# ASSESSMENT OF THE IMPACT OF STRESS ON THE PERFORMANCE OF CONSTRUCTION PRACTITIONERS IN KADUNA STATE

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DEPARTMENT OF QUANTITY SURVEYING FEDERAL UNIVERSITY OF TECHNOLOGY MINNA, NIGER STATE

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A THESIS SUBMITTED TO THE POSTGRADUATE SCHOOL, FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA, NIGERIA IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF TECHNOLOGY (M. Tech) IN QUANTITY SURVEYING

#### **ABSTRACT**

Stress at the workplace has become one of the main problems in the modern world and is one of the world's most common health concerns. Workplace stress affecting the success of construction firms because it affects the productivity and efficiency of employees. Many industries, not to mention the construction industry, need to receive substantial attention. In view of this, the study assessed the impact of work stress on the performance of construction practitioners with a view to suggesting strategies for effective management of stress. This study was quantitatively conducted via questionnaire survey. The research instrument was administered to construction practitioners in the study area. The respondents were selected using simple random sampling technique. Data was analysed using descriptive statistic such as percentage, mean item score, and inferential statistic such as Pearson product correlation. The study identified the major three (3) most prevalent factors contributing to stress among practitioners' as Poor working conditions (MIS = 3.72), Work overload (MIS = 3.72), and financial problem (MIS=3.64). The study also identified Work stress (MIS = 3.98). Subjective Stress (MIS = 3.80) and Chronic Stress (MIS=3.52) as the three (3) most common types of workplace stress experienced by construction workers and also the major Stressors are identified to be; Task Stressors (MIS=3.98), Personal Stressors and Organisation Stressors (MIS=3.84). The study also identified Task performance (MIS=3.80), Technical performance (MIS=3.76) and Organisation performance (MIS=3.68), as the three (3) major measure of performance of stressed construction practitioner. The most significant stress factors having impact on a construction practitioner's performance are; Reduced job satisfaction (MS = 3.90), Inefficiency in performance (MIS=3.86) and Absenteeism from work (MIS=3.82). The study reveals a positive and slightly strong (0.393) correlation between stress factors and measures of performance of construction practitioners with a P value (p=0.0) at 1% (0.01) level of significance. Therefore, a significant relationship between work stress and the performance of construction practitioners. Stress has positive impacts on the performance of professionals in construction. The study recommends that management should ensure that employees are up-to-date and get sufficient training in order to effectively execute their jobs and track their progress. Management should also make sure to implement flexible working hours e.g., hybrid that allow the employees to work in office and from home and also make provision for employee relaxation; by organising picnics, games and vacations.

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#### **CHAPTER ONE**

#### INTRODUCTION

#### 1.1 Background to the Study

1.0

The building construction industry has witnessed transformation across the globe in the last few decades. Continuous changes in the development of building process, pace and complexity of work and increasing demand for higher productivity have become common features of the construction industry (Wong *et al.*, 2010). In addition, practitioner's and other work force in the industry operate in an extremely competitive environment where projects are designed, constructed and delivered within tight budgets and a short duration. The whole processes have made works in the industry mentally and emotionally demanding and stressful (Wahab, 2010).

According to Daniel (2019), an average employee in the construction industry spends almost one third of his life on work, and sometimes has to face a lot of stress during his/her job. Daniel (2019) further lamented that stress in a workplace has touched almost all professions, from executives to workers who are directly engaged in the production. Job stress ultimately affects the physical as well as mental health. Stress has considerable impact on the lives of individuals. Although stress is a common concept, it is often misunderstood by many individuals. Stress is the way in which an individual responds to a range of environmental stressors. It is individualistic in nature and affects different people in different ways. Thus, what affects one person may not affect another (Blonna, 2012).

Lath (2010) asserted that every person including a child, an adult, employed or unemployed faces stress in his/her everyday life. He defined stress as any challenge that exceeds the coping abilities of the individual. According to Patching and Best (2014),

stress is a manifestation of different psychological factors such as an individual's personality type, their ability to be flexible, their understanding and use of avoidance and/or coping mechanisms, an individual's sleep and behaviour patterns, as well as their cognitive style, and how they learn. Lath (2010) opined that stress is the physical and emotional responses that occur when workers perceive an imbalance between their work demands and their capability to meet such demands.

The causes and effects of psychological and occupational stress varies across different sectors of the economy. In the construction industry, professionals are exposed to stressful working conditions (Edwards and Irani, 2010). The industry is defined with such as dynamism uncertainty which, elevating its stressful nature (Mohr and Wolfram, 2010). Sommovigo *et al.* (2019) added that construction related jobs are complicated, dynamic, crisis-ridden and involves high speed. These make construction employees vulnerable to occupational and psychological disorders and this has effect on themselves and the industry.

In education sector, Yusoff and Khan (2013) emphasized that stress is due to imbalance between job demands and their ability to respond. Employees are under pressure due to heavy workload, job demands, research and publications giving rise to tiredness, sleeping problem and concentration which are more visible when more workload is expected to attract external research funds. Similarly, Nithyajothi (2019) found that work life in the telecom industry is both challenging and stressful. Thus, employees are exposed to experiencing damage to critical brain structures and circuitry (McEwen and Morrison, 2013), reduced ability to cope with future stress and expanded nervousness and constant discouragement (Miller and Hen, 2015).

In developed economies, people are more familiar with what constitute work-related stress

and how to manage them unlike developing world. It is important for the employers and employees to understand what give rise to work-related stress and how to manage them as a result of globalization and changes in the structure of the workforce. According to Farber (2012), stress cannot be completely eradicated but may be managed or coped with in an ideal way.

The continuous decline in the contributions of the industry to the economy development is traceable to many factors in which low productivity is inclusive. Although low productivity is general concern to many sectors of the economy. Stress is one of the major factors responsible for low productivity of the industry, because construction process requires a lot of physical activities that are stressful to the participants (Wahab, 2010).

According to Amankwah *et al.* (2015), constructive stress inspires encouragement among employees and helps them to undertake various job challenges. If stress reaches a breaking point, performance becomes zero, and the employee will no longer feel like working for their employer, absenteeism increases, eventually resulting into quitting of a job or getting fired. This supports earlier research findings that stress resulting from work is a major problem and it takes a toll on one's physical and mental well-being (Leung *et al.*, 2016). This leads to a decline in employees' job performance as excessive stress interferes with performance.

Organizations involved in the construction industry rely heavily on their human resources, thus precautions must be taken to protect them from any risks. In order to employ human resources effectively and efficiently and to keep them with the company, Sharma and Devi (2011) argue that it is critical to recognize the sources of stress and take steps to mitigate them. This calls for an assessment on the impact of stress on the productivity of construction professionals.

#### 1.2 Statement of Research Problem

Construction projects are task-oriented in nature, with the central objective being to produce the final product within the scope of time, cost and expected quality requirements (Hoboken, 2014). Therefore, professionals are continually exposed to varying stressors in their work environments which threatens their physical and mental health, and hence decreases job satisfaction and productivity (Enshassi and Al-Swaity, 2015).

One of the main factors affecting the success of construction firms is work stress. This is because it affects the productivity and efficiency of employees (Jignyasu *et al.*, 2019). Employees are likely to be unhappy with their current work environment when they are subject to high level of stress and may consequently leave their jobs (Ali and Rizwan, 2014), or experience decline in ability to operate efficiently (Lubbadeh, 2020), which is directly proportional to the organization's success in every activity (Suharto *et al.*, 2019).

According to Kingstone and Ngonidzashe (2016), low income, poor working conditions, inadequate personal protective equipment, lack of training in safety, lack of job stability and security, and job rotation have been identified as the causes of stress for employees. What it shows is that there is a negative relationship between job stress and job performance (Kingstone and Ngonidzashe, 2016). For instance, workers often feel tired when they undergo stress and they may not be able to do their job. Eventually, organizations are less likely to succeed in competitive markets with stressed workers. As such, workers and the employers should know the various techniques that can be used to manage stress (Jignyasu *et al.*, 2019).

Stress at the workplace has become one of the main problems in the modern world and is one of the world's most common health concerns. Work stress can be detrimental to physical and emotional reactions when the job demand (job expectation) and job support do not correspond to the individual's abilities to keep up with the expectations of the organization. The underlying problem of work stress among safety and health practitioners at construction worksites does affect the deterioration of their performance (Jignyasu *et al.*, 2019).

Previous researches (Kingstone and Ngonidzashe 2016; Ajayi et al., 2019, Jignyasu et al., 2019) focused on causes and effects of occupational stress in the construction industry. This goes to suggest that adequate attention has not been given to proper assessment of impact of stress on the performance of construction practitioners in Kaduna. This has partly accounted for the dearth of empirical data on impact of stress on the performance of construction practitioners in Nigeria in general and in Kaduna, in particular. It is this gap in literature that this study attempted to fill. Therefore, this research is intended to fill the gap on stress and work performances in Kaduna by assessing the impact of work stress on the performance of construction practitioner firms with a view to suggest strategies for effective management of stress among construction practitioners.

#### 1.3 Research Questions

To clearly give direction to this study and achieve its objectives, the following research questions were formulated:

i. What are the factors contributing to stress among practitioners in the construction industry?

ii. What are the types of workplace stress experienced by construction practitioners?

iii. What are the measures of performance of construction practitioners in the construction industry?

iv. What are the impact factors that stress has on performance of construction practitioners?

#### 1.4 Aim and Objectives

The aim of this study is to assess the impact of work stress on the performance of construction practitioners with a view to suggest strategies for effective management of stress.

In order to achieve the aim of this research, the following objectives were pursued:

 To assess factors contributing to stress among practitioners in the construction industry.

ii. To examine various types of workplace stress experienced by construction practitioners.

iii. To examine measures of performance of construction practitioners in the construction industry.

iv. To assess the impact factor of stress on construction practitioners' performance.

#### 1.5 Research Hypothesis

The following hypothesis was formulated:

Hypothesis 1:

H<sub>01</sub>: There is no significant relationship between work stress and Performance of construction practitioners.

Ha<sub>1</sub>: There is a significant relationship between work stress and performance of construction Practitioners'

#### 1.6 Justification of the Study

In order to justify the gap for this study, the contributions of the following research cannot be overemphasised. Leung *et al.* (2014) identified that work stress is known to negatively impact productivity and work satisfactions among employees in various occupations. Besides this, it is believed to be a large contributor to absenteeism and low employee morale, but also have negative implications on profitability and organizational development. Hence, many organizations have realized the importance in raising the issue of work-related stress. Stress in a workplace has touched almost all professions, starting from executive levels to co-workers who are directly engaged in the production (Goswami, 2015)

Workplace stress plays a significant role in physiological and psychological well-being of employees. It also affects the productivity and performance of organizations. Studies shows that stress has a great impact on construction practitioners and thereby affects their level of productivity. The level of the impact is not empirically shown most especially in the study area (Panigrahi, 2016).

According to Owusu-Fordjour *et al.* (2020), Construction practitioners could experience occupational psychological disorders, such as workaholism and burnout due to their work, personality lifestyle. The key perceived effects of occupational psychological disorders on construction practitioners were accident-prone, chronic pain, insomnia or sleep disturbances, musculoskeletal injuries and loss of memory/forgetfulness (Kotera *et al.*, 2019).

Nwafor (2015) explored the relationship between stressors, stress levels, performance, and coping behaviors among construction professionals. These professionals include project managers, architects, field and office engineers, designers, and other professionals within the contractor organizations in Nigeria. The study concluded that there was a significant relationship between stressors and stress (subjective and objective) and also between stressors and coping behavior strategies. Finally, recommendations are given for construction organizations and individuals respectively in order to lessen the high stress levels of construction professionals in Nigeria.

However, there is limited research on the impact of stress on the performance of construction practitioners in Kaduna state. Further, in-depth quantitative studies, which explore the factors contributing to stress among practitioners in the construction industry, measures of performance of construction practitioners in the construction industry and impact factor of stress on construction practitioners' performance and these serve as the gap this research intends to fill. This research is significant to construction practitioners, policy makers, and the construction firms on how to effectively manage stress and improve performance among construction practitioners.

#### 1.7 Scope of the Study

This research work focuses on the impact of work stress factors on the performance of construction practitioners in Kaduna. Kaduna as a geographical scope was selected because it is one of the metropolitan cities in Nigeria that has the high population of construction practitioners. This study focused on construction practitioners which encompasses Architects, Quantity Surveyors, Builders and Engineers. This study adopted quantitative method of research through field survey using questionnaire. This study focused on factors contributing to stress among practitioners in the construction industry, types of workplace stress experienced by construction practitioners, measures

of performance of stressed workers in the construction industry and the impact of stress factors on the performance of construction practitioners.

#### **CHAPTER TWO**

#### 2.0 LITERATURE REVIEW

#### 2.1 Concept of Stress in the Construction Industry

Stress is prevalent in the construction industry. It can have negative consequences for individuals and organisations, such as loss of productivity, reduced morale, and high turnover (Hayes et al., 2015). Job stress results from the source of stress, which resides in the working environment. It occurs when there is a discrepancy between an individual's self-perceived and actual ability to deal with tasks (Ahmad et al., 2016). Job stress can be either quantitative or qualitative depending on its source (Leung et al., 2012). Quantitative stress is defined as the stress resulting from the quantitative discrepancy (i.e., volume of work) between external demands individuals' actual ability, while qualitative stress is defined as the stress resulting from the qualitative discrepancy (i.e., difficult of work) between external demands and individuals' actual ability (Leung et al., 2015).

Quantitative and qualitative stress can be induced by stressors like work-home conflict, work underload, while chronic exposure to quantitative and qualitative stress can induce burnout, decreased organizational commitment, and lower productivity among CPs (Leung *et al.*, 2011). Facing source of stress could result in emotional stress to individuals, which manifests itself in the form of worry, anxious and being frustrated (Leung *et al.*, 2015). This could further lead to emotional exhaustion if individuals are continuously affected by the source of stress (Leung *et al.*, 2015). In addition to negative individual consequence, emotional stress also induces negative consequence to organization, such as absenteeism, loss of productivity, diminished organizational commitment (Finney *et al.*, 2013).

Exposure to stress can also provoke the physical adjustments of the human body, such as increased pulse rate, increased blood pressure, and sweating (Schat *et al.*, 2005). Over certain time these physical adjustments cannot revert into normal, and physical stress symptoms will result and appears in the form of headache, back pain, and loss of appetite (Masihabadi *et al.*, 2015). Physical stress is particularly detrimental, as in addition to impair performance, prolonged suffering from it will also result in future morbidity and mortality (Nixon *et al.*, 2011).

Stress is defined as "the body's psychological, emotional, and physiological responses to any demand that is perceived as threatening to a person's well-being stated that stress is a process of appraising events or situations as harmful, threatening, or challenging it also involves assessing potential responses and responding to events. Stress gives both positive and negative responses to our actions, because our rational evaluation and assumption of the stressors makes difference in how we react to the issue that is perceived as stressor and how we deal with it. There is constructive and destructive stress. Constructive stress is the feeling of anxiety that makes us perform well in our daily life. Stress could also be the driving force to test ourselves and encourage ourselves to do something. Destructive stress presents undesirable effect of stress known as distress.

#### 2.2 Types of Construction Workplace Stress

Based on the above definitions of stress, seven types of stress were defined in this study: subjective stress and objective stress.

#### 2.2.1 Subjective stress

Subjective Stress (SS) refers to the stress that is perceived by individuals through their subjective judgments. It is mainly measured by the degree of satisfaction with the

environment, including feelings of happiness or depression, and the degree of confidence in an organization (Leung, 2012).

#### 2.2.2 Objective stress

Objective Stress (OS) refers to the evaluation of threat resulting from cognitive factors. OS mainly focuses on the evaluation of the events happening around the person concerned (Leung *et al.*, 2012). It depends on individuals' perception of his or her ability to fulfill the task with a certain number of difficulties or challenges that one's job involves (Leung, 2011; Leung *et al.*, 2012; Leung *et al.*, 2015). Hence, objective stress is induced due to the deviation between individuals' expected ability and the actual ability to deal effectively with tasks (Leung *et al.*, 2015). In real situations, there are a lot of cognitive factors affecting construction professionals' objective stress, such as the number of project deadlines, the number of tasks (e.g., numerous meetings, frequent documentary submissions, site visits, considerable phone calls) and difficult jobs (e.g., complicated decision-making, multi-task programme, various resources allocation) (Haynes and Love, 2004; Leung *et al.*, 2015).

#### 2.2.3 Work stress

From the Second World War, stress has become an interesting topic for researchers. Organizations are finally recognized the fact that because of job stress, lots of human potentials are being disappeared. Almost the employees say that they are under high stress at workplace. Hence, work stress is one of biggest problem in the global world. Stress is an unexpected reaction people have to treat them investigate pressures. Stress can have a positive influence on employees only with a certain amount at which an employee can handle, however, mostly it exceeds the tolerable limits and has a negative effect on employees. According to Anderson *et al.* (2002), family conflicts are also rooting which create stress of employees.

Stress has been viewed as an environmental stimulus to an individual; it defined stress as an individual's reaction to environmental forces that had effects on individual performance. Because job stress can threat individual performance and family functional, it is quite dangerous. Job stress can make a difference between the ability of families to provide material security and demands on families. Even with executives and managers, stress is an experience in the work life of every employee. Work stress by accident made organizational performance go down. Besides, work stress not only has impact on company and employee job performance but also can shape dire influences when related to health care. Therefore, the importance of work stress is emphasized nowadays by employers to manage and reduce through practical guidelines in public sector but not in private one (Daniel, 2019).

#### 2.2.4 Chronic stress

She describes this type of stress as unrelenting demands and pressures for seemingly interminable periods of time. Chronic stress is the type that wears the individual down day after day and year after year with no visible escape. It grinds away at both emotional and health of the individual leading to breakdown and even death (Daniel, 2019).

#### 2.2.5 Acute stress

This type of stress is the most common and most recognizable form of stress. It is the kind of stress which the individual knows exactly why "he is stressed; he was just in a car accident; the school nurse just called him; a bear just ambled onto his campsite". It can also be something scary but thrilling, such as a parachute jump. Normally, the body rest when these stressful events cease and life gets back to normal because the effects are short-term. Acute stress usually does not cause severe or permanent damage to the body (Daniel, 2019).

#### 2.2.6 Traumatic stress

It is a severe stress reaction that results from a catastrophic event or intense experience such as a natural disaster, sexual assault, life-threatening accident, or participation in a combat. Here, after the initial shock and emotional fallout, many trauma victims gradually begin to recover. But for some people, the psychological and physical symptoms triggered by the trauma do not go away, the body does not return to equilibrium, and life does not return to normal. This condition is known as post trauma stress disorder. Common symptoms of this type of stress are flashbacks or nightmares about the trauma, avoidance of places and things associated with the trauma, hyper vigilance for signs of danger and irritability and tension (Daniel, 2019).

#### 2.2.7 Episodic acute stress

Daniel (2019), went further to explain episodic acute stress as where the individual experiencing this type of stress lives are very chaotic, out of control and they always seem to be facing multiple stressful situations. They are always in a rush, always late, always taking on too many projects, handling too many demands. If an individual is prone to episodic acute stress, he may not know it or admit it. He may be wedded to a life style that promotes stress. Unfortunately, people with episodic acute stress may find it so habitual that they resist changing their lifestyles until they experience severe physical symptoms (Daniel, 2019).

#### 2.3 Types of Stressors

A stressor is a particular circumstance, requirement, or situation that can induce stress, a biochemical change in behavioral, physiological, and/or psychological health (Leung *et al.*, 2008). The following stressors affect employees at the workplace.

#### (i) Personal stressors

Some people are more susceptible to stress, in which they are less capable of coping with resulting in frustrating situations. However, other people do better at coping with stress (Leung and Chan, 2011). This may be due to the different types of behaviours of individuals, which lead to different reactions to stressors (Leung *et al.*, 2008). Besides, many researchers have shown that home-work conflict may lead to stress (Leung *et al.*, 2007; Emslie *et al.*, 2004; Lingard 2004; Lingard and Francis, 2005). On the other hand, it is widely accepted, that poor relationships and distrust with colleagues, supervisors and subordinates, and the lack of support in implementation and mistrust amongst participants at work, have significant relationships with stress-related problems (Leung *et al.*, 2007; Ibem *et al.*, 2011; Ng *et al.*, 2005, Haq *et al.*, 2008).

#### (ii) Task stressors

It is obvious that different occupations have different natures of work; thus, different stress levels perceived by individuals. Therefore, the specific characteristics of construction projects, may specifically lead to stress in construction professionals in various disciplines (Leung *et al.*, 2005, 2007, 2008; Haynes & Love, 2004; Ng *et al.*, 2005; Wahab, 2010; Leung & Chan, 2010; Ibem *et al.*, 2011).

#### (iii) Physical stressors

Many researchers have studied the fact that stress can be caused by poor working conditions around the individual either at work or the home environment (Ibem *et al*, 2011; Ng *et al.*, 2005, Haq *et al.*, 2008; Leung *et al.*, 2008; Ng *et al.*, 2005; Wahab, 2010). Different individuals have different tolerance levels to adverse conditions.

#### (iv) Organizational stressors

According to Andrews *et al.* (2009), the structure of an organization and communication between individuals, have strong relationships with the level of stress in individuals, and

it has been proved to be related to burnout, job satisfaction, organization commitment and turnover of individuals. Besides, job autonomy was found to be related to depression and low self-esteem and positively related to satisfaction (Leung *et al.*, 2007, 2008).

#### 2.4 Factor Contributing to Stress among Construction Practitioners

Employee's experience and feel stressed due to a set of various reasons and therefore the reactions to stress at the workplace are not a separate aspect. (Fairbrother and Warn, 2003). Increasingly, the stress level is changing rapidly among the employees due to various reasons, such as work overload, over crowdedness at the workplace, of loud noises generated by machines and arousal of conflicts among the employees and the employer due to poor or inadequate decisions. Stress can arise because of transitions made in our personal lives. Personal issues that contribute to stress are domestic problems in the house, like losing loved ones, financial problems and divorce.

These could be categorized as individual causes that lead to stress. On the other hand, there is also stress that is caused by organizational factors; these factors are those faced by the employees at the workplace. Issues such as role uncertainty; that is not being able to know exactly what one is supposed to do and what others expect from us and also having too much work at hand with little time to accomplish it, can cause stress at the work place.

Further, organizational factors that causes stress are poor working conditions where the employee is often too distracted, where there is noise, where it is chilly or too hot and where the workplace is often filled with people running here and there. Whereas issues that contribute to stress are lack of control, suddenness, and ambiguity; especially role ambiguity is the foremost reason of stress at work (Richardson, 2014). Some organizational factors that can be considered as stressors mostly depend on the types of

job and specification of works. These play important role regarding the issues related to stress, for instance, if the job is high-stress prone. High stress jobs are the kind of jobs that require plenty of time, and put the employees under the pressure of work. It is also notable that, often the employees suffer from poor working situation, if the work is performed in an unpleasant environment (Bloisi *et al.*, 2007).

#### 2.4.1 Workplace factors causing stress

Scholars have stated that a large number of features of occupational life, is connected to stress. Okeke *et al.* (2016), concluded their study by conducting a sample study of 7,099 employees from 13 different companies and occupations. They reported that a significant statistical relationship between workplace factor and negative symptoms of health or disorder of mental situation such as, anxiety, depression and irritation. Employees usually feel stress at their jobs due to the following reasons (Okeke *et al.*, 2016); work overload, misuse of power, inadequate decisions or leader behavior and overcrowd and noise.

Work and workplace in them are stressful phenomenon and therefore, various aspects of work situations are connected to stress (De Silva *et al.*, 2017). According to Boschman *et al.* (2013), the factors related to roles in a work environment are namely existence of low-level power, role indefiniteness or role dispute. They added that increase in physical conditions at the workplace such as concurrent permanent noise, overcrowding and lack of secrecy, are associated to stress. The behaviour of the leader or chief can also affect the level of stress (Fairbrother and Warn, 2003).

#### 2.4.2 External factors of stress

The causes of stress from an individual perspective as well as in the workplace have been examined. There are also external factors that cause stress both on employees and organizations. Employees can be affected directly external causes of stress, but companies are often affected indirectly. According to the study made by Kirkcaldy and Martin (2000), employees experience stress due to various reasons. Often stress has been associated with important issues, such as environmental and economic aspects. The environmental factors, include organizational climate as well as occupational consequences of job contentment, organizational loyalty and behavioural aspects of employees. For example, remarkable occupational environment of doctors and nurses who in hospitals deal with wound, death and dying on regular basis. (Fairbrother and Warn, 2003). External factors beyond the control of both the employees and the organizations are based on political and economic factors. Economic uncertainties such as redundancy and downsizings are some of the economic consequences of a firm which affects the employees. Changes in political situation or economic disability are out of employees' control and therefore the idea of redundancy and downsizing affects employees in some way. (Bloisi et al., 2007). Advancement in technology is also another external factor that has contributed to productivity to a large extent. It causes a remarkable decline of demand for labor in the market, which affect the employee's job security. Though, it is important to familiarize one's self to new technologies, it can be considered stressful if perceived as unachievable or difficult to learn. Technological changes like computerized systems, new software can cause stress among workers. Besides, a technological change, politics is also an external factor of stress. In cases where there is major change in government policies or mistrust of employees to government would make the environment will be more stressful (Bloisi et al., 2007).

Studies made by Boschman *et al.* (2013). stated that there are many research findings and sufficient information in this particular area. Scholars cannot apply all their findings in a particular place to all workplaces, because the workplace factors are not always

related to stress in various workplaces, in other words, stress factors are not always stable, consistent and similar to a group of occupations. It varies from environment to environment, work to work or situation to situation, but the relationship is variable between stress and job satisfaction of the team being surveyed. (Fairbrother and Warn, 2003).

# 2.5 Impact of Work Stress Factors on Construction among Practitioner's Performance

The findings of the investigation regarding the consequences of work stress experienced by employees at Khairun University showed a negative and significant effect on employee performance (Nur, 2013), Similarly Ramli (2017) and Yang and Hwang (2014) have tested the impact of work stress on employee performance their findings showed that organizational performance is based on collectively efforts of employees. Barlian (2016) also examined the causal relationship between the achievement of employee performance and organizational performance. He concluded that, a good relationship assists managers in directing the limited organizational resources in the right direction, therefore leading to employee performance, and also lead to employee's satisfaction and job efficient. Basri (2012) explained job stress as a negative feeling that due to individual's inability to face the weight of a workload or an inappropriate capacity or pressure at work.

Ahmad, et al. (2016) and Ramli (2017) also stated that work stress is a condition of tension that affects emotions, processes, thinking and conditions of a person, thus work stress can be said to be a condition that disturbs the state of employees which affects the emotions, cognitive processes of the employees themselves. Job stress can also be said to be a condition of discomfort experienced by an employee caused by work or work environment so that it has an impact on the survival of his life. Previous studies

affirmed that work stress has a negative and significant impact on employee performance.

#### 2.5.1 Negative Impact of Work Stress Factors

Iresa et al. (2015), findings contradict the findings of Ramli (2017), the most important apprehensions in the study of work stress are the adverse impact on employee's performance. Employees suffering from stress at work place would try to withdraw themselves from stressors. An employee that is stressed and cannot leave the job is a problem for the management showing in terms of inefficiency in performance, wastage of operational resources, creating obstacles for subordinates. Stress factors associated with the poor performance and negative result in employees physical and psychological wellbeing at work. Enduring stressful situation at work create a negative impact not only on employee's performance but also hinders the overall performance at organizational level. The relationship between work stress and performance is very complex and organisation needs take strategic decisions.

Productivity is considered to be at the peak with moderate level of work stress, but as it goes beyond that certain level, the productivity starts decreasing (Kakkos and Trivellas, 2011). Stress employees may not have sufficiently energy and may not be whole-heartedly dedicated to their job, resulting in low productivity and at the peak of stress, employees may to get out of that stressful situation, result in no concentration on work. Job stress can be viewed as an individual's reactions to characteristics of work environment that are perceived to be emotionally and physically threatening to the individual (Shahriari *et al.*, 2013). It points to a poor fit between the individual's capabilities and his work environment, in which excessive demands are made of the individual or the individual is not fully prepared to handle the situation (Shahriari *et al.*,

2013). In general, the higher the imbalance between the demands and the individuals' abilities, the higher will be experienced job stress (Jamal, 2007).

#### 2.5.2 Relationship between job stress and job performance

Job performance can be viewed as an activity in which an individual is able to accomplish successfully based on the task assigned to him, subject to the normal constraints of the reasonable utilization of available resources (Shahriari *et al.*, 2013). Four types of relationships were proposed earlier to exist potentially between the measures of job stress and job performance namely; a negative linear relationship, a positive linear relationship, a curvilinear / u-shaped relationship and no relationship between the two. The nature of the relationship between job stress and job performance, has been a subject of debate there is no agreement on the exact relationship and there is empirically examined study that the two relationships exist in the study area.

A negative relationship between job stress and performance was conceived by those who viewed job stress as essentially dysfunctional for the organization and its employees (Tourigny *et al*, 2016). Chronic job stress (lasting more or less permanently) by its very nature is extremely aversive to most employees, creating a noxious situation in the work setting. In such situations, individuals are most likely to spend a sizeable chunk of their time and energy coping with stress, thus adversely affecting their performance (Shaikh *et al.*, 2013). The advocates of a positive relationship between job stress and performance generally equate stress with challenge (Tourigny *et al.*, 2016). According to Selye, stress is "the nonspecific response of the body to any demand made upon it" (Selye, 1976). Stress refers to all the nonspecifically induced changes (Selye, 1976) that may create physiological, mental and behavioural reactions within a biological system.

According to Manderson (2014), "the term stress is so ubiquitous that it is used as a noun when we talk about being under stress, as a verb when events are stressing us and as an adjective, when we use the term - modern life has become stressful". Thus, the concept of stress is "multidimensional and composite, including emotion and arousal" (Moal, 2007). Job stress is denoted as a mismatch between one's aptitudes, capacities and demands of the job and needs supplied by the job environment (Dissanayaka, 2014). Excessive demands are the product of individual's interaction with the surroundings pinpointing that the individual is not fully equipped to handle a selected scenario (Dissanayaka, 2014) Job performance is defined as the execution of a particular activity, the attainment of which is to be appraised in terms of pre-defined benchmarks of accuracy, completeness, economy and speed (Goswami, 2015). Job performance can be considered as "an activity in which an individual is able to accomplish successfully the task/goal assigned to him, subject to the normal constraint of the reasonable utilisation of available resources" (Goswami, 2015). Job stress is often described as closely associated with performance and have serious implications on individual and organizational performance. Stressed employees are most probably unhealthy, poorly motivated, less productive and less safe at work (Goswami, 2015; Lopes and Kachalia, 2016; Park, 2007). Sources of job stress contribute to reduced job satisfaction, reduced quality of labour, high worker's turnover, absenteeism, reduced worker overall performance and reduced organizational performance. Too much stress is clearly evidenced by a substantial decline in performance and organizational effectiveness (Manderson, 2014).

#### 2.6 Measures of Performance of Construction Practitioners

There are various ways of assessing performance in construction sector, few of these ways are discussed below:

#### i. Technical performance

Technical Performance Measurement is a process by which project management can measure the risks inherent in a given project. Technical Performance Measurements provide insight as to the parameters of the specific design elements of the system. Technical Performance Measurement is used by project management to define the measures of performance and acceptable variables during project implementation (Ahmad *et al.*, 2016). Use of Technical Performance Measurement benchmarks should be limited to factors which negatively affect the primary measures of performance, which are schedule and budget. Project management should not use Technical Performance Measurement to measure typical project goals, but strictly as a preventative measure to ensure that the project is delivered on time, and for the targeted budgetary goals. Studying these technical performance measurements provides the opportunity for management to develop tolerable risk ranges to evaluate the parameters of the project (Dziekonski *et al.*, 2018).

#### ii. Social performance

Social performance of construction projects reflects the extent to which the lifecycle of construction projects meets the demands of anticipated or existing social demands. Therefore, social performance of construction projects could be obtained by analyzing social impacts of construction projects and the requirements for social sustainability by diverse stakeholders. Shen *et al.* (2007) explored the indicators for social sustainability performance evaluation of different stages. Valdes-Vasquez and Klotz (2013) identified 50 processes for social sustainability consideration during planning and design phase of construction projects, and these processes were categorized into six categories, namely stakeholder engagement, user considerations, team formation, management considerations, impact assessment, and place context. Zuo *et al.* (2012) interviewed

domain experts and 26 criteria of social sustainability were identified, which were further discussed from three dimensions, i.e., macro level, external stakeholders, and internal stakeholders. Almahmoud *et al.* (2015) studied social core functions (SCFs) of a construction project from perspectives of diverse stakeholders. Capital performance, health and physical comfort, accessibility, integration, usability psychological comfort, and operation health and safety were identified as SCFs of a construction project. Liu *et al.* (2018), studied social impacts of an affordable housing project and indicators reflecting social impacts were discussed from three aspects as socio-economic effects, adaptabilities, and social risks. Wang *et al.* (2016); Shi *et al.* (2015), and Liu *et al.* (2016) also addressed the social risks of the construction projects. They suggested that the projects should not only be compliant with the regulations but also meet the requirements of diverse stakeholders, especially the end-users, which will improve project social flexibility and thereby contribute to project social sustainability.

#### iii. Personal performance

Personal Performance means each Employee's work performance during the Performance Period which may be assessed by the Administrator based on one or more criteria, including, but not limited to: personal or team performance and measures such as teamwork, interpersonal skills, communication skills, employee development, project management skills, and leadership, or individual or team business objectives such as performance versus budget and attainment of safety, operational incident and environmental standards (Jin *et al.*, 2013).

#### iv. Organizational performance

There are possibly as many interpretations of the term organizational performance as the studies that have used the construct. Luo and Stephanie (2012) who conducted a meta-analysis of organizational performance suggested that it should be measured in

economic and operational terms: The economic performance looks at financial and market outcomes which assess the profits, sales, return on investment for shareholders, and other financial metrices.

The operational performance, on the other hand, focuses on the observable indices like customer satisfaction and loyalty, the firm's social capital, and competitive edge derived from capabilities and resources. Organizational performance is measured for different levels of hierarchy and can be assessed for individuals, groups, and the entire organization as a whole (Knies *et al.*, 2016). A systematic literature review of 213 studies published in reputed journals or a period of only three years (2006-09) revealed 207 different measures used for assessing performance. Eventually, the researchers settled on a multi-dimensional construct of organizational performance with financial performance, product market performance, and shareholder return forming three crucial aspects.

Occupational stress has been found to be related to job performance (Donaldson-Feilder, 2011). Yozgat *et al.* (2013), in a research of job stress and job performance among employees in public sector found a negative relationship between job stress and job performance. In similar research in China, Siu (2003) revealed that there is a negative relationship between sources of stress and self-related job performance. Donaldson-Feilder (2011), in a study found that, events identified as a cause of stress lead to depression, which in turn, cause decrements in interpersonal and cognitive/motivation aspect of job performance. Mahan *et al.* (2010) found that ongoing and episodic stressors were significantly and positively associated with anxiety and depression.

Mahan et al. (2010), argued that, as ongoing stressors increases in teachers working environment so as anxiety which affect their performance. Job stressors affect the

general physical health of employees, their job satisfaction and performance as well as their commitment negatively. Wu (2011), in a similar study, found that job stress and job performance were negatively correlated. Naqvi *et al.* (2013), found lack of financial rewards, inflexibility in work hours, personal issues, low control over the work environment and bureaucratic management system to be negatively correlated with employees" productivity.

In a similar study, Dhamodharan and Arumugasamy (2011) found that, occupational stressors influence positively the coercive and authoritative leadership and influence negatively the affiliative, democratic, pace-setting and coaching. A research work by Jeyaraj (2013) on occupational stress among teachers, found that teachers who reported greater stress were less satisfied with teaching, report greater frequency of absence and a greater number of total days absent, were more likely to leave teaching (career intensions) and less likely to take up a teaching career again (career commitment). Dunmade *et al.* (2014), in a study of techno-stress among university workers, found that, techno-stress has negative consequences on the individual worker's performance. Suandi *et al.* (2014), In similar research among state university department found that, the relationship between job stress and job performance is at a quite negative but moderate level. According Forkuoh *et al.* (2014), employees" commitment has

Specific organizational stress causes a major disruption, the source of the stress is usually apparent. In most instances, however, the impact of stressors is less obvious. There is a need, therefore, to systematically diagnose the sources and impact of organizational stress. There are objective measures which can be used, but these tend to

positively impact on the growth and succession of small and medium scale enterprises

but high level of stress significantly impact on commitment and affect productivity (Siu,

2003).

be rather nonspecific in identifying organizational stressors (Spielberger, 2010). Questionnaires and interviews provide more specific information about the sources of stress. Some of the objective measures of stress and a number of commonly used stress questionnaires and structured interview formats are reviewed in the following pages. While it is possible to examine work-related stress and non-work-related stress separately, it is not really possible to fully understand an individual's overall stress level or experience without considering the two in combination (Cascio and Boudreau, 2011). Therefore, this section also includes a consideration of relevant instruments which incorporate both aspects of an individual's life. It would be a mistake to ignore either work-related or non-work-related factors in diagnosing an individual's stress level.

The objective measures which are available to evaluate organizational stress are to a large extent the measures used to assess organizational health and effectiveness Centre for Disease Control and Prevention (2011). Such measures include the following: tardiness rate, absenteeism rate grievances file, clinic and employee assistance programme utilization rates, rate and severity of work-related accidents, interdepartmental employee transfer rate, employee turnover rate, performance of specific cost/profit centre in standard terms (time per unit of service, unit produced per time period, percent utilization of raw materials), sales volume and revenue, change in volume and revenue and return on equity.

These and similar measures are appealing because they are objective and quantifiable. Understanding when to choose, implement, and use specific metrics can help in improving decision making, optimizing organizational effectiveness, and maximizing the value of investments in human resources (Cascio & Boudreau, 2011).

Each of the measures can be influenced by many factors other than stress. Even when a high absentee rate is attributable to organizational stress, knowing the absentee rate does not in itself indicate the source of the stress. Objective measures can be useful in several specific instances. Comparison of tardiness, absenteeism, or turnover rates among subgroups within the organization may serve to identify high-risk groups worthy of further scrutiny. After these groups are identified, more specific stress questionnaires or interviews can be used to determine the reasons for poor performance. Comparing performance measures over time may help to alert management to potential difficulties (Forkuoh *et al.*, 2014).

A fall in productivity or a rise in tardiness, absenteeism, and clinic visits, or turnover may be an indicator of growing stress levels. What is important to note in this regard is the extent and degree of change that occurs. When preventive management procedures or other stress reduction activities are undertaken, the impact of the interventions can be followed by some of the objective measures. If such measures are used to assess the impact of management interventions, it is important to carefully select those measures which are intended to be affected by the intervention. While the objective organizational measures of stress may indicate the existence of organizational stress, they will not give much data or detail about the specific source of the stress. However, they provide an independent means for comparing groups within the organization and for assessing the impact of management interventions (Mahan *et al.*, 2010).

#### 2.7 Strategies to Mitigate Stress among Construction Practitioners

Productive management of stress includes three steps for both employees and organizations Awareness helps to understand when there is decrease in performance and absenteeism.

Determining the source: Find out what causes this distress and its consequences. Doing something constructive: Find solutions to existing problems Stress could be considered as an inevitable condition at one point. It complicates the situation to maintain

productivity and also disturb to have pleasant work and social life. The first step towards stress management is to identify signs that indicate stress such as anxiety, anger, annoyance. After these signs are recognized, the next step is to find out the causes and figure out its impacts. The third and final step is to effectively deal with the stressful situation. There are two types of coping mechanisms suggested by Manzoor *et al.* (2012) the first one is, (problem focused) here the stressors are either changed or totally removed. The second mechanism is (emotion-focused) where employees learn to adapt themselves to the situations and also deal with stress in a constructive manner. The difference lies where in problem focused coping mechanism the stressor is directly being tackled; it is either altered or abolished. Whereas in emotion-focused it is only the people who change or learn how to adapt to the stressor in a productive manner. (Bloisi *et al.*, 2007). At the end the first person in control (charge) of managing stress lies on the individual and the followings are some of the strategies for coping with stress in relation to workplace.

- 1. Time management: Schedule tasks accordingly, controlling one's time effectively, prioritization of tasks to be handled first. Here effectiveness and efficiency are valued.
- 2. Seeking help: Getting assistance is advisable from management, co-workers or manager for improving the performance.
- 3. Emotion-focused strategies: As previously discussed if the stressors cannot be avoided learning how to adapt to it in a constructive way is relevant. Common emotion-focused strategies include exercise, companionship, relaxation and recreational activities. (Bloisi *et al.*, 2007)

### 2.7.1 Employees stress management at the workplace

In most cases, the employees and organizational approaches are attempting to reduce the threat to health of staff associated with stress in their workplace. Individual approaches indicate several techniques in order to reduce the risk of stress associated to employee's health for example, occupational, health, and clinical consultations, daily training, visit psychologists. The exact aim of these consultations and activities are helpful in assisting the employees to become aware of available resources to protect their health against unpredictable uncertainties. The existing services and resources help the employees to improve their abilities and skills against uncertain situations or change their current situations. (Physical, social, work). A wide range of training courses are conducted to assist the employees to improve their skills. (e.g., precise or adequate use of management, time management, communication proficiency, assertiveness, problem solving). These activities lead to a higher achievement and active performance of employees against stress and coping with it. Training assists the employees to highlight the following features

- 1. One can understand the signs of stress
- Gains flexibility in behavioral pattern, one can intervene to the stress process
  when it begins. Stress usually grows up gradually in a normal situation. More
  stress causes more problems.
- Makes aware of the situation and providing action plan for reducing the stressors.
- 4. Develop the ways of how to react actively against stress and active coping mechanisms.
- 5. Learn the skills of relaxation, motivation, and increasing self-confidence.
- 6. The above practices are proved helpful to overcome stress or to prevent stress from maximization (Michie, 2002).

### 2.7.2 Organizational approaches to stress management

Managers can identify stress in the workplace by discovering work stress complications, by checking frequently the employee's health and work fulfillment. Managers can also prevent stress by ascertaining those employees know where to turn to when they face with such problems and following up on their recovery if health issues arise. According to the study made by Leka *et al.* (2004) work stress influences organizations by means of having difficulty retaining employees, weakening achievement and output, employee's unwillingness to perform actively and greater criticism on job performance from clients. Employees' recruitment will be negatively affected and greater responsibility of being obligated to answer to lawful rights and accusations by stressed workers would arise; this as a result would harm the company's appearance from those who are employed already or potential employees.

Management of many firms conducts many different activities and events as a motivational and inspirational aspect within their organizations. This might assist the employees to reduce their stress to an extent. (Fairbrother and Warn, 2003). Human resource management can also restructure the work provided for the employees, by concentrating on the demands, know-how, method and skills of employees and provide provision and a good control mechanism. This could be done by adjusting the work surroundings and allocating the task proportionally to all employees. Management should make sure that the employees are up-to date and get the proper training to be able to perform their job properly and monitor their development. It should also make sure to implement flexible working hours that allow the employees to work and assist the employees to get proper guidance where and when it's needed; this would be effective to minimize the stress. In addition to this promoting teamwork and collaboration between the employees could be used as stress reduction mechanism.

Managers should also encourage their employees to take time management and decision-making courses to help them enhance their confidence at work and capability of doing their work with a good manner. Management can also improve the physical environment and provide a suitable situation given the circumstances of cost and need. Another organizational approach to stress management could be having a horizontal line of authority rather than a vertical one; this would help the employees feel comfortable and convenient to communicate with management. It is also helpful to build friendly and respectful relationship between managers and employee. When all the stress preventive measures have proved to be unsuccessful and stress has actually occurred and has caused health damages to the employee then this measurement should be taken as further explained above to provide both organizational and individual interferences like medical counseling and job restructuring. These activities will be implemented by these actions. But it should be discussed and agreed upon by both the employee and the employer (manager).

At tertiary management stage, Management should be able to recognize workers who have problems and find it hard to solve their problems on their own and offer them assistance. Management can recognize when workers are having work troubles when the employees make mistakes than usual, have low achievement, has increased his/her alcohol consumption or there is a greater customer criticism. These can be taken into consideration when attempting to recognize work related stress among employees. (Liu et al., 2018). Decreasing intrusions at workplace for the employees could be one of the solutions to be provided by human resource managers. Therefore, minimizing the distractions at work as much as possible would make the employee have more time to focus on work and not have to spend after work or weekends on work. It is not unusual to find distractions at work that make people stay at work after work or work or

weekends as a result of not accomplishing the task due to reasons that are caused by intrusions. Intrusions at work are sudden brief pause at the job which is caused by another job request. Forms of intrusions are unannounced office visits, e-mails, phone calls. Human resource management can lessen if not prevent the stress caused by intrusions at work by setting strict rules to let employee focus on task at hand (Liu *et al.*, 2018)

The problem of stress management is that not all stress occurred on the employees is caused by the task at the workplace. Most of the time there is a link between the sources of stress at

home and at the workplace. Employers need to keep an eye on employees' stress level regardless the cause because an employee who is stressed by personal issues might find the task stressful though the demand of the job would have been possible to perform under normal conditions. (CIPD, 2008).

### **CHAPTER THREE**

### 3.0 RESEARCH METHODOLOGY

### 3.1 Research Design

According to Bryman, (2012), research design is general method that combines various parts of a research in a concise and coherent manner, thereby, ensuring the efficient achievement of the research aim. Design in research comprises the blueprint for the collection, measurement and analysis of data. A research design gives a framework for the collection and analysis of data. Its choice reflects priority to be given to a range of dimensions of the research process (Bryman, 2012). Naoum (2007) viewed research design as the way in which the research objectives can be questioned and postulated two types of research designs; quantitative and qualitative research. Quantitative approaches seek to gather factual data and to study relationships between facts and how such facts and relationships accord with theories and the findings of any research executed previously. Qualitative approaches seek to gain insights and to understand people's perception of "the world" whether as individuals or groups (Fellows and Liu, 2021). This study adopted quantitative research design via questionnaire survey administered on construction practitioners in Kaduna State. Questionnaire is being adopted as a suitable method of collecting data since it allows large coverage, convenient and Kaduna is selected because is one of the epicentres of relatively inexpensive. construction activities in North West Nigeria and also have high population of construction practitioners.

# 3.2 Research Population

Population is the universe of units from which the sample is drawn. The term 'units' encompass peoples, firms, projects, cases and scenarios (Bryman, 2012). The target population for this study is construction practitioners in Kaduna State which comprises

of Architects, Quantity Surveyors, Builders and Engineers. Population of these professionals in Kaduna State is 429 based on the information gotten from each professional bodies in the State (such as Nigerian Institute of Architects (NIA), Nigerian Institute of Quantity Surveyors (NIQS), Nigerian Institute of Building (NIOB) and Nigerian Society of Engineers (NSE). Those that are financially up to date in their various professional bodies as at 2021 constituted the population, based on the information gotten from the record of each institution desk officers.

# 3.3 Sample Frame

This is the process of defining the population, a selection of a representative of the population. This is an accessible section of the target population (usually a list with information) from where a sample can be drawn (Loke, 2013). For the purpose of this study, construction practitioners operating within Kaduna metropolis constitute the target respondents. Based on the information gotten from the record of each institute desk officers, financial update of members for 2021 specified that there are 46 Architects, 171 Quantity Surveyors, 52 Builders, and 160 Engineers making a total of 429 respondents within the study area.

### 3.4 Sample Size

A sample is a small proportion of a population selected for observation and analysis. The sample size for this study was calculated using a formula below as illustrated by Glenn (2013).

$$n = \frac{N}{1 + N(e)^2}$$

Where;

n = Sample size

N = Population size in the sample unit

e = Level of precision which is + 5% (0.05)

$$n = \frac{429}{1 + 429 (0.05)^2} = 201$$

In order to arrive at a sample size that served as a representative of the entire population in the study area. With 429 active professionals in the Kaduna when substituted in equation (1) and an estimated sample size of 201 respondents was arrived as a sample size for the study.

# 3.5 Sampling Technique

Research sampling technique is categorized into two namely: non-probability and probability sampling techniques. Probability sampling method is any method of sampling that utilizes some form of random selection and subdivided into simple random sampling, systematic random, stratified random, cluster random sampling, and multi-stage sampling (Mollel, 2017). Non-probability sampling does not depend on the rationale of probability theory, examples include convenience sampling and purposive sampling (White, 2015). Simple random sampling technique was employed for this research work because it gives every unit equal chance of been selected into the sample and also it is the most appropriate for homogeneous population.

### 3.6 Instruments for Data Collection

The instrument for data collection was a list of structured questions which constituted the questionnaire. The questions were made self-explanatory and interactive to encourage maximum cooperation from the respondents. The questionnaire contains closed questions that addressed impact of work stress on the performance of construction practitioners. Close ended questions were used to elicit information from

respective respondents. This study adopted close-ended questions based on a 5- point Likert's scale (from 1 to 5). The questionnaire was divided into 5 Sections, Section A deals with the respondents' demographic information. Section B deals with the factors contributing to stress among practitioners in the construction industry, Section C deals with types of workplace stress experienced by construction practitioners. Section D deals with measures of performance of stressed construction practitioners and Section E deals with impact factor of stress on construction practitioner's performance.

### 3.7 Procedure for Data Collection

The analysis of the data was carried out using descriptive statistics such as; percentage, mean item score, and inferential statistics; and Pearson product correlation.

Research data may either be primary or secondary in nature. Primary data are raw data, gotten through the use of questionnaire, interview or observation, or the combination of any of these research tools. It is extracted directly from the various sources such as the respondent and the area(s) under study. This study collected primary data with the aids of a well-structured questionnaire administered to construction practitioners within Kaduna metropolis.

### 3.8 Pilot Study

The survey instrument was pilot tested to determine its validity and reliability, as well as to evaluate the gathered data. The drafted questionnaire was pilot tested to 20 professionals in the study area before it was administered to the larger population. The expert used for pilot study were purposively selected based on their experience in the industry. They have acquired more than ten (10) years working experience. The final draft of the questionnaire was refined based on the comments and observations of the professionals.

# 3.9 Method of Data Analysis

Objective one (1), assessed the factors contributing work stress in the construction industry; to achieve this objective data obtained was analyzed using descriptive statistics which include mean score. The question is in five (5) points Likert scale. The most significant factors contributing work stress in the construction industry was ranked based on the mean value.

The objective two (2), examined the type of workplace stress experienced by construction practitioners. To achieve this objective descriptive statistic which include mean score which was used to rank the types of stress. The question is in five (5) points Likert scale.

The objective three (3), examine the Measures of Performance of Construction Practitioners;

To achieve this objective descriptive statistic which include mean score which was used to rank the measures of performance of stressed construction practitioner. The question is in five (5) points Likert scale.

The objective four (4), To investigate the impact of stress on construction practitioners' performance: The inferential analytical tool that was adopted for this study is Pearson correlations correlation was used to determine the impact of stress on construction practitioners' performance.

A 5-point Likert scale was used. A 5-point Likert scale was used to measure the strategies for effective management of stress among construction practitioners. This was subjected to 5-point Likert scale would ranging from 5 = Strongly Effective (SE); 4 = effective 3 = Neutral (N); 2 = Ineffective (I); 1 = Strongly Ineffective (SI).

Two hundred and ten (210) questionnaires were administered to the research population and two hundred (200) were retrieved representing a response rate of 95.24 %.

### 3.9.1 Tools for Data Analysis

Data collected from the respondents via the structured questionnaire was analyzed in relation to the stated objectives. The analysis was carried out with the aids of Statistical Package for Social Science (SPSS) and Microsoft excel package, the tools adopted for data analysis in this research work includes; Descriptive statistical method (Mean Item Score) and inferential statistic (correlational analysis) summarized in Table 3.1 below:

**Table 3.1: Summary of Method of Data Analysis** 

S/N	Objectives	Data Collection Instrument	Method of Analysis
i.	To assess factors contributing work stress in the construction industry	Questionnaire	Descriptive
ii.	To examine various type of workplace stress experienced by construction practitioners.	Questionnaire	Descriptive
iii.	To examine measures of performance of construction practitioners.	Questionnaire	Inferential Statistics
iv.	To assess the impact of stress on construction practitioners' performance.	Questionnaire	Descriptive

Source: Researcher's Survey (2021)

### 3.9.2 Correlation Coefficient

Correlation coefficient is used to determine the relationship between two or more variables. The coefficient ranges from 0 to 1. A correlation of 0 indicates no relationship at all; a correlation of 1.0 indicates a perfect positive correlation while a value of –1.0 indicates a perfect negative correlation (Pallant, 2011). The guidelines for correlation coefficient are summarized in Table 3.2.

**Table 3.2: Guidelines for Correlation Coefficient** 

Coefficient Range	Strength of Association
$\pm 0.50 \text{ to } \pm 1.00$	Strong
$\pm 0.30 \text{ to } \pm 0.49$	Slightly Strong
$\pm 0.01 \text{ to } \pm 0.29$	Weak

Source: Pallant (2011)

### 3.9.3 Mean Item Score (MIS)

Mean Item Score (MIS) is an individual total score divided by the number of items constituting the scale or subscale there by generating a mean item score for each individual that falls between the ranges of the values for the response continuum options (Warmbrod, 2014). MIS is being ranked from 1.00 to 5.00. The formula for Mean item score (MIS) is as equation 3.2.

$$MIS = \frac{\Sigma W}{N} \dots (2)$$

Where:  $\Sigma$  = Summation, W = Weight, and N = Total number respondents

### 3.9.4 Decision Rule Used for MIS

Shittu *et al.* (2015) stated that, the outcome of Mean Item Score (MIS) on a Five-Points Likert scale could be decided on the following; 4.51-5.00 for Very High; 3.51-4.50 for High; 2.51-3.50 for Medium; 1.51-2.50 for Low; 1.0-1.50, and Very Low interpreting level of contribution.

4.51-5.00 for Serve; 3.51-4.50 for Significant; 2.51-3.50 for Moderate; 1.51-2.50 for Minor; 1.0-1.50. and In-significant interpreting level of Significance. 4.51-5.00 for Very-Effective; 3.51-4.50 for Effective; 2.51-3.50 for Fairly-Effective; 1.51-2.50 for Less Effective; 1.0-1.50, and Least Effective interpreting level of Effectiveness.

4.51-5.00 for Strongly Agree; 3.51-4.50 for Agree; 2.51-3.50 for Neutral; 1.51-2.50 for Disagree; 1.0-1.50, and Strongly Disagree interpreting level of Agreement. Table 3.3 shows the decision rule used for MIS analyses.

**Table 3.3: Decision Rule for MIS Analyses** 

SCALE	Cut-Off Point	Interpretation			
	MIS	Level of contribution	Level of Significance	Level of Effectiveness	Level of Agreement
5	4.51-5.00	Very High	Severe	Very -Effective	Strongly agree
4	3.51-4.50	High	Significant	Effective	Agree
3	2.51-3.50	Medium	moderate	Fairly -Effective	Neutral
2	1.51-2.50	Low	Minor	Less -Effective	Disagree
1	1.00-1.50	Very low	In-Significant	Least -Effective	Strongly Disagree

Source: Adapted and modified from Morenikeji, (2006)

# **CHAPTER FOUR**

### 4.0 RESULTS PRESENTATION, ANALYSIS AND DISCUSSIONS

This section presents analysis of data collected through the questionnaire administered and went on to discusses the findings.

### 4.1 Demographic Information of the Respondents

Table 4.1 shows the analysis of the respondents' demographic information. The analysis revealed that most of the respondents sampled 156 (78.0%) are males, while 44 represents 22.0% are females.

In terms of academic qualification, the highest surveyed were BSc/HND 144 (72.0%), while 56 (28.0%) of the respondents were MSc. /MTECH degree holders. In terms of professionals' representation, the result revealed that quantity surveyors 84 (42.0%) are the highest, followed by engineers 48 (24.0%), then builders 36 (18.0%) and lastly, architects 2 (16.0%). A look at the years of work experience of the respondents shows that 48 (24.0%) of them have their years of working experience fall within the 1–5 year range, while 60 (30.0%) and 36 (18.0%) fall between the ranges of 6-10 and 11-15 years, respectively. Also, 28 (14.0%) and 28 (14.0%) of the population fall between the ranges of 16 to 20 years and above 20 years, respectively. However, the respondents' average years of working experience is calculated to be approximately 12.75 years. The findings on the professional membership revealed that 8 (4.0%) were fellow members, 100 (50.0%) were registered members, 48 (24%) were under probation, 20 (10%) were student members, and the remaining 24 (12%) fell under the category of other. This implies that they are experienced enough to give a valid response. Based on the result on the respondents' background information, it was concluded that the respondents are well equipped professionally and in terms of experience to give reasonable insight into the subject under consideration.

**Table 4.1 Demographic Information of the Respondents** 

Demographic Information	Variables	Frequency	Percent
Gender	Male	156	78.0%
	Female	44	22.0%
	Total	200	100%
Educational Qualification	Hnd/Bsc	144	72.0%
	MSc	56	28.0%
	Total	200	100%
Profession	Architect	32	16.0%
	Quantity surveyors	84	42.0%
	Builders	36	18.0%
	Engineers	48	24.0%
	Total	200	100%
Years of Experience	1-5years	48	24.0%
-	6-10years	60	30.0%
	11-15years	36	18.0%
	16-20years	28	14.0%
	Above 20 years	28	14.0%
	Total	200	100%
Membership	Fellow	8	4.0%
-	Member	100	50.0%
	Probation	48	24.0%
	Students	20	10.0%
	Others	24	12.0%
	Total	200	100%

**Source: Author 's Survey (2021)** 

# **4.2** Factors Contributing to Stress Among Practitioners in the Construction Industry

A total of thirteen (13) stress factors were identified from literature, and respondents were asked to rank these factors as contributing to stress among practitioners. Table 4.2 shows the result of the analysis of the factors contributing to stress among practitioners. It can be seen that the top three (3) are poor working conditions, work overload, and financial problems, with MIS values of 3.72, 3.72, and 3.64 ranked 1st, 1st, and 3rd, respectively. In addition, domestic problems in the home, overcrowding at work, and divorce are the least prevalent (3) factors, with MIS values of 2.62, 2.44, and 2.36 ranking 10th, 11th, and 12th, respectively. This shows that all factors considered were

considered medium and low because they fall between the MIS values of 3.72 and 2.36, respectively.

However, a close look at the results in Table 4.2 shows that all the identified factors contributing to stress among practitioners had an average MIS value of 3.11 which implies the general effect of the factors contributing to stress among practitioners in the construction industry are medium. All the 13 factors identified contributing to stress among practitioners and have the tendency to positively affect building projects. The finding of this study here agrees with Okeke *et al.* (2016) and De Silva *et al.* (2017), where it was established that employees usually feel stressed at their jobs for the following reasons: work overload, misuse of power and loud noises generated by machines.

Table 4.2: Factors contributing to stress among practitioners in the construction industry

S/No	Factors	MIS	Rank
1.	poor working conditions	3.72	1
2.	work overload	3.72	1
3.	financial problems	3.64	3
4.	Ambiguity of tasks	3.36	4
5.	behaviour of the leader	3.36	4
6.	Economic uncertainties such as redundancy and downsizings.	3.26	6
7.	Misuse of power	3.18	7
8.	loud noises generated by machines	3.12	8
9.	Role uncertainty by the employee	3.00	9
10.	Advancement in technology	2.62	10
11.	domestic problems in the house	2.62	10
12.	over crowdedness at the workplace	2.44	12
13.	Divorce	2.36	13
	General Average	3.11	

Source: Author 's Survey (2021)

# 4.3 Types of Workplace Stress Experienced by Construction Practitioners

Six (6) types of workplace stress experienced by construction practitioners were identified from literature, and respondents were asked to rank their level of agreement

with the identified workplace stress. Table 4.2 shows the result of the analysis of the types of workplace stress experienced by construction practitioners. It can be seen that the most common types of workplace stress experienced by construction workers are work stress and subjective stress, with MIS values of 3.98 and 3.80, ranked 1st and 2nd, respectively. The least common types of workplace stress experienced are objective stress and traumatic stress, with MIS values of 3.46 and 3.40, ranked 5th and 6th, respectively. However, a close look at the results in Table 4.3 shows that all the types of workplace stress had an average MIS value of 3.61 which all implies all the respondents were of same opinion on the type of stress and to a considerable extent, all 6 identified types of stress were experienced by the respondents. These findings are in line with the conclusion of Leung *et al.* (2012), Leung *et al.* (2015), and Daniel, (2019) on types of stress.

**Table 4.3: Type of Stress** 

S/No	Type of Stress	MIS	Rank	Decision
1.	Work stress	3.98	1	Agree
2.	Subjective stress	3.80	2	Agree
3.	Chronic stress	3.52	3	Agree
4.	Acute stress	3.50	4	Agree
5.	Objective stress	3.46	5	Neutral
6.	Traumatic stress	3.40	6	Neutral
	General Average	3.61		Agree

Source: Author 's Survey (2021)

On the various sources of workplace stress experienced by construction practitioners, Table 4.4 reveals the types of stressors.

Table 4.4 reveals the types of stressors. The findings showed task stressors to be the most important stressors with a mean value of 3.98 and ranked 1st, followed by personal stressors (MIS = 3.84 ranked 2nd), and organisational stressors and physical stressors with a mean value of 3.84 and 3.66 ranked 3rd and 4th, respectively. All the four types of workplace stressors identified had an average MIS value of 3.83. It shows that

everyone who responded had the same views on the forms of stressor and that, to a large degree, all four categories of stressor mentioned by the respondents were felt by them. The findings of this study agree with the studies of Leung and Chan (2011) and Ibem *et al.* (2011), where task stressors, personal stressors, organisational stressors, and physical stressors are the major causes of stress.

**Table 4.4: Type of Stressor** 

S/No	Type of Stressor	MIS	Rank	Decision
1.	Task stressors	3.98	1	Agree
2.	Personal stressors	3.84	2	Agree
3.	Organizational stressors	3.84	3	Agree
4.	Physical stressors	3.66	4	Agree
	General Average	3.83		Agree

**Source: Author 's Survey (2021)** 

### 4.4 Measures of Performance of Construction Practitioners

Five (5) measures of performance were identified from literature, and respondents were asked to rank their level of agreement with the identified measures. Table 4.6 shows the result of the analysis of the measures of performance of construction professional practitioners. Task performance and technical performance are the most commonly used measures of performance for construction professional practitioners in all types of workplaces, with MIS values of 3.80 and 3.76 ranking first and second, respectively. The least used measures of performance are personal performance and social performance, with MIS values of 3.62 and 3.30, ranked 4th and 5th, respectively. Table 4.5 shows that all the measures of performance of construction professional practitioners had an average MIS value of 3.63 this implies that measures of performance of construction professional practitioners was alright.

**Table 4.5: Measures of Performance of Construction Practitioners** 

S/No	Measures of Performance	MIS	Rank
1.	Task performance	3.80	1
2.	Technical Performance	3.76	2
3.	organizational performance	3.68	3
4.	personal performance	3.62	4
5.	Social Performance	3.30	5
	General Average	3.63	

Source: Author's Survey (2021)

# 4.5 Impact factor of stress on Construction Practitioner's Performance

In order to achieve objective three which is impact factor of stress on construction practitioners' performance) Table 4.6 shows that the most significant impact factor of stress on a construction practitioner's performance is reduced job satisfaction (mean = 3.90). This was followed by inefficiency in performance (mean = 3.86), absenteeism from work, reduced quality of labour, and absenteeism (mean = 3.82, 3.78, and 3.64). The least rated were creating obstacles for subordinates (3.20) and high worker turnover (2.94). Table 4.6 shows that all the impact factors of stress on construction practitioners' performance had an average MIS value of 3.11, which implies that all the impact factors had a moderate effect on the stress performance of construction practitioners.

Table 4.6: Impact factor of stress on Construction Practitioner's Performance

S/No	Impact factor	MIS	Rank
1.	Reduced job satisfaction	3.90	1
2.	Inefficiency in performance	3.86	1
3.	Absenteeism from work	3.82	3
4.	Reduced quality of labour,	3.78	4
5.	Absenteeism	3.64	4
6.	Wastage of operational resources	3.40	6
7.	Reduced organizational performance	3.24	7
8.	Reduced worker overall performance	3.24	8
9.	Creating obstacles for subordinates	3.20	9
10.	High worker's turnover,	2.94	10
	General Average	3.11	

**Source: Author 's Survey (2021)** 

### 4.5.1 Impact of Stress on Construction Practitioner's Performance

In determining the impact of stress on construction practitioners' performance, a null hypothesis was formulated:

 $H_{01}$ : There is no significant relationship between work stress and Performance of construction practitioners.

Ha<sub>1</sub>: There is a significant relationship between work stress and performance of construction Practitioners'

The responses to the administered questionnaire on stress factors influencing on construction practitioners' performance correlated with the most significant measures of performance of construction professional practitioners (task performance).

The analysis of the relationship between work stress and the performance of construction practitioners revealed that there exists a positive, slightly strong, and significant relationship between work stress and task performance. The result of the Pearson product moment correlation analysis is presented in Table 4.7. The correlation value was positive and slightly strong (0.393). The correlation was therefore found to be significant at a 1% (0.01) level of significance (p = 0.00). Therefore, the alternate hypothesis that states there is a significant relationship between work stress and the performance of construction practitioners was accepted. The relationship between stress and job performance or the impact of occupational stress on performance has been a topic of academic interest over the years. The findings of the correlation analysis agree with other studies where a relation between stress and performance has been proved in various sectors of society, such as the banking industry (Shaikh *et al.*, 2013), hospital industry (Nabirye, 2010), hotel industry (Olaniyi, 2013), high-tech industries (Hsieh *et* 

al., 2004), business (Dar et al., 2011) and the educational sector (Riyadi, 2015; Suandi et al., 2014).

**Table 4.7: Results of Pearson Product Correlation Analysis** 

Correlations		Work stress	Task performance
Work stress	Pearson Correlation	1	.393**
	Sig. (2-tailed)		.000
	N	200	200
Task performance	<b>Pearson Correlation</b>	.393**	1
	Sig. (2-tailed)	.000	
	N	200	200

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

Source: Author 's Survey (2021)

# 4.7 Summary of Findings

Based on the results of data analyses undertaken in this study, the following are the major findings:

- i. The study identified thirteen (13) factors contributing to stress among practitioners in the Construction Industry, the most prevalent factors contributing to stress among practitioners' factors are Poor working conditions (MIS = 3.72), Work overload (MIS = 3.72), and Financial Problem (MIS=3.64). This implies that, to a considerable extent, all the 13 factors contributing to stress among practitioners have the tendency to positively affect Employee productivity and the organisation performance.
- ii. The study identified six (6) types of workplace stress experienced by construction practitioners out of which Work stress (MIS = 3.98), Subjective stress (MIS = 3.80) and Chronic Stress (MIS=3.52) are the three most common types of workplace stress experienced by construction workers and also the major Stressors are identified to be; Task Stressors (MIS=3.98), Personal Stressors and Organisation Stressors (MIS=3.84)

- iii. The study identified five (5) types of measure of performance of stressed construction practitioners out of which Task Performance (MIS=3.80), Technical Performance (MIS=3.76) and Organisation Performance (MIS=3.68), are ranked as the major three measures of performance of stressed construction practitioner.
- iv. The three major significant impact factors of stress on a construction practitioner's performance are Reduced Job satisfaction (MIS=3.90), Inefficiency in Performance (MIS=3.86) and Absenteeism from work (MIS=3.82)
- v. The correlation value was positive and slightly strong (0.393). The correlation was therefore found to be significant at a 1% (0.01) level of significance (p = 0.00). Therefore, the alternate hypothesis that states there is a significant relationship between work stress and the performance of construction practitioners was accepted.

### **CHAPTER FIVE**

### 5.0 CONCLUSION AND RECOMMENDATIONS

### 5.1 Conclusion

Stress at the workplace has become one of the main problems in the modern world and is one of the world's most common health concerns. Not only to the construction industry, therefore it needs substantial attention. In view of this, the study assessed the impact of work stress on the performance of construction practitioners with a view to suggesting strategies for effective management of stress.

The study identified poor working conditions, work overload and financial problem as the most prevalent factors contributing to stress among practitioners. The study identified; Work stress, Subjective stress and Chronic stress as the most common types of workplace stress experienced by construction workers and also showed that; Task stressors, Personal and Organisation stressors to be the most important stressors. Task performance, Technical and Organisation performance are the most commonly used measures of performance for construction professional practitioners in all types of workplaces. The major three most significant impact factor of stress on a construction practitioner's performance are; Reduced job satisfaction, Inefficiency in Performance and Absenteeism. Based on the result on the respondents' background information, it was concluded that the respondents are well equipped professionally and in terms of experience to give reasonable insight into the subject under consideration. Stress has both positive and negative impacts on the performance of professionals in construction.

### 5.2 Recommendations

As a result of the conclusions made in this study, the following were recommended:

- Management should ensure a conducive working environment, improve salaries and incentives; by providing sufficient lighting, cooling system and providing bonuses.
- ii. Management should also make sure to implement flexible working hours working e.g., hybrid that allow the employees to work in office and from home and assist the employees to get proper guidance where and when it's needed; this would be effective to minimize the stress.
- iii. Management should also encourage their employees to take time management and decision-making courses to help them enhance their confidence at work and capability of doing their work in good manner.
- iv. The workers should be sensitized on how to manage stress and active coping mechanisms.
- v. The Management should ensure that employees are up to date and get proper training to be able to perform tasks properly and monitor their development.
- vi. The Management should make provision for employee relaxation; by organising picnics, games and vacations.

# 5.3 Contribution to Knowledge

The study has made following significant contributions to the body of knowledge:

- The study uncovered the factors contributing to stress among practitioners in the construction industry.
- ii. The study also reveals various types of workplace stress experienced by construction practitioners and their sources.
- iii. The study also reveals measures of performance of stressed construction practitioners.

iv. The study also reveals the impact of work stress factors on construction practitioners' performance in order to suggest strategies to mitigate stress among practitioners in the construction industry.

# 5.4 Areas for Further Studies

In the light of the limitations of this study, the following areas are suggested for further research:

 Assessment of stress management among professionals in construction industry in Nigeria.

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**Appendix** 

**QUESTIONNAIRE SURVEY** 

Department of Quantity Surveying,

School of Environmental

Technology,

Federal University of Technology,

P.M.B. 65, Minna, Niger State.

Dear Sir/Ma,

I am a Master's degree student of Quantity Surveying Department, School of

Environmental Technology, Federal University of Technology Minna, Niger State. I am

conducting research on "Assessment of the Impact of Stress on the Performance of

Construction Practitioners in Kaduna State".

Your participation in filling the attached questionnaire will be crucial to the success of

this research. Please note that all information provided will be used for academic

purposes only, and no personal identifying information is required. Therefore, you do

not need to include your name or telephone number in your response.

If you have questions or observations at any time about the survey or procedures, please

make use of the contact information below:

Thank you very much for your support.

YUSUF, Ibrahim

Phone No: 08169655424

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# Section A: Respondents Demographic information

Please provide information about the respondent as requested by selecting one of the options provided. Thank you.

Α	Age of respondent	1	Less than 25 years
		2	25 years – 35 years
		3	36 years – 45 years
		4	More than 45 years
В	Gender of respondent	1	Female
	-	2	Male
C	Educational qualifications of respondent	1	OND/NCE
		2	HND/BSc
		3	MSc
		4	PhD
D	Respondent's professional background	1	Architect
		2	Quantity surveyors
		3	Builders
		4	Engineers
Е	Respondent's professional body	1	NIQS
		2	NIA
		3	NIOB
		4	NSE
F	Respondent's membership grade	1	Fellow
		2	Member
		3	Probational
		4	Students
		5	Other
G	Respondent's years of experience in the built environment	1	1-5 years
		2	6 -10 years
		3	11-15 years
		4	16 - 20 years
		5	>20 years

1. Have you experienced stress on your work before? (a) Yes () (b) No () (c) Not sure ()

Section B: Factors Contributing to Stress Among Practitioners in the Construction Industry.

2. Please indicate the extent to which each of the following factors contributing to stress among practitioners in the construction based on the following 5-point Likert's scale of (1) VL = very low, (2) L= low, (3)M = medium, (4)H = high; and (5) VH = very high

SN	Factors Contributing to Stress Among Practitioners in the	VL	L	M	Н	VH
	Construction Industry	1	2	3	4	5
1	work overload					
2	over crowdedness at the workplace					
3	loud noises generated by					
	machines					
4	domestic problems in the house					
5	financial problems					
6	Divorce					
7	behaviour of the leader					
8	Role uncertainty by the employee					
9	poor working conditions					
10	Ambiguity of tasks					
11	Misuse of power					
12	Economic uncertainties such as redundancy and downsizings.					
13	Advancement in technology					

# SECTION C: Types of workplace stress experienced by construction practitioners

**3.** On a five-point scale kindly assess the types of workplace stress frequently experienced by construction practitioners:  $5 \cdot 5 \cdot (SA) = Strongly Agree$ ;  $4 \cdot (A) = Agree$ ;  $3 \cdot (N) = Neutral$ ;  $2 \cdot (D) = Disagree$ ;  $1 \cdot (SD) = Strongly Disagree$ .

	Various types of workplace stress	5	4	3	2	1
		SA	Α	N	D	SD
1.	Subjective stress					
2.	Objective stress					
3.	Work stress					
4.	Chronic stress					
5.	Acute stress					
6.	Traumatic stress					
	Types of stressors					
7.	Personal stressors					
8.	Task stressors					
9.	Organizational stressors					
10.	Physical stressors					

# **SECTION D: Measures of Performance of Construction Practitioners**

**4.** On a five-point Likert scale kindly rate measures of construction practitioner performance on a 5-point scale of EW= Exceptionally well (5), VW= Very well, t (4), A= Alright (3), NVW= Not very well (2) and VP = Very poorly (1)

	Measures Of Construction practitioner performance:	5	4	3	2	1
		EW	VW	A	NVW	VP
1.	Technical Performance					
2.	Social Performance					
3.	Task performance					
4.	personal performance					
5.	organizational performance					

# SECTION E: Impact factor of stress on construction practitioner's performance

**5.** Kindly rate ways by which stress factors impacted on construction practitioner's performance on a 5-point Likert's scale SE= Severe (5), SI= Significant (4), M = Moderate (3), MI= Minor (2) and IS = Insignificant (1)

	Impact factor of stress on construction practitioner's performance	5	4	3	2	1
		SE	SI	M	M	IS
1.	Absenteeism from work					
2.	Inefficiency in performance					
3.	Wastage of operational resources					
4.	Creating obstacles for subordinates					
5.	Reduced job satisfaction					
6.	Reduced quality of labour,					
7.	High worker's turnover,					
8.	Absenteeism					
9.	Reduced worker overall performance					
10.	Reduced organizational performance					

Thank you.