (Mintzberg) (According to Ferris and colleagues, 2009). Despite their negative connotation, these definitions correlate to employee attitudes.

Workplace politics, according to the majority of employees, is an inescapable element of working life.It's not uncommon to find organizational members or units attempting to influence others (e.g., ingratiation, impression management, and developing power coalitions) in order to protect or advance their own interests, especially if their workplace is marked by uncertainty, limited resources, and a lack of trust (Prasad, 2011).

Organizational politics can work in a company's favor or against it, but it is commonly regarded as dysfunctional due to its proclivity to undermine efficiency and effectiveness (Kacmar et al., 2009).

Politics takes up time, limits information sharing, and creates hurdles to communication (Eisenhardt and Bourgeois, 1988). It is also possible that it will have a negative effect on personnel. Working in a politically charged environment is tough, does not create positive working attitudes, and is prone to high staff turnover.

More research is needed due to the pervasiveness and importance of organizational politics in the workplace. Managers will be better able to grasp, forecast, and control political behaviors in their organizations with the knowledge gained from organizational politics study. Specifically,

We need to know more about the causes and repercussions of organizational politics. Following a review of the relevant literature on the subject, a number of conceptual models for describing the process of organizational politics emerged (Bhatnagar, 2005).

The formulation of the basic framework and the selection of variables for the current study were influenced by these models.

Workplace politics, according to the majority of employees, is an inescapable element of working life. It's not uncommon to find organizational members or units attempting to influence others (e.g., ingratiation, impression management, and developing power coalitions) in order to protect or advance their own interests, particularly if their workplace is marked by uncertainty, limited resources, and a lack of trust (Prasad, 2007).

Organizational politics can work for or against a corporation, but it is often regarded as dysfunctional due to its proclivity for undermining efficiency and effectiveness (Kacmar et al.2009). Politics takes up time, limits information sharing, and creates hurdles to communication (Eisenhardt and Bourgeois, 2011).

"Informal, parochial, often contentious, and illegitimate conduct aimed at replacing legitimate power" (Mintzberg, 2009), as well as "social influence behavior explicitly oriented to enhance self-interest" (Mintzberg, 2009). (Mintzberg, 2009). (Ferris and colleagues, 2008). Although these definitions have a negative connotation, they correspond to employee perceptions. When asked about political activity in the workplace, employees often describe it in negative terms.

2.3.1.7 Lack of training safety

The Federal Republic of Nigeria's Factories Act F1 legislation from 2004 is the current health and safety regulation in Nigeria. Nnedinma (Nnedinma, 2016). Unfortunately, the current health and safety regulations in Nigeria do not apply to the building industry (Idoro, 2011).

The majority of Nigerian construction firms follow international health and safety standards and legislation adopted by developed countries around the world, with enforcement and execution left to the discretion of the contractors (Idoro, 2011; Tanko and Anigbogu, 2012).

Nigeria has agreed to the International Labour Organization's (ILO) standard, namely the Occupational Safety and Health Convention, 1981 No 155, which addresses health and safety issues on construction sites. The regulatory environment in Nigeria is complex due to the numerous regulatory approaches to health and safety (Nnedinma, 2016).

2.3.1.8 Lack of safety clear goal setting

During workplace transitions, employee psychological demands and emotions are at an all-time high. Job security, voice autonomy, and fairness, all of which are tied to organizational decisions, influence these needs. The state of psychological safety was shaped by organizational decisions and managerial activities. Employees' perceptions

of psychological safety range from freedom of speech to a sense of secure interpersonal risk-taking, as well as shared belief and support (Carmeli and Hoffer, 2009; Edmondson, 1999; Kahn, 1990).

Psychological safety is enhanced by social support that includes organizational, supervisory, and coworker assistance (Singh et al., 2017). (Singh et al., 2017).

Sudden crises and workplace changes have an impact on employee emotional responses. Social support, manifested through mutual trust, open communication, and empowerment, fosters a sense of stability and safety.

On the other hand, a lack of support and autonomy leads to a low sense of psychological safety and a bad mood. Previous research has linked psychological safety to learning behavior (e.g. Carmeli and Hoffer, 2009),

Social support, which includes organizational, supervisory, and coworker assistance, improves psychological safety (Singh et al., 2017). Sudden crises and workplace changes have an impact on employee emotional responses. A sense of stability and safety is fostered by mutual trust, open communication, and empowerment.

Lack of support and autonomy, on the other hand, leads to a lack of psychological safety and bad mood. Psychological safety has previously been linked to learning behavior in studies (e.g. Carmeli and Hoffer, 2009).

Managers and HR professionals who are new to WFH concepts learn new ways to lead, motivate, and interact with their employees (Nguyen, 2020).

According to Nguyen, managers may be subjected to remote monitoring, time tracking systems, and other surveillance technologies to monitor employee productivity (2020).

Because supervisors are unable to see their subordinates at work, pervasive tracking, such as providing extra work, requesting work reports, or requesting daily meetings, becomes a technique of managing employees in the WFH situa

2.3.2 Task stressors

Task stressors are stressors that are attributable to job characteristics and have an impact on workers' mental health (Enshassi and Al Swaity, 2014).

Pressures include project overload, uncertain project roles, tight deadlines, and long working hours.

2.3.2.1 Project overlord

A situation in which the project demands surpass an individual's competence to handle the project is referred to as project overload (Leung et al. 2011). Excessive project overload wreaks havoc on work-life balance, leading to occupational stress (Bowen et al., 2018).

Project overload was mentioned as a source of occupational stress in 23 of the 38 papers, accounting for 60% of the total; this is an adequate percentage given the link between project overload and a cognitive and emotional disorder (Hwang et al, 2018).

Due to tight schedules and the framework of a building project, construction project managers are typically overworked (Bowen et al., 2014). According to Bowen et al., (2014) and Leung and Chan, (2012), workload is an acute primary stressor inherent in construction projects, and it is a key source of stress in construction projects.

2.3.2.2 Long working hours

Long work hours are a task stressor for construction workers who are dealing with project deadlines and job uncertainty (Bryson and Duncan, 2018). Depending on the nature of the construction firms and the complexity of the construction, construction workers work an average of 60 hours per week (Love et al., 2010).

Contractors' construction employees have gone above and beyond the regular working hours in order to accomplish client goals in some cases (Lingard and Francis, 2009).

Long work hours are a task stressor for construction workers who are dealing with project deadlines and job uncertainty (Bryson and Duncan, 2018).

Depending on the nature of the construction firms and the complexity of the construction, construction workers work an average of 60 hours per week (Love et al., 2010). In some cases, contractors' construction employees have gone above and beyond normal working hours to meet client objectives.

2.3.2.3 Role ambiguity

Project role ambiguity, which refers to an individual's ambiguous role obligations as a result of project complexity, a lack of project information, and a deadline for finishing construction projects, is another source of stress (Leung and Chan, 2012). In 15 of the 38 studies examined, role ambiguity was identified as a source of stress.

Project role ambiguity predicts burnout, accounting for 39.47 percent of the total due to tight timelines and uncertain role responsibilities, especially in large construction projects involving many trade contractors (Leung and Chan, 2012)

2.3.2.4 Lack of autonomy

Individual autonomy is defined as an individual's ability to regulate and construct their own working techniques, standards, and work arrangements (Spiegelaere et al., 2014).

Providing employees with the right to flexible Psychological challenges as well as significant working autonomy, according to Bond et al. (2008), promotes their mental health.

Job autonomy, according to Park and Jang (2015), has a good effect on employees' mental health. Employees in China would be less lonely at work if they thought they

had enough job autonomy (Mao, 2013). Professional autonomy has a positive effect on individual psychological states as a motivator. As a result of the above debate, the following concept emerges:

2.3.2.5 New technology required

The process of technological capability development differs across developed and developing economies (Bennett and Zhao, 2004; Erensal and Albayrak, 2008). The process in industrialized economies begins with the invention of technology and continues with its adaptation, absorption, and negotiation.

Following that, the entrepreneurs gradually shift from exporting goods to shifting production and assembly lines to other markets. The technical potential of poor countries is developed in a unique way.

It all starts with their dé tentes attempting to negotiate new technologies. As local manufacturing increases, technological knowledge is absorbed and adapted to local conditions (Takahashi, 2005).

2.3.2.6 In adequate pay

Despite the fact that pay is the most important incentive component in nearly all firms (Scott et al., 2005), few companies devote much time and effort to educating employees on how pay is determined and distributed (Scott et al., 2005).

Many employees, according to polls, are dissatisfied with their pay structure (Rogers et al., 2003). Because money is typically considered as confirmation of one's status in and worth to the business, misunderstanding compensation schemes can have a significant emotional and behavioral impact (Rogers et al., 2003).

There is also evidence that communicating about management practices can increase organizational commitment, job satisfaction, performance, pay satisfaction, and pay fairness perceptions, as well as establish a positive work atmosphere.

According to a previous public sector study, employees had a better experience with pay system features when they trust their employers (Condrey, 2005).

When employers make decisions that are relevant, appropriate, and acceptable in their own business, they have a better chance of inspiring employees (Behrend, 2009).

Employees will be better informed about what is expected of them and what they will receive in return, making the organization's incentive system more efficient (Behrend, 2009)

Because information about pay improves workers' perceptions of fair pay practices, pay communication predicts pay satisfaction. Employees establish expectations about pay hikes and other aspects of their income based on previous company practices, and these belief systems impact attitudes toward pay equity (Behrend, 2009).

Demonstrating that the company pays employees fairly and according to acceptable criteria might improve workers' perceptions of fairness (Hanley, 2011). Indeed, fairness judgments about pay are unlikely to occur unless the organization communicates how remuneration is calculated (Lee et al., 20009).

2.3.2.7 Repetitive job

Individual task performance in the context of their occupations is a key factor in a number of organizationally relevant outcomes (Hui et al., 2010).

Organizational behavior research has long focused on the role of intrinsic vs. extrinsic components embedded in various jobs as determinants of acceptable job outcomes. Ilgen and Hollenbeck (2010) provide an overview of this field of study, while DeVaro et al. present new empirical evidence (2007).

Unstructured employment, on the other hand, are unpredictable and encompass a wide range of events and activities that are impossible to forecast or anticipate. To put it

another way, task structure refers to the degree to which work-related tasks and responsibilities are clearly specified.

2.3.2.8 Shift work

With today's desire for ongoing access to products and services, a variety of job arrangements have evolved, including shift work, which is defined by working hours that depart from standard daylight hours (Smith et al., 2003).

Shift work has long been associated with negative consequences, particularly in terms of psychological and physical health, such as sleep loss, accidents, and health issues (Boggild and Knutsson, 2016)

2.3.2.9 Time pressure

In today's commercial world, time constraints have long been recognized as a reality (Takeuchi and Nonaka, 2004). As a result of greater innovation and shorter product cycles, businesses across industries are being driven to change more frequently.

The impact of time pressure on strategy has been studied extensively in the strategy literature, particularly in the high-velocity research stream.

As suggested by Maruping et al. (2015), we're interested in "felt time pressure" measured at the group level. In addition, "knowledge-transfer efficacy" is defined as the efficient flow of information among team members (Tasselli, 2015).

Intra-team collaboration and cooperation require trust. Indeed, trust is especially vital in situations characterized by complexity, a lack of hierarchy, and considerable interdependencies (Ping Li, 2012).

The word "time pressure" describes the stress caused by a time constraint as well as the need to deal with constraints (Ordonez and Benson, 2016). “Time pressure,” according to Maruping et al., is “the sense that there is a scarcity of time available to

execute a task, or a collection of activities, in relation to the demands of the task(s) at hand" (2015).

At the individual level, the issue of "time pressure" has been investigated (Putrevu and Ratchford, 2007). However, at the group level, we match ourselves with earlier studies. Time pressure is defined by Maruping et al. (2015) as "a shared attribute of the team that arises from the common experiences and perceptions of team members."

2.3.3 Personal stressors

Personal stressors are a person's personal qualities and private lives (Leung et al.2010). These stresses are individual-level risk factors arising from the social relationships and personal characteristics of the construction workforce.

Personal stresses include interpersonal and intrapersonal stressors; personal stressors include poor working relationships, Type a personality, superior difficulties, and distrust. Construction staff, according to Poon et al. (2013), are stressed because they have a direct link with construction operations and are liable for any faults or mistakes that may arise.

According to Meliá and Becerril (2007), bureaucratic leadership conduct is a major source of stress. Personnel with a low level of involvement in decision-making and problem-solving may feel stressed (Ibem et al., 2011).

Personnel in this situation believe they have little work control (Janssen and Bakker, 2001). The most important factor that contributed to stress and burnout among construction employees was poor connections between workers at all organizational levels and senior management (Leung et al, 2009).

2.3.3.1 Type of behaviors

The most plausible theory is that when type a people are put in stressful situations, they become too aroused physiologically. Elevated production of the chemicals

adrenaline and norepinephrine, as well as increased heart rate and blood pressure, are all symptoms of arousal. Excessive physiological reactivity, in turn, appears to be linked to an elevated risk of cardiovascular disease. (Kunanat, 2003).

2.3.3.2 Characteristics of the type a individual

The higher competitiveness of the personality type leads to an aggressive and ambitious performance orientation, increased mental and physical alertness, muscle tension and an explosive and fast speaking style. Restlessness, impatience and the habitual speed of most activities are all symptoms of a constant need for time. This can lead to rage and increased Type A aggression and rage, which is largely hidden in most Type A people. As a result, TABP can be summarized as an action-emotion complex that includes:

(i) Behavioral tendencies (eg ambition, aggressiveness, competitiveness and impatience);

(ii) ii. Specific behaviors (eg, muscle tension, attentive fast and emphatic speaking style, and accelerated speed for most activities); and

(iii) iii. Emotional reactions (eg, anger, hostility, and rage) (Rosenman et al., 1988)

2.3.3.4 Boredom at work

Boredom has attracted the attention of researchers from various disciplines, including human factors engineering, psychology, sociology, education, criminology, and industrial psychology. However, it has not been widely researched and there is no single, universally accepted definition of boredom Vodanovich (2003).

Researchers and educators would be able to develop and implement boredom-reduction intervention programs in schools if they knew how and when boredom

happens (Daschmann et al., 2011). According to Daschmann et al., students' ennui is caused by a lack of purpose, over-challenge, under-challenge, and a lack of involvement in academic success setting (2011).

Daschmann et al. (2011) discovered that 44.3 percent of participants were partially to strongly in agreement that they commonly experienced boredom in mathematics class. Boredom in higher education is also addressed by Mann and Robinson (2009). 211 university students participated in Mann and Robinson's (2009) study by filling out questionnaires to analyze the contributors, moderators, and repercussions of their boredom.

According to the results of their poll, 59 percent of students are bored in class half of the time, and 30% are bored in most or all of their classes. Furthermore, boredom proneness was discovered to be the most important mediator of boredom experience in the study.Employee boredom can be measured using mathematical techniques.

i. Nonlinear formulations

In recent years, the role of emotions in the workplace has been recognized (Ashkanasy et al., 2002). The study of boredom at work, on the other hand, has been largely disregarded, and related research is still in its infancy (Game, 2007). Employees frequently complain about boredom at work.

ii. Linear formulations

It is assumed that variance in worker motivation is linear in the linear version of the boredom formulas. The initial state of the worker's motivation when he/she begins operating in a new workstation, the amount of time spent at the workstation, and his/her motivation coefficient all influence the worker's motivation level at any point during the production horizon.

2.3.3.5 Family problem

Following are the causes and consequences of family problems

i. Complete fragmentation. All supervisors, social workers, trainers or experts focused only on their own field to solve a particular problem.

ii. Low efficiency. Many interventions failed or were stopped because clients did not follow instructions.

iii. Inconsideration There were no consequences for falling or non-compliance.

iv. Smart customers. Usually the customer is better than the suppliers; the customer usually received more than he was entitled to; suppliers generally knew less about their customers than they should have.

v. Lack of management system. There was no mechanism to coordinate all activities. While each agency took responsibility for their client, none actually took responsibility for the family involved. you. Islands of knowledge. Information about the situation of families from criminal records, housing associations, nursing homes, schools and welfare systems was not shared or used.

vi. vii. Rows. The process time was too long; too many interventions delayed queues, e.g. the waiting time for the courthouse was around six months, five months in special care for young people.

vii. viii. There are no red alerts. Although many institutions had quality systems in place, there were no signals of poor performance or worsening problems. ix. Disappointed professionals. Many professionals said they considered

reporting the situation, but their workloads and long queues prevented them from spending extra time on such important cases

2.3.3.6 Discrimination

Discrimination can harm employees and clients in the hotel sector across four categories. These include hiring decisions (Albors-Garrigos et al., 2020; Chiang and Saw, 2018); employee treatment (Sarwar and Muhammad, 2020; Tews and Stafford, 2020);

2.3.4 Interpersonal stressors/working environment

2.3.4.1 Interpersonal conflicts

The building industry in China is quickly growing and plays a critical role in the economy. It's also evident that cost overruns, delays, and lower profit margins are all common occurrences (Meng, 2012).

Many practices and studies have sought ways to reduce waste and improve efficiency in construction projects to achieve project success (Chanmeka et al., 2012). These studies consider conflict, especially interpersonal conflict, as a critical factor in project success (Brockman, 201 ; Cheung and Chuah, 2000; Senaratne and Udawatta, 2013).

According to Hahn (2000), interpersonal conflict at work occurs 25 to 50 percent of the time during an employee's workday. Managers spend between 30% to 42% of their time dealing with employee disagreement (Bobinski, 2006; Denny, 2005). According to Brockman (2014), the entire impact of unresolved harmful interpersonal conflict on the workplace has yet to be realized.

2.3.4.2 Role conflicts

Organizational behavior and psychology have both examined stress in the workplace (Kahn and Byosiere, 1992). Most notably, studies have looked into the causes and effects of common workplace stressors such as role conflict, role ambiguity, and job overload (Jackson and Schuler, 1985).

As people live, learn, work and play, they are surrounded by their physical environment. People's physical environment is affected by the air they breathe, the water they drink, the homes they live in and the cars they use to work and .school. The causal sequence of relationships between these components is one of the areas that has received little attention.

Rather than examining the importance of mediated interactions between these components, researchers have documented the influence of these components separately. Tubre and Collins (2000, p. 155) stated after conducting a meta-analysis that "role ambiguity should not be dismissed as a 'insignificant' variable in the work performance domain."

Physical stressors

2.3.4.3 Poor physical environment

Individuals are surrounded by their physical environment as they live, learn, work, and play. The air they breathe, the water they drink, the dwellings they live in, and the cars they use to commute to work and school all have an impact on people's physical environments.

Managing stress, coping with stress, or adjusting to stress are all terms that have been used to describe the process of dealing with stress. Self-mobilization refers to a person's ability to mobilize and cope with stress effectively or ineffectively (Haynes and Love, 2014).

2.3.4.4 Unsafe working environment

If an employee cannot perform their required daily activities due to the hazardous physical conditions of the workplace, it is considered an unsafe work environment. For example, exposed wires, faulty equipment, hazardous materials or asbestos can create an unhealthy work environment.

2.4 Copping strategies

Managing stress, coping with stress, or adjusting to stress are all terms for the same thing. Self-mobilization refers to an individual's ability to mobilize and cope successfully or inadequately with stressors (Haynes and Love, 2014).

Instead of taking medicine to relieve stress, there are a number of other ways to lessen its bad effects through improving control and management (Kavitha, 2009).

Physical activity, hobbies, socializing with family and friends, engaging in various forms of entertainment, and seeking support from supervisors, coworkers, and others are all examples given by Bowen et al (2014). According to Leung et al., coping behavior is linked to positive performance among Hong Kong quantity surveyors (2006).

Leung et al. (2012) investigated a number of personal coping strategies for dealing with job stress.

When dealing with stressful situations, project managers, according to Aitken and Crawford, use active coping and planning approaches (2007). Organizations should also teach their staff how to maintain their health and reduce work-related stress on a regular basis (Jainet al., 2013)

2.4.1 Problem focused strategies

Problem-focused coping entails taking steps to finish a task, whereas emotion-focused coping entails taking steps to improve one's mood (Greenberg, 2012).

Problem-focused coping plans are comparable to problem-solving strategies. Problem-solving refers to a method that is objective and systematic, as well as appropriate and beneficial to the circumstance. Problem-focused coping behavior refers to a person's ability to adapt to changes in their environment (Leung et al, 2017).

Problem-solving behavior is the deliberate use of problem-focused efforts to improve a condition (Yip and Rowlinson, 2006). It addresses the problem and its consequences, as well as time management, managerial skills, and self-adjustment (Leung et al., 2012). According to Yip and Rowlinson (2006), the most widely used coping mechanism for construction professionals is planned problem-solving. Reduced depression symptoms are linked to positive re-appraisal activity (Aitken and Crawford, 2007). Workers are pushed to work past their normal working hours, which can be dangerous because it produces stress and a great deal of strain (Mueller, 2015).

Work overload is caused by a variety of blunders made by ourselves or coworkers, not necessarily by a flood of work. The actions listed below can be taken.

a) Stress management training: To assist employees in dealing with work overload, organizations should conduct stress management training. Employees are taught how to alleviate stress through stress management practices.

b) Set priorities: When you're swamped with work, it's critical to prioritize and execute tasks based on their importance and urgency. Prioritizing allows you to concentrate on the most important activity. A variety of strategies can be used to prioritize tasks. Prioritizing tasks, for example, can be done by coding and categorizing activities as ABC.

A-Very important

B- Important

C- Not important

b) Control your emotions, on each and every one on the way tries to respond in stressful situation mindset of the workers have important role. Most of the times workers who are not used to work under pressure or work overload tend to panics and imagining the possible worst outcomes, in that situation it is important to control emotion because such situation does not require panic but rather calm and rational decisions.

c) Delegate work, people think delegating work means to shrink responsibility. Although some tasks in the office or at workplaces you cannot delegate because of some reasons. In the situation of limited works, in order to reduce workload, you can delegate the works or parts of the works that is easy to be performed by your subordinates.

d) Planning and organization, in this approach workers are instructed to create to do list or an action plan. In to do list you can list all daily goals and task to be performed on that day, on action plan workers can precise what is necessary to accomplish. Action plan can split tasks into smaller sub goals and tasks.

e) Elimination of tasks, sometimes one may feel overloaded with so many tasks but sometimes the workload may constitutes with less important and or unnecessary tasks than can save a lot of time if cancelled. It is advised to try eliminating tasks that add no high productivity, no quality nor achievement of your objectives.

2.4.2 Emotional focused strategies

Emotion-focused coping strategies are cognitive techniques that are employed to reduce emotional distress. Averting, minimization, selective consideration, and getting good values from unwanted situations are examples of these methods (Lazarus

and Folkman, 2014). The goal of emotion-focused coping behavior is to manage and regulate emotional pain (Leung et al., 2006). It focuses on how to deal with a person's worries and displeasure as they react to situations (Schafer, 2001).

The idea is to use a variety of activities to regulate distress emotions (Djebarni, 2006). "Self-controlling behavior explores techniques to deal with and respond to stress through the clampdown of sentiments," according to Lazarus and Folkman (2014). When it comes to accommodating chores, people are aware of their responsibilities to make things right (Yip and Rowlinson, 2006).

According to the American Psychological Association (2008), 40 percent of adults smoked, 41 percent gambled, 35 percent shopped, and 27 percent consumed alcohol to cope with stress. Because stress is a psychological and physiological reaction to events that disrupt our personal equilibrium in some way, particularly occupational stress, which is harmful to workers' health and, as a result, to the health of organizations, According to Sauter (2014), workers should if they want to lessen the consequences of stressful working conditions.

a) Balance between work and family or personal life
b) Workers should seek a support network of friends and co-workers
c) To have a relaxed and positive outlook

2.5 Empirical Literature Review

Kehinde and Adeyeye (2019) study how gender influences stress response methods among quantity surveyors in the workplace in order to improve job performance.

A survey of quantity surveyors in Lagos yielded primary data, which was collected using structured questions. To survey male quantity surveyors, 334 quantity surveyors from government facilities, consulting and construction firms were randomly sampled, and the survey was coordinated using a purposive sampling technique.

The data collected was examined using percentile analysis. 27 stress reaction strategies were revealed in dealing with stressors in quantity surveyors' workplaces. The study's findings revealed the frequency with which stress response tactics were used, with "seeking clarification with coworkers or superiors" being the most common.

There have also been empirical research on the level of occupational stress in the construction industry. Wahab (2010) investigated the amount of stress among craftspeople in the building sector in Nigeria. A sample of 105 construction workers was provided by the Federation of Building and Civil Engineering Contractors.

The main and secondary data sources used in this study were both primary and secondary. Structured surveys and interviews provided the primary data for this study, while secondary data came from a review of related textbooks, journals, papers, the internet, records, and any other publications.

. In this study, descriptive and inferential statistics were employed to analyze the data.

The findings of the study show that most artists were more stressed at work than at home, and that this stress harmed their productivity at work while also generating medical problems in their bodies.

Drinking, quarrelling, clubbing, flirting, and smoking are the most common stressors, according to the study, whereas aerobic, biofeedback, relaxation, laughter, and social support are the most common ways people decrease stress.

.

According to the findings, every construction firm should plan for the management of artisans' stress through proactive strategies, non-specialist and specialist assistance, reorganization of the social-physical environment, time off, and social activities,

while artisans should stick to their preferred stress management methods to achieve optimal work performance.

According to Sunindijo and Kamardeen (2017), the construction industry is missing out on significant performance benefits resulting from gender diversity. Its reputation for extreme job stress, which leads to poor psychological health, is one of the reasons why women do not enter or leave the business early. This study used an online questionnaire survey to see if women in the construction sector endure different stressors and suffer different levels of work-related psychological injuries than their male counterparts.

Respondents were 167 males and 110 women working in the Australian construction business. The findings show that: (1) women professionals experience more anxiety and acute stress symptoms than men professionals, but there is no significant difference in the level of depression experienced by the two genders; (2) the top 10 stressors at work for construction professionals are the same for both genders, including time pressure, excessive workload, and long work hours; and (3) the top 10 stressors at work for both genders are time pressure, excessive workload, and long work hours.

(4) Women professionals face more discrimination, bullying, and sexual harassment than men; and (5) women professionals face more discrimination, bullying, and sexual harassment than males.

Frequency analysis and average index techniques were used to analyze the data. According to the data, over 30% of respondents (9 individuals) feel they have had some kind of disease or handicap in the previous year.

Around 13% of persons employed in the example construction site job roles are currently experiencing stress, depression, or anxiety, which they believe is caused or

exacerbated by their job or former employment. Around 7% of individuals surveyed stated that their job was extremely stressful.

For respondents, the most stressful aspects of work were being responsible for the safety of others at work. The most critical level of stress was determined to be around 2.48 of the average index for work demand. According to the findings, 47 (20.9%) of the employees experienced low levels of occupational stress, 74 (32.9%) experienced moderate levels of stress, and 104 (46.2%) experienced high levels of stress. According to the data, the majority of the employees were stressed in some way.

According to the data, 47 (20.9%) of employees reported low levels of occupational stress, 74 (32.9%) had moderate levels of stress, and 104 (46.2%) had high levels of stress. According to the data, the majority of the employees were moderately to extremely stress.

Love et al. (2010) investigated the nature of self and social supports, as well as mental health, among construction professionals in Australia, using an exploratory study design. The study included the help of 449 construction professionals. Employees working for a contracting firm on-site had worse mental health and increased job stress, according to the research.

Employees who worked on-site for a contracting company had worse mental health and increased job stress, according to the research. Self-stress was likewise higher among on-site personnel, whereas self- and work-support was higher among consultants. Workplace support was a substantial predictor of poor mental health in consultants.

Another study by Ibem et al. (2011) sought to uncover relevant stress indicators among specialists in the Nigerian building construction industry.This is because,

among professionals in the building construction industry in the United States, little is known about work stress.

A questionnaire was sent to 107 specialists from 60 ongoing building projects in Nigeria's Anambra, Ogun, and Kaduna states, including architects, builders, civil/structural engineers, and quantity surveyors.

The data was analyzed using descriptive statistics, and the findings revealed that the main sources of stress were a high volume of work, uncomfortable site offices, a lack of feedback on previous and ongoing construction projects, and differences in the scope of work in ongoing construction projects.

2.7 Chapter summary

This chapter covers various concepts of stressors issues, it describes different kind of stressors, stressors in construction workers, organizational stressors, personal stressor, interpersonal stressors/work environment and physical stressor, also it describes the overview of Tanzania construction industry concerning stress issues ,copping behavior to deal with stress in different genders, empirical literature review and lastly research gap.

CHAPTER THREE:

RESEARCH METHODOLOGY

3.1 Introduction

This study analyzed the issue of stress and gender in building construction industry in Tanzania. Methodology focuses on the research design, study population; sample size, sampling technique, source and type of data, data gathering method,data analysis technique and data reliability and validity,data collection instrument as well as ethical consideration in research.

It adopted mixed approach combining qualitative and quantitative research. The questionnaire survey was the main instrument used for data collection. The investigation involves different professionals, Architects, Quantity surveyor, Engineers, Technicians and labors both skilled and unskilled at different levels, from on going lager construction sites at Dar es salaam Tanzania.

To get potential sites a primary survey was carried out to map potential lager construction site in Dar es Salaam. Contractors Registration Board (CRB) based in Dar es Salaam registers construction project. A list and physical address of larger on going construction sites in Dar es Salaam was obtained from CRB and several projects were selected purposely based on the criteria established by researcher.

This criteria include lager construction sites which have multiple activities in progress and with number of labor working in different trade. The site was considered large when the project value was 3,000,000,000 Tsh and above. The researcher believes that larger project has a number of labors skilled and unskilled, both males and Females.Whom they can provide detailed and enogh information. The collected data was analyzed using statistical package for social science (SPSS).

3.2 Research Design

This study used a cross-sectional design with descriptive characteristics since it entails watching and summarizing a subject's behavior without altering it in any manner.

The strategy allowed for a more in-depth analysis of the phenomena, and the researcher used qualitative and quantitative data collection methods to create a comprehensive grasp of the stress issue across genders.

3.3 Area of study

According to Makoba (2008, p.52), if there is no specified region for study, the study may not be completed (2008). Dar es Salaam was the site of the research. According to census data from 2012, the region has a population of 3,464,541 people and a total area of 1,379 square kilometers.

Due to the prevalence of many different types of construction activities and a vast population of major and small construction operations, the scope of this study was confined to construction employees in Dar es Salaam, Tanzania's economic and commercial capital city. Dar es Salaam was seen as having a lot of information and being a good representation of Tanzania's construction efforts.

3.4 Unit of Study

The construction employees (Males and Females) in the sampled construction sites serve as the unit of data analysis (respondents) and reporting of results. Construction workers with various skill levels were recruited from 41 registered construction sites worth more than 3 billion Tanzanian shillings.

3.5 Sampling Technique and Sample Size

3.5.1 Techniques of Sampling

The process of selecting a correct split of an element from a population so that the subset can be utilized to make inferences about the population as a whole is known as sampling (Charles 2007).It also aids in the generalization of data across a wide population.

At the AQRB office, a list of registered building construction projects in Dar es Salaam with a value of 3 billion Tsh or more was collected. A total of forty-one construction sites were sampled and included in the study, out of a total of fifty-one.

Questionnaires were given to workers with skill levels three and four since they are in short supply, especially on construction sites. Due to their huge numbers and nomadic nature, twenty-one construction workers with skill level two were purposefully and randomly selected for interviews, while seven groups of employees with skill level one were selected for focused group discussions using a handy technique of sampling.

The following criteria were used to choose construction sites for primary data collection:

a) Active construction sites.

b) Workplaces with a big number of employees.

c) A construction site worth more than 3 billion Tanzanian shillings, because it was believed that high-value projects use advanced and complicated technology also it filled with different sections supervised under different professionals both males and females, this helped to show different significant levels of stress among construction workers.

3.5.2 Sample Size

A sample is a subset of the population about whom the researcher wants to learn more and draw conclusions (Babbies 2005). The following sample was obtained and a sample to work with based on data obtained from the AQRB office. The study's respondents were chosen from a sample size of 41 registered building construction sites out of 51 sites registered by the AQRB in 2020/2021.

$$Sample\ Size = \frac{\frac{z^2 \times p(1-p)}{e^2}}{1+(\frac{z^2 \times p(1-p)}{e^2 N})}$$

Whereby: N= Population Size = 51 Construction sites E= Margin of error = 8%

z= Score from the desired confidence level= 92%

e is percentage, (for example, 3% = 0.03).

Therefore; Sample size = **41 Construction sites**

Respondents for the study were of three types as follows;

a) On an individual basis: the respondents were 62 construction employees with levels three and four competencies.

b) On a group basis: the respondent was divided into nine groups from various construction sites, with each group consisting of at least seven construction workers with level one abilities.

c) Mixed type: the respondent was made up of 21 construction workers found in Dar es Salaam's building construction sites, the majority of whom were of skill level two, with a few from skill levels three and four.

3.6 Types and Sources of Data

There are two types of data that has been used when carrying out this study which are primary and secondary data.

3.6.1 Primary data

This is firsthand information gathered from the field by the researcher utilizing research methods such as questionnaires, focus groups, and interviews during the research period. The primary data acquired in this study pertains to the specific study objectives of gender perceptions of different types of stress, stress effects on different genders, and possible coping mechanisms for stress effects on different genders in building construction activities. Researcher obtain primary information from AQRB and CRB boards in Dar es salaam Tanzania.

3.6.2 Secondary Data

This is pre-collected data that was used as a reference and to learn from the experiences of others. Journals, books, prior studies, and web resources on stress, its causes, consequences, tolerance, coping mechanisms, and the like were used as secondary data in this study. The secondary data was also used to assess the primary data that had been gathered.

3.7 Methods of Data Collection

Data was collected using a variety of methods, including the previously mentioned interview, questionnaire, focused group discussion, and observations. Depending on gender and expertise in the building tasks, different data gathering methods were used.

3.7.1 Interview

In an interview, data is gathered through questioning and recorded by enumerators (Kothari, 20011). It is self-evident that an interview is an oral distribution of questionnaires and so a face-to-face encounter. In most research, such as descriptive studies, the interview approach is an appropriate instrument. Interviews were conducted on a few construction sites (with workers with level two skills and a few workers with levels three and four skills, including technicians and artisans) where the circumstances were favorable. Data was collected from 21 respondents across the research population using an unstructured interview.

3.7.2 Questionnaire

Questionnaires are forms with questions on them that the respondent fills out and returns (kathori, 2004). Questionnaires are a type of strategy that is quite expensive and is mainly utilized by literacy persons with corporative respondents. This form was created to collect both quantitative and qualitative data important to this research. Closed-ended questions were used in the questionnaires.

Quantity Surveyors, Project Managers, and Site Engineers were among the 62 responders who received questionnaires with competence levels 3 and 4. Gender perceptions on stress, strategies of coping with stress from different genders, and suggestions for suitable solutions for stress reduction at different skill levels were among the data collected. Some of the people who filled out the surveys were also interviewed.

3.7.3 Focused Group Discussion (FGD)

FGD (focused group discussion) is a technique for interacting with people who share a common interest or set of characteristics. It is led by a moderator who leverages the group's interaction to gather knowledge on a certain topic (Chambers, 1992). Focused

group discussion has the advantage of enabling the development of collective and creative enthusiasm, which leads to information exchange and familiarization with new ideas and concepts. Because this was the case for the majority of construction workers, FGD was used to gather largely qualitative data from them in this study.

3.7.4 Observation

It is a data collecting strategy that entails systematically watching, evaluating, and documenting human behavior and traits, as well as objectives or phenomenal phenomena.

The researcher focused on observing level of technology and manual works/handlings; site planning; safety issues; working practices; relationship between workers and management at large, such as how the work is supervised; condition of the workers, and a variety of other things in order to obtain firsthand information from the visited construction sites.

Observation was more than just looking or hearing as a means of data gathering; the researcher watched and documented the situations using both notes and pictures.

3.8 Reliability and Validity

Research instrument dependability refers to the degree to which a research instrument generates consistent data outputs across time when repeated measurements are conducted (Emory, 1991). When it comes to determining the validity of research findings, the accuracy of measuring devices is crucial. The first researcher utilized the Cronbach Alpha Coefficient method to examine the reliability and validity of data,

The degree to which a research instrument's results are consistent over time when repeated measurements are taken is referred to as its reliability (Emory, 1991). The validity of study findings is heavily influenced by the measurement instrument's reliability. To determine the reliability of data, two methods were used. First, the researcher used the Cronbach Alpha Coefficient method to test the reliability and validity of data, and to all kind of stressors had 0.790 Alpha coefficient value, which implies that all kind of stressors are valid and reliable for the study.

During data collecting, the researcher was also filling out questionnaires, not only to increase the response rate, but also to allow respondents to ask questions such as "what do you mean by stating that?" and provide further explanations. By administering the questionnaire, the researcher increases the likelihood of relying on the data and ensures that the majority of questions are answered.

3.9 Research Ethics

The researcher's research ethics are the principles he or she follows to conduct the study with diligence, honesty, and least offence to all participants (Hungler et al., 1993). Informed consent, right to privacy, honesty with professional colleagues, and protection from damage are the four ethical dilemmas in research that Ormord et al., (2005) divided into four categories.

The School of Architecture Construction Economics and Management at Ardhi University's Department of Building Economics granted permission to conduct the research. The respondents' informed consent was gained by first outlining the study's goal. Respondents were advised that they had the option to decline being interviewed at any time and that doing so would have no negative implications. Anonymity and confidentiality were important considerations in this study; no respondent was forced

or bullied into giving up his or her name in order to make their contributions truthful and just unless he or she was ready to do so.

3.10 Data Analysis

To improve the reliability of the studied data, a number of suitable qualitative and quantitative data analysis methodologies were applied (Creswell, 2003).

The data was analyzed using both qualitative and quantitative methods. For a thorough examination, this study uses both qualitative and quantitative methods. Quantitative methods are concerned with quantity or amount measurement, whereas qualitative approaches are concerned with qualitative phenomena (Kothari 2004). The researcher used data coding for descriptive analysis, and the results are presented in the form of tables and graphs.

CHAPTER FOUR

DATA COLLECTION, ANALYSIS AND PRESENTATION

4.1 Introduction

The results of the study are presented, analyzed and discussed in this chapter. It describes the demographic profile of the respondents, their characteristics, presentation of data and analysis based on the objectives of the study. The main aim of the study was to investigate stress and coping techniques between different genders and abilities on construction sites.

4.2 Respondents Profile

The purpose of this section is to discuss the demographic variables of the respondents so that the researcher can determine what judgments they may have about the given topic. The surveyed respondents are characterized by age, gender and work experience.

4.2.1 Respondents Demographic Variable

The researcher perceived it right to consider including age of the respondent in the analysis as this would help in realizing which particular age group perceive the issue of stressors in construction activities. The finding in Table 4.1 shows that 30 (37.5%) of the workers were 18−25 age, while 25(31.3%) argued that they were between 25-34 years of age, 16 (20%) of the workers were between 35-44, while and lastly 9(11.3%) workers were above 45+ years of age.

Table 4.1 Demographic characteristics in terms of age

	Age	Frequency	Valid Percent
	18−24	30	3 .
	25-34	25	31.3
	35-44	16	20
	4 above	9	11.3
Valid	Total	80	100

The data on age show that more than half of the respondents were young and energetic, and that they were likely to be quite mobile in their search for a good job, which causes stress because most youth and young people are ambitious.

Similarly, the gender result revealed that 17 (21.3%) of the workers were females, while 63 (78.8%) were males, indicating that the research encompassed both genders, male and female, despite the fact that the number of males is slightly higher than the number of females. Due to the nature of the work and the surroundings, female workers reported experiencing higher stress than male workers, according to research.

Table 4.2: Demographic characteristics in terms gender

	Age	Freq	Valid %
	male	63	78.8
	female	17	21.3
Valid	Total	80	100

Likewise in term of work experience the findings showed that 25(31.5%) of total workers had worked 0-4 years, also 25(31.25%) had worked for 5-9 years, and lastly 25(31.3%) had worked for 10−14 experience and lastly 5(6.3%) had worked for 14−18 years.

Table 4.3 Demographic characteristics in terms experience

	frequency	Valid %
0-4 years	25	31
5-9 years	25	31.3
10-14 years	25	31.3
14-18 years	5	6.3
Total	80	100

Over a period of 14 years, there is a decrease in stress as working experience increases, because construction employees first adapt to the site environment, and then use various stress coping mechanisms. Because the significant level is 0.0020.05, there is a statistical association between the length of time spent at work and workplace stress. Furthermore, more than 75 percent of all respondents who are married report having a family obligation, which might induce stress during building activities.

4.3 Perception of stressors to different gender at skills level 3 and 4

Objective number one state that *"To assess the types of stressors as perceived to different gender in building construction sites* under this objective the following information obtained.

Table 4.5: results of ANOVA comparing perception of stress and different genders (males and females)

Kind of stressor	ANOVA-test	df	Significant ($p<0.05$)	Significant differences (YES or NO)
Organizational stressors	1.179	79	0	YES
Task related stressors	2.237	79	0	YES
Personal related stressors	1.96	79	0.012	YES
Physical related stressors	1.45	79	0.003	YES
Gender related stressors	1.34	79	0.01	YES

4.3.1 Organizational stressors

According to the study, homework conflicts, a lack of carrier guidelines, insufficient freedom for decision making, and a lack of organizational support are the top sources of stress for construction workers, with 3.567 for males and 3.667 for females, 3.555 for males and 3.540 for females, and 3.235 for males and 3.450 for females as the top sources of stress Males and females have different averages. With 0.890 for males and 1.600 for girls, there is an unequal reward and treatment, as well as a lack of

promotion prospects. The least stated sources of stress to construction employees are low pay (1.970 for males & 1.666 for females) and a lack of room for creativity (0.970 for males & 1.990 for females

Table 4.6: Perception of stress in Organizational stress

Organizational kind of stressors	**Males**			**Females**		
	Mean	Std.Dev	rank	Mean	Std.dev	rank
Lack of organizational support	3.235	1.29	2	2.77	2.23	6
Homework conflicts	3.567	1.23	1	3.667	1.17	1
Poor organizational structure	1.25	1.1	8	2.6	1.184	9
Unfair reward and treatment	0.89	1.346	13	1.6	1.67	12
Lack of autonomy	1.94	1.236	11	2.22	1.643	10
Job insecurity	1.11	1.445	10	2.89	1.768	5
Lack of human resources	1.457	1.11	7	2.9	2.124	4
Lack of promotion &opportunities	1.97	1.09	4	1.666	2.134	13
Inadequate freedom of decision making	2.99	1.119	3	3.45	2.117	2
Poor communication	1.35	1.231	9	2.7	1.78	8
Lack of feedback	1.59	1.101	5	3.4	1.785	3
Inadequate room for innovation	0.9	1.23	12	1.99	1.345	11
Overall perception of stressors	**1.985**			**2.72**		

4.3.2 Personal stressors

Personal stressors are described as individual based sources of stress inherent in home or work that cause mental ill-health among workers, according to research. The following personal stressors are lead mentioned first problem with supervisors, language barrier, alcohol, harassment and discrimination for female construction workers, and drug use, with 4.549 mean for males & 4.532 mean for females,4.055 m.

With 1.990 for males and 2.023 for females, job adaptability is the least mentioned factor in personal stressors.

Table 4.7: Perception of stress to personal stressors

Personal kind of stressors	**Males**			**Females**		
	Mean	Std.Dev	rank	Mean	Std.dev	rank
Poor working relationship	3.555	1.33	4	3.22	1.209	4
Problems with supervisors	4.549	1.22	1	4.532	1.13	1
Harassment and discrimination	3.201	1.23	5	4.5	1.17	2
Language barrier	4.055	1.221	2	3.945	1.184	3
Adaptability with change of job	1.99	1.276	7	2.9	1.67	5
Alcohol and drug use	3.99	1.236	3	2.023	1.643	7
Competitive team work	2	1.445	6	2.543	1.668	6
Overall perception of stressors	**3.334**			**3.38**		

According to the findings, more than 4.549 female and 4.532 male construction employees believe that supervisory issues and a language barrier contribute to stress during construction activities. The significance level was smaller than the required significance level, i.e. 0.012 0.05, according to the statistics from the ANOVA test, implying that the findings are true and not by coincidence.

4.3.3 Gender related stressors

According to the findings, over 4.549 female and 4.532 male construction employees believe that problems with supervisors and a language barrier contribute to stress in the workplace. The significance level was smaller than the required significance threshold, i.e. 0.012 0.05, according to the statistics from the ANOVA test, implying that the findings are not coincidental.

Table 4.8: perception of stress to gender related stressors

Gender related of stressors	**Males**			**Females**		
	Mean	Std.Dev	rank	Mean	Std.dev	rank
Gender inequalities	3.255	1.241	1	2.009	1.39	2
Sexual harassment	3.235	1.29	2	2.17	1.23	1
Limited job opportunities	3.167	1.23	3	1.667	1.27	3
Overall perception of stressors	**3.219**			**1.95**		

More than 2.00 mean of female construction employees claimed sexual harassment as the main source of stress, while more than 3.00 mean of male construction workers stated gender disparities are a serious issue in construction activities. The significance level was less than the required significance threshold, i.e.0.010 0.05, according to the statistics from the ANOVA test, implying that the findings are true and not by coincidence.

4.3.4 Task related stressors

There are various types of task stressors that have been researched, but the following are the most commonly mentioned task stressors in the building construction industry: first, work overload, which is defined as a situation where there are discrepancies between project demands and an individual's ability to cope with the project, with a mean of 4.555 for males and 3.540 for females.

Table 4.9: Perception of stress to task related stressors

Task related stressors	**Males**			**Females**		
	Mean	Std.Dev	rank	Mean	Std.dev	rank
Work overload	4.555	1.24	1	3.54	1.39	1
Role ambiguity	3.235	1.29	4	2.77	2.23	4
Tight time frame	3.567	1.23	3	3.267	1.17	3
Long working hours	4.255	1.2	2	2.6	1.184	2
Work underload	3.49	1.346	5	1.6	1.67	7
Much contact with people	2.876	1.345	7	2.997	1.66	8
Unfair assignment of work load	3.345	1.456	6	2.678	1.98	5
Inadequate knowledge of project	1.67	1.237	10	2.54	1.34	10
Unpredictable working hours	1.94	1.236	9	2.22	1.643	9
Too specified job nature	1.97	1.445	8	2.89	1.768	6
Overall perception of stressors	**3.09**			**2.71**		

Long working hours is a task stressor that contributes much stress level to construction workers due to project deadline and overcoming job insecurity, mostly skilled level 2 and 3 workers argued with the statement.

Long working hours, according to more than half of female construction employees, are a source of family problems and occupational stress. Long working hours, work overload, tight deadlines, and project role ambiguity are the leading sources of task stressors, according to the statistics from the ANOVA test, which indicates that the significance level was less than the required significance level, i.e. 0.000 0.05, implying that long working hours, work overload, tight deadlines, and project role ambiguity are the leading sources of task stressors and findings are true not by chance.

4.3.5 Physical stressors

Physical stressors are environmental sources of stress that might originate at work or at home, according to the field. There are several types of physical stressors, with a mean of 3.600 for female construction workers and 3.890 for male construction employees. Poor working conditions, such as job setting, temperature, and office design, are said to be the main source of stress at work. Males have a score of 3.555, while girls have a score of 3.540. Inadequate safety equipment, injury, and accident are causes of stressors, and poor safety equipment contributes to stress among construction workers owing to anxieties.

In addition, 2.900 female construction workers cited poor medical services as a major source of stress, while 3.235 male construction workers cited injury and accident as a major source of stress, with bad transportation and medical services being the least stated sources of stress.

Table 4.10: Perception of stress to physical related stressors

Physical kind of stressors	**Males**			**Females**		
	Mean	Std.Dev	rank	Mean	Std.dev	rank
Inadequate safety equipment	3.555	1.34	2	3.54	1.39	2
Injury and accident	3.235	1.29	3	2.77	2.23	4
Poor transportation	3.167	1.23	4	2.667	1.17	5
Poor medical services	2.256	1.1	5	2.9	1.184	3
Poor working environment	3.89	1.346	1	3.6	1.67	1
Overall perception of stressors	**3.221**			**3.1**		

The significant level of 0.03 in the ANOVA statistics is less than the required threshold of 0.05, implying that poor working conditions are a major source of physical stresses in the construction industry.

Coping strategies of stress to workers with skills level 3 and 4

In 3.112, 3.025, 2.997, and 2.887, respectively, male construction workers asserted that problem-focused method employed in regulating stress by assigning work that is easily handled by subordinates, controlling emotions, setting priorities, and eliminating tasks.

4.556 mean of female construction workers mention emotional focused strategies in coping with stress, with 4.357 mean arguing that balancing work and family or personal life is the most and encouraged method to be used, workers seeking a supportive network of friends or coworkers, and having a relaxed and positive outlook being the least mentioned coping strategies methods in 3.769 mean.

4.4 Perception of stressors to different gender at skills level 2

The interview was performed with 13 construction workers, the majority of them are technicians (civil and architect) and a few of whom are professionals with skill levels 3 and 4 who lost the opportunity to respond to several critical questions from the questionnaires.

Task related stress

Long working hours and work overload are the main sources of task stress in building construction activities, according to more than half of workers. Inadequate project knowledge, unfair work assignments, unpredictable working hours, and role ambiguity are other task stressors mentioned and argued mostly by male's construction workers.

Physical stressors

Physical duties are unavoidable in construction activities, and poor working conditions and inadequate safety equipment are the main sources of physical stressors, resulting in contractors reducing project costs by 5.500 average mean. Poor

transportation and medical services are also mentioned by female construction workers due to their sensitivity to the issue.

Gender related stressors

Industry of construction It is ruled by men; it is cultural that when men face stress, they find it difficult to express their emotions; as a result, more than fifty men in Tanzania commit suicide each year as a result of stress. The reasons of gender-related stressors reported by 99 percent of building construction workers are sexual harassment and gender disparities.

Organization kind of stress

Due to homework conflicts, job insecurity, insufficient room for decision-making, and unfair reward and treatment, construction workers experience stress, anxiety, and depression. Though female construction workers outnumber male construction workers by 20%, inadequate room for innovation and poor communication are less commonly mentioned cases of stress.

Coping strategies to different kind of stressors

Cope with stress in building construction activities depends on the contractors and consultant mind set, according to the second objective, which states that “to examine on how different gender cope with different kinds of stressors in the building construction industry,” employers should create an environment in which construction workers are free to express how they feel before mental deterioration. 1/5 of construction workers call in sick due to stress, and companies have a tool to help them manage their workers' health.

Suggested measures to cope with stress

The suggested methods from building construction workers skilled level 2 come from particular aim three, which states that “to provide appropriate and suitable ways different gender cope with stress in the construction industry.”

Construction workers should be given with safety equipment, and medical services and working conditions should be enhanced. Sexual harassment and gender inequities should be discouraged and Wages need to be raised.

4.4 Perception of stressors to different gender at skills level 1

This study was conducted on several construction sites in Dar es Salaam, specifically at building construction sites, and found that the majority of construction workers in this group have no formal schooling background. Five groups of ten members each were introduced during lunch time to both males and females, and the members in focus group discussion are individuals who are conducting physical work on site and are normally employed temporarily and paid on a weekly or daily basis.

Physical stressors are a major topic of discussion in focus groups because the nature of the work they do requires a lot of physical exertion.

1. They are exhausted from hard work and manual handling, such as lifting bars, blocks, cement, and other large weights, and as a result, they turn to alcohol and marijuana for relief.
2. Laborers are not given with a working contract or agreement, implying that employers are attempting to avoid liability because some jobs have a negative influence on employees' health, such as working at a high altitude or wall polishing.
3. Laborers are not given with a working contract or agreement, implying that employers are attempting to avoid liability because some jobs are hazardous to employees' health, such as working at a high altitude or polishing walls.

4. Inadequate medical services, where the first aid kit does not contain enough medicine to cover the number of construction workers, forcing them to treat themselves.
5. Long working hours lead to family miscommunication, as well as payments being delayed and those who are sick not being considered for payment because they are out of work.
6. Working in a hostile environment, such as a scorching sun, a dusty atmosphere, noise, and a variety of other hazards that endanger their health and safety. Working at a high altitude with inadequate safety equipment also puts workers under a lot of stress, which leads to poor quality work.
7. In most of the sites in Dar es Salaam, only a few engineers and other specialists are given with safety equipment, putting undisciplined labor under stress due to un comfort ability.

Coping strategies to different stressors

a. Majority of construction worker use marijuana, smoking cigarette and the use of alcohol although it's a short relief coping strategies it believed to minimize stress since other stress causes are out of their human control and is part and parcel of their job.

   Through drinking cheap alcohol health of construction workers are ruined

b. Male comforting themselves with girls after work for the workers who they have not marriage engage themselves into sexual activities to release tension a number of men argued on this and encourages the process.
c. Abusive language used to release tension and make the heart peace to all problems bothering, it is the method which discouraged for workers whom they have good

manner and encouraged to young construction workers who their reasoning capacity its low.

CHAPTER FIVE:

DISCUSSION AND FINDINGS

5.1 Introduction

This chapter aim to discuss the finding as presented in the previous chapter. The discussion based on three objectives of the study.

5.2 Perception of stressors to different gender

Under objective number one which states that "*To assess the types of stressors as perceived to different gender in building construction sites* "the following achieved:

The outcomes of the study revealed that employees with skills levels 3 and 4 mentioned that homework issues add significantly to stress during construction activities, while 34 and above men construction workers disagreed. Construction workers are especially stressed due to a lack of career standards and poor organizational assistance, according to the findings.

It was discovered that a language barrier causes to stress in over 56 percent of all construction workers; this occurs most frequently in projects where a constructor or consultant's staff are foreigners.

Also, when it comes to gender-related stressors, women with less than four years of experience confront gender inequities and sexual harassment as a result of their newness to the sector and the fact that the construction business is dominated by men, according to one academic Sayed.

When it comes to task-related stressors, more than 60% of both male and female construction employees believe that job overload, long working hours, and tight deadlines contribute significantly to stress.

Physical stressors, such as poor working conditions and insufficient safety equipment, are cited by more than 70% of construction workers, both male and female. Physical stressors are sometimes referred to as environmental stressors.

Furthermore, the majority of construction employees with skill levels 1 and 2 experience increased physical stress as a result of their direct involvement in dangerous and difficult activities that require a lot of manual labor, such as concrete and steel work. Risks in their jobs, a poor working environment, poor pay, a lack of permanent employment and working contracts, and a lack of support from the organization they work for are all major sources of stress for them. Other major sources of stress include a lack of health insurance, transportation issues, and safety equipment.

5.3 Coping with stress to different gender

Under objective number two which state that "*To examine on how different gender cope with different kind of stressors in building construction industry*". According to the findings of the literature review Bowen et al., balancing work and family life was the most commonly mentioned method by male construction workers, while straight management training, emotion control, and the elimination of some tasks were more encouraged by female construction workers (2014), Taking physical exercise, indulging in hobbies, mingling with family and friends, engaging in various forms of entertainment, and seeking support from supervisors, coworkers, and others are all ways to cope with stress, according to him.

Workers with skill levels 1 and 2, the majority of whom are unskilled laborers paid weekly or daily, perform physical labor such as lifting cement, steel bars, blocks, and various beams and column members. As a result of these types of jobs, a number of

construction workers abuse cheap alcohol, marijuana, and cegarate, as well as using abusive language and comforting teasing.

5.4 Suggested measure to cope with stressors to different gender

From the objective number three which state that "*To propose possible and suitable way different gender cope with stress in construction industry* "The following are the proposed measures for different genders and ability levels. First, employers should ensure that all construction workers on site are provided with safety equipment that first aid kits contain enough medicine, that wages and promotions are provided on time, that sexual harassment on the job site is discouraged, and that the working environment is improved by construction workers.

CHAPTER SIX:

SUMMARY, CONCLUSION AND RECOMMENDATION

6.1 Introduction

This chapter provides a summary of the study, conclusions and recommendations presented and taken from chapter four. The main objective of the thesis is to investigate issues of stress and coping strategies for different genders and different skill levels in a house construction project. Therefore, recommendations are presented, showing how different genders see the problem of stress and how different genders deal with stress in house building activities.

6.2 Summary

The main objective of this research is to explore the issues of stress and coping strategies in different gender in building construction project where the specific objectives of the research are first to assess the types of stressors as perceived to different gender in building construction sites, secondly to examine on how different gender cope with different kind of stressors in building construction industry and the third objective is to propose possible and suitable way different gender cope with stress in construction industry. The study guided with the following research questions

i What are the types of stressors as perceived to different gender?

ii What are the coping strategies used by gender to different kind of stressors in building construction project?

iii What are the possible and suitable way different gender cope with stress in building construction projects?

With regard to research question one, the study findings revealed that perception of stressors to different gender are as follows in organizational stressors 64% of

respondent argue on homework problems 63% lack of carrier guideline and 60% argued on lack of organizational support. In personal stressors 56% language barrier 53% the use of alcohol and drugs. In gender related stressors 67% gender inequality, 64% sexual harassment. In task related stressors 60% work overload 58% long working hours 55% tight time frame and lastly physical stressors 70% argued on poor working environment 61% inadequate safety equipment and 30% poor medical services

In response to research question two, survey data revealed that 80% of males employ problem-solving tactics whereas 89 percent of women utilize emotional-based strategies to deal with stress by combining work and family or personal life.

In addition, three suggested stress coping strategies are as follows: safety material equipment should be provided, first aid kits should contain enough medicine, wages and promotions should be provided on time, sexual harassment on the job site should be discouraged, and the working environment should be improved through construction workers, according to the research question.

6.3 conclusions

Different genders and ages perceive stressors in different ways. From organizational stressors to physical stressors to gender related stressors, task stressors, and personal stressors, male and female respondents offered their perspectives on how they see things. A greater number of men than women responded, though women were more sensitive to gender related stressors. Building construction coping mechanisms utilized by different genders include emotional focused tactics favored by women and problem-focused strategies used by males.

6.4 Recommendation

In addition, three suggested stress coping strategies are as follows: safety material equipment should be provided, first aid kits should contain enough medicine, wages and promotions should be provided on time, sexual harassment on the job site should be discouraged, and the working environment should be improved through construction workers, according to the research question.

i Employees should be consulted to choose which type of emotional relaxation is best for them.

ii. .Whenever possible, provide more breaks to allow your staff to relax and enjoy themselves.

iii. Construction companies should provide frequent training in stress coping techniques for employees, as well as discourage people from utilizing negative coping strategies to deal with stress, which can harm their health and performance.

iv It is recommended that you seek psychiatric counseling, especially if your stress has become evident and uncontrollable. Then getting professional help, such as from Stress Managers, is strongly recommended.

v. Clearly defining workers' roles and responsibilities, allowing workers to participate in decision-making and actions that affect their jobs, improving communication, and finally providing opportunities for social interaction among workers, as well as providing a yardstick by which companies can assess their performance in addressing the major causes of stress

6.5 Areas for further studies

A researcher could work on the following areas concerning the issue of stress and stressors in building construction activities

1) Investigation on task stressors impact on occupational stress concerning different project complexities such as megaproject, which would reveal task stressors for various project characteristics.
2) Assessment on the role of noise, sound and light on occupational stress among the frontline workers in building construction activities
3) Assessment on the effects of occupational stress in the building construction activities
4) Assessment on the issue of stress to building construct workers at different skills levels

REFERENCE

Nelson-Wong, E., & Callaghan, J. P. (2010). Changes in muscle activation patterns and subjective low back pain ratings during prolonged standing in response to an exercise intervention. *Journal of Electromyography and Kinesiology*, *20*(6), 1125-1133.

Enshassi, A., & Al Swaity, E. (2015). Key stressors leading to construction professionals' stress in the Gaza Strip, Palestine. *Journal of Construction in Developing Countries*, *20*(2).

Tran, G. A., &Strutton, D. (2020). Comparing email and SNS users: Investigating e-servicescape, customer reviews, trust, loyalty and E-WOM. *Journal of Retailing and Consumer Services*, *53*, 101782.

Beheshtifar, M., &Omidvar, A. R. (2013). Causes to create job burnout in organizations. *International Journal of Academic Research in Business and Social Sciences*, *3*(6), 107.

Verma, A., Jiang, C. Y., Betts, T. R., Chen, J., Deisenhofer, I., Mantovan, R.,.& Sanders, P. (2015). Approaches to catheter ablation for persistent atrial fibrillation. *New England Journal of Medicine*, *372*(19), 1812-1822.

Bruschini, M., Carli, A., &Burla, F. (2018). Burnout and work-related stress in Italian rehabilitation professionals: A comparison of physiotherapists, speech therapists and occupational therapists. *Work*, *59*(1), 121-129.

Cheese, P. (2016). Managing risk and building resilient organizations in a riskier world. *Journal of Organizational Effectiveness: People and Performance*.

Campbell, J. Y. (2006). Household finance. *The journal of finance*, *61*(4), 1553-1604.

Wilson, S. R., Knowles, S. B., Huang, Q., & Fink, A. (2014). The prevalence of harmful and hazardous alcohol consumption in older US adults: data from the 2005–2008 National Health and Nutrition Examination Survey (NHANES). *Journal of general internal medicine*, *29*(2), 312-319.

Chopra, V., Flanders, S. A., Saint, S., Woller, S. C., O'Grady, N. P., Safdar, N., ..& Bernstein, S. J. (2015). The Michigan Appropriateness Guide for Intravenous Catheters (MAGIC): results from a multispecialty panel using the RAND/UCLA appropriateness method. *Annals of internal medicine*, *163*(6_Supplement), S1-S40.

Chun, J. A., Cooke, R. A., Eheart, J. W., & Cho, J. (2010). Estimation of flow and transport parameters for woodchip-based bioreactors: II. field-scale bioreactor. *Biosystems Engineering*, *105*(1), 95-102.

French, E., & Strachan, G. (2015). Women at work! Evaluating equal employment policies and outcomes in construction. *Equality, Diversity and Inclusion: An International Journal*.

Joachim, E., Gardezi, A. I., Chan, M. R., Shin, J. I., Astor, B. C., &Waheed, S. (2017). Association of pre-transplant dialysis modality and post-transplant outcomes: a meta-analysis. *Peritoneal Dialysis International*, *37*(3), 259-265.

Winter, T., Thubert, P., Brandt, A., Hui, J. W., Kelsey, R., Levis, P., ...& Alexander, R. K. (2012). RPL: IPv6 Routing Protocol for Low-Power and Lossy Networks. *rfc*, *6550*, 1-157.

Milner, A., Page, A., &LaMontagne, A. D. (2013). Long-term unemployment and suicide: a systematic review and meta-analysis. *PloS one*, *8*(1), e51333.

Frone, M. R. (2000). Work–family conflict and employee psychiatric disorders: The national comorbidity survey. *Journal of Applied psychology*, *85*(6), 888.

Campbell, J. Y. (2006). Household finance. *The journal of finance*, *61*(4), 1553-1604.

Descamps, S., Beˆty, J., Love, O. P., & Gilchrist, H. G. (2011). Individual optimization of reproduction in a long-lived migratory bird: a test of the condition-dependent model of laying date and clutch size. *Functional Ecology*, *25*(3), 671-681.

McGrogan, A., Madle, G. C., Seaman, H. E., & De Vries, C. S. (2009). The epidemiology of Guillain-Barré syndrome worldwide. *Neuroepidemiology*, *32*(2), 150-163.

Pérez-Escamilla, R., Damio, G., Chhabra, J., Fernandez, M. L., Segura-Pérez, S., Vega-López, S., ...&D'Agostino, D. (2015). Impact of a community health workers–led structured program on blood glucose control among Latinos with type 2 diabetes: the DIALBEST trial. *Diabetes Care*, *38*(2), 197-205.

Brun, E., &Milczarek, M. (2007). European Agency for Safety and Health at work. *Expert forecast on emerging psychosocial risks related to occupational safety and health. European Risk Observatory Report. Luxembourg: Office for Official Publications of the European Communities*.

Arndt, C. E., Fernandez-Leborans, G., Seuthe, L., Berge, J., &Gulliksen, B. (2005). Ciliated epibionts on the Arctic sympagic amphipod Gammaruswilkitzkii as indicators for sympago–benthic coupling. *Marine Biology*, *147*(3), 643-652.

Walne, A. J., Vulliamy, T., Marrone, A., Beswick, R., Kirwan, M., Masunari, Y., ...&Dokal, I. (2007). Genetic heterogeneity in autosomal recessive