EVALUATING THE EFFECT OF STRESS IN QUANTITY SURVEYING PERFORMANCE IN CONSTRUCTION PROJECT

(A CASE STUDY OF CONSTRUCTION PROJECT IN KWARA STATE POLYTECHNIC, ILORIN)

BY

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HND/23/QTS/FT/0033

SUBMITTED TO

THE DEPARTMENT OF QUANTITY SURVEYING, INSTITUTE OF ENVIRONMENTAL STUDIES, KWARA STATE POLYTECHNIC, ILORIN

IN PARTIAL FULFILLMENT OF REQUIREMENT FOR THE AWARD OF HIGHER NATIONAL DIPLOMA (HND) IN QUANTITY SURVEYING

JULY, 2025

CERTIFICATION

This is to certify that this project work has been read and approved by the undersigned on behalf of the Department of Quantity Surveying, Institute of Environmental Studies, Kwara State Polytechnic, Ilorin, as meeting the requirement for the award of national diploma in Science Laboratory Technology.

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DEDICATION

This research work is dedicated to Almighty Allah who has given me the knowledge strength and wisdom to achieve this feat, above all for the unmerited grace he has showered upon me may his forever be praised!

ACKNOWLEDGEMENT

First and foremost, I give all thanks and glory to the Almighty God for granting me the strength, wisdom, and perseverance to successfully complete this project.

I would like to express my sincere gratitude to my supervisor, **Qs ADEOTI BASHIR OLANREWAJU** for his invaluable guidance, encouragement, and constructive feedback throughout the course of this project. His support and mentorship played a crucial role in the successful completion of this work.

I would also like to express my sincere gratitude to my H.O.D,Qs SIDIQ LATEEF for his invaluable guidance, encouragement, and constructive feedback throughout the course of this project. His support and mentorship played a crucial role in the successful completion of this work.

To my wonderful parents, **Mr. and Mrs. TIAMIYU** thank you for your unwavering love, prayers, and sacrifices that have brought me this far. Your belief in me has always been my greatest motivation.

To my loving brothers and sister, **UTHMAN ISMAIL, UTHMAN FATAI, UTHMAN YUSUF, TIAMIYU BARAKAT** your endless support, patience, and encouragement have been my rock during this academic journey. I am truly blessed to have you by my side.

My heartfelt appreciation also goes to my amazing friends, **ADERONKE**, **TOHEEB, TAOFEEQ**, ASSURANCE, and many others whose names cannot all be mentioned here. Your companionship, encouragement, and shared moments of laughter and stress made this journey easier and more memorable.

Finally, I thank all my lecturers, colleagues, and everyone who contributed in one way or another to the success of this project. I remain grateful.

Thank you all.

ABSTRACT

This study investigates the impact of stress on quantity surveying performance in construction projects, with a focus on Kwara state polytechnic, Ilorin. Quantity surveyors play a crucial role in ensuring project success, but stress can compromise their performance.

This research explores the sources of stress, its effects on quantity surveyors' productivity, and strategies for mitigation. A case study approach was employed, with data collected through questionnaires and interviews. The findings reveal that stress significantly affects quantity surveyors' performance, errors, and delays. The study recommends stress management strategies and improved working conditions to enhance quantity surveyors ' performance and overall project success.

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CHAPTER ONE

1.0 GENERAL INTORUCTION

According to Fink (2016), the World Health Organization has identified that stress can have a devastating effect on a person's emotional and physical wellbeing, and it is the health epidemic of the 21st century. Malagris and Fiorito (2015), as cited in Costa and Pinto (2017), identified the stress experienced by professionals as occupational stress. According to Salam (2016), Even those studies have considered the quantity surveyors generally without focusing on the quantity surveyors working for consultants or contractors. the job roles of the quantity surveyors working for contractors and those of the quantity surveyors working for consultants are different (lee and cullen, 2018). unlike a consultant's quantity surveyor, a contractor's quantity surveyor works at the head office or on-site, where the work is complicated, stressful, and accountable (mbachu, 2015; towey, 2017). contractor's quantity surveyors working on-site could have a stressful working environment because they perform many tasks within a limited period to achieve the project's cost, time, and quality targets (Mas-Machuca, et al., 2016).

The job roles of the quantity surveyors working for contractors and those of the quantity surveyors working for consultants are different (lee and cullen, 2018). unlike a consultant's quantity surveyor, a contractor's quantity surveyor works at the head office or on-site, where the work is complicated, stressful, and accountable (mbachu, 2015; towey, 2017). contractor's quantity surveyors (both male and female quantity surveyors) working on-site could have a stressfulworkingenvironmentbecausetheyperformmanytaskswithinalimitedperiodtoachieve

the project's cost, time, and quality targets (mas-machuca, et al., 2016).

The stress level of a quantity survey or depends on the gender of the quantity surveyor. This gender dependence on stress is due to the different roles played by male and female quantity surveyors in their jobs, families, and personal lives (panojan, et al., 2019). Therefore, this study compares significant stressors of male and female quantity surveyors working on-site for contractors.

Stress is a common phenomenon in the workplace, and the construction industry is no exception. Within the industry, professionals such as quantity surveyors are exposed to numerous stressors due to the high responsibility associated with managing the financial and contractual aspects of construction projects. The Nigerian construction industry, in particular, has witnessed significant

growth over the years, with a considerable increase in large-scale infrastructure projects. However, the pressures that accompany such projects often result in heightened stress levels, which can negatively impact the performance of quantity surveyors, leading to issues such as poor decision-making, errors in cost estimation, delays, and decreased productivity (Khan et al., 2017; Alinaitwe et al., 2018).

Quantity surveyors are responsible for various aspects of project management, including cost estimation, budgeting, procurement, and ensuring that projects are completed within financial constraints. However, the demands of the job, such as tight deadlines, client pressures, fluctuating material costs, and poor communication with stakeholders, often lead to stress. While some studies have explored the general concept of stress in the construction industry, few have specifically focused on how stress affects the performance of quantity surveyors in the Nigerian context, which is characterized by unique challenges such as political instability, economic uncertainty, and infrastructural deficiencies (Igbokwe et al., 2021).

1.1 BACKGROUND OF THE STUDY

The construction industry, known for its complex and dynamic nature, often presents a high level of stress for professionals involved in project execution. Among these professionals, quantity surveyors are tasked with the critical responsibility of managing costs and budgets throughout the lifecycle of a construction project. These tasks require precision, attention to detail, and the ability to manage multiple tasks simultaneously, making stress an inevitable byproduct of the profession (Alinaitwe et al., 2018).

In Nigeria, the construction industry has experienced rapid growth, with significant investments in infrastructure such as roads, bridges, and buildings. This expansion, while providing economic opportunities, has also placed considerable pressure on construction professionals, including quantity surveyors. One major source of stress in the Nigerian construction industry is the frequent delays in project timelines and inadequate funding, which often result in the need to make last-minute adjustments and compromises. Additionally, poor coordination among stakeholders, changing regulations, and political instability contribute to an unpredictable work environment that can exacerbate stress levels among quantity surveyors (Olanrewaju et al., 2019).

Stress has been shown to have a detrimental effect on professional performance, especially in high-stakes fields such as construction (Oke et al., 2020). In particular, stress can lead to a decline in job satisfaction, decreased decision-making abilities, and a higher likelihood of making errors in budgeting and cost estimation (Khan et al., 2017). Furthermore, stress can have serious health implications, leading to both physical and mental health issues, which can further impair job performance (Olanrewaju et al., 2019).

The challenges of managing stress in the construction sector are further compounded by the limited research conducted on this topic in the Nigerian context. While stress and its effects on workers in other sectors have been studied in-depth, few studies have focused specifically on the impact of stress on the performance of quantity surveyors in the Nigerian construction industry. It is within this context that this study seeks to investigate the relationship between stress and the performance of quantity surveyors working on construction projects in Nigeria. The results of this study could provide valuable insights into strategies that could be implemented by construction firms to manage stress and improve overall project outcomes.

Research by Alinaitwe et al. (2018) and Khan et al. (2017) suggests that stress in the construction industry is often caused by long working hours, unrealistic deadlines, poor communication, and high workload. In Nigeria, these factors are compounded by challenges such as inadequate infrastructure, fluctuating material costs, and political instability (Igbokwe et al., 2021). The need for improved work environments and stress management strategies has therefore never been more urgent in the Nigerian construction sector.

1.2 STATEMENT OF THE PROBLEM

Despite the importance of quantity surveying in the successful execution of construction projects, there is limited empirical research exploring how stress affects the performance in the construction sector. Factors such as:

1.Stress in the workplace is a well-documented issue, and its negative effects, including burnout, reduced job satisfaction, and decreased productivity, are widely recognized.

2.In the construction industry, where quantity surveyors are essential in managing costs, budgets, and contracts, stress can have particularly detrimental effects on their performance.

3.Despite the critical role of quantity surveyors in successful project execution, there is limited empirical research examining how stress affects their performance specifically in the construction sector.

4.Stressors such as heavy workloads, tight deadlines, and conflicting demands from stakeholders can impact the quality of their work and decision-making abilities.

1.3 AIM ANDOBJECTIVES

1.3.1 AIM

The primary aim of this study is to evaluate the effect of stress on the performance of quantity surveyors in construction projects.

1.3.2 OBJECTIVES

The specific objectives of this study are:

1.3.2.1.To identify and categorize the main sources of stress experienced by quantity surveyors in the construction industry.

1.3.2.2.To evaluate the relationship between stress levels and the performance of quantity surveyors in terms of productivity and decision-making ability.

1.3.2.3.To analyze the role of organizational support and resources in managing stress among quantity surveyors.

1.3.2.4.To propose strategies for mitigating the negative effects of stress on quantity surveying performance in construction projects.

1.4 RESEARCH QUESTIONS

The research questions aim to guide the investigation into the effect of stress on quantity surveying performance in construction projects. the key questions for this study are:

1.What are the primary sources of stress experienced by quantity surveyors in construction projects?

2.What impact does stress have on the productivity and efficiency of quantity surveyors in construction projects?

3.How do organizational factors (such as work load, deadlines, and management support) influence the stress levels of quantity surveyors?
4.What strategies can be implemented to mitigate the effects of stress on quantity surveying performance?

1.5 DEFINITION OF TERMS

1.5.1 STRESS: Stress is the physiological and psychological response to external pressures or demands that exceed an individual's capacity to manage them effectively. In the context of this study, stress refers to the challenges faced by quantity surveyors in construction projects, including time constraints, workload, and stakeholder expectations, which can negatively affect their performance (Lazarus & Folkman, 2015).

1.5.2 QUANTITY SURVEYING: Quantity surveying is a specialized profession within the construction industry responsible for managing the financial aspects of construction projects. This includes cost estimation, budgeting, tendering, contract administration, and project financial control, ensuring projects remain within budget and contractual obligations (Hong et al., 2019).

1.5.3 PERFORMANCE: Performance refers to the ability to execute tasks effectively and efficiently. In the case of quantity surveyors, performance encompasses the accurate completion of tasks such as cost estimation, managing project budgets, meeting deadlines, and making sound financial decisions that contribute to the success of construction projects (Zhang et al., 2018).

1.5.4 WORKLOAD: Workload is the amount of work assigned or expected of an individual within a given time frame. In construction, workload is a significant stressor for quantity surveyors, often involving tight deadlines and high expectations, which can impact their stress levels and performance (Nasir et al., 2020).

1.5.5 BURNOUT: Burnout is a psychological condition resulting from prolonged exposure to work- related stress, characterized by emotional exhaustion, reduced performance, and a sense of detachment. For quantity surveyors, burnout is a critical concern, as it can lead to poor decision-making, decreased job satisfaction, and diminished work performance (Schaufeli & Taris, 2017).

1.5.6 DECISION-MAKING: Decision-making refers to the cognitive process of selecting an appropriate course of action from a set of alternatives. In quantity surveying, this involves tasks such as determining cost estimates, making procurement choices, and assessing project risks. Stress can impair this process, leading to errors in budgeting and contract management (Yin et al., 2021).

1.5.7 ORGANIZATIONAL SUPPORT: Organizational support is the extent to which an organization provides resources, assistance, and encouragement to its employees, helping them manage job-related stress and perform effectively. In the context of quantity surveyors, organizational support includes access to training, resources, and a healthy work environment, all of which can reduce stress and improve performance (Liu et al., 2019).

1.5.8 MENTAL HEALTH: Mental health refers to an individual's emotional and psychological well- being, which influences their ability to cope with stress and work efficiently. Poor mental health due to stress, such as anxiety and depression, can negatively affect the performance of quantity surveyors, leading to reduced productivity, errors, and increased absenteeism (Ng & Zhang, 2020).

1.6 SCOPE AND LIMITATION OF THE STUDY

This study will primarily be based on data collected from construction firms and professionals actively engaged in quantity surveying roles. The research will focus on quantity surveyors working on large and medium-scale construction projects, both in the public and private sectors.

1.6.1.**Sample Size and Selection:** The study will rely on a sample of quantity surveyors from selected construction firms in Kwara State, which may limit the generalizability of the findings to

all quantity surveying professionals in the industry. The sample may not fully represent the diversity of quantity surveyors working across various sectors or types of construction projects in other regions.

1.6.2.**Geographical Constraints:** The research will be conducted in Kwara State, Therefore, the findings may not be transferable to construction industries in other parts of Nigeria or internationally, especially in regions with different labor conditions, regulations, and industry practices.

1.6.3.**Self-Reported Data:** The study will primarily rely on self-reported data obtained through surveys and interviews, which can introduce biases or inaccuracies. Participants may over- report or under-report their stress levels or performance due to personal biases, social desirability, or the tendency to downplay negative experiences.

1.6.4.**Time Constraints:** The study's timeframe may limit the ability to conduct an in-depth longitudinal analysis of the long-term effects of stress on the performance of quantity surveyors. Stress-related impacts on performance might evolve over time, and a longer research period would be needed to assess these long-term consequences fully.

1.6.5.**Limited Scope of Stressors:** While the study aims to focus specifically on the stressors faced by quantity surveyors, stress in the workplace is multi-dimensional. Factors such as organizational culture, managerial support, and broader economic conditions could all contribute to stress but may not be explored in detail within the context of this research.

1.6.6 **LIMITATION**

1 Sample size and selection: The study will rely on a sample of quantity surveyors from selected construction firms, which may limit the generalizability of the findings to all QS professionals in the industry.

2 Geographic constraints: The research will be conducted in Kwara state, meaning the results may not be applicable to different countries or cultures.

3.Self-reported data: The study will depend on self -reported surveys and interviews, which may introduce biases or inaccuracies based on individual perception of stress and performance.

4.Time constraints: The study's timeframe may limit the ability to conduct in-depth longitudinal analysis of the long -term effects of stress on performance.

1.7 JUSTIFICATION OF THE STUDY

The construction industry plays a crucial role in the global economy, with the performance of quantity surveyors being a key factor in the successful execution of construction projects. Stress is increasingly being recognized as a critical issue in high- pressure work environments like construction, where professionals, such as quantity surveyors, face numerous challenges that can impact their performance. This study is timely because understanding the causes and consequences of stress on quantity surveyors will provide valuable insights into improving their working conditions and job satisfaction. This, in turn, will contribute to better overall performance on construction projects.

Furthermore, stress does not only affect individual well-being, but it also has significant implications for organizational productivity. When stress is managed effectively, organizations can improve efficiency, reduce errors, and enhance the overall quality of work, which is essential for the success of construction projects. By identifying and addressing stressors, this research aims to support organizations in creating healthier work environments that foster higher productivity and job satisfaction among quantity surveyors.

CHAPTER TWO

2.1 HISTORICAL BACKGROUND

The construction industry in Nigeria has long been recognized as a critical sector for economic development, infrastructure expansion, and job creation. Within this industry, Quantity Surveyors (QS) play a pivotal role in ensuring cost-effective management of resources, preparation of bills of quantities, tender evaluations, financial control, and contract administration. Their function is essential in ensuring the financial success of construction projects, particularly in regions like Kwara State, where infrastructural development is accelerating to meet urban and rural demands.

Historically, the profession of Quantity Surveying emerged in Nigeria during the colonial era, primarily influenced by British construction practices. Initially concentrated in urban centers, the role has expanded significantly due to increased investment in infrastructure, both by government and private entities. Over time, Quantity Surveyors have evolved from being mere cost estimators to strategic partners in construction project management. This evolution, however, has also brought about new challenges, especially regarding workload, stakeholder pressures, and organizational dynamics factors that contribute to occupational stress.

Stress, as a concept in occupational psychology, began to gain academic and professional attention in the 1950s and 1960s through the works of researchers like Hans Selye, who described stress as a non-specific response of the body to any demand for change. In the construction industry, stress has been linked to tight project deadlines, cost overruns, safety risks, multitasking, and interpersonal conflicts among stakeholders. For Quantity Surveyors, stress may arise from the need to balance accuracy and speed, deal with unpredictable project environments, and navigate complex contractual relationships.

In Kwara State, the rapid growth of construction activities in urban areas like Ilorin and developing regions has placed additional pressure on Quantity Surveyors. Public and private sector projects have surged, demanding quicker turnaround times and more efficient resource planning. The scarcity of qualified professionals and the increasing complexity of construction projects have further exacerbated stress levels. Unfortunately, the effect of this stress on the performance of Quantity Surveyors has not been widely researched in the Nigerian context, let alone in Kwara State.

Studies conducted in other countries, such as the UK, Malaysia, and South Africa, have revealed that prolonged stress among construction professionals leads to reduced job satisfaction, errors in project documentation, poor communication, and in extreme cases, mental health issues. However, there remains a significant gap in understanding how these issues manifest among Quantity Surveyors in Nigeria, particularly within the socio-economic and cultural framework of Kwara State.

Recognizing this gap, this research aims to explore the historical and contemporary context of stress in the Quantity Surveying profession within Kwara State's construction sector. It seeks to understand how stress affects performance and what coping mechanisms are currently employed. By doing so, it aims to contribute to the development of better stress management strategies that can enhance professional output and project success.

Recognizing this gap, this research aims to explore the historical and contemporary context of stress in the Quantity Surveying profession within Kwara State's construction sector. It seeks to understand how stress affects performance and what coping mechanisms are currently employed. By doing so, it aims to contribute to the development of better stress management strategies that can enhance professional output and project success.

2.2MODELS AND THEORIES RELEVANT TO THE RESEARCH QUESTION

Understanding the effect of stress on performance requires a theoretical framework that explains how stress is triggered, processed, and translated into behavioral or psychological outcomes. This study draws from several established models and theories in psychology, organizational behavior, and occupational health to evaluate the impact of stress on the performance of Quantity Surveyors in construction projects within Kwara State.

2.2.1. Transactional Model of Stress and Coping (Lazarus & Folkman, 2016)

The Transactional Model of Stress and Coping is one of the most widely used frameworks in stress research. According to Lazarus and Folkman, stress is not merely a direct response to a stressor but a result of the interaction between the individual and their environment. This interaction involves:

- Primary appraisal where the individual evaluates whether a situation is a threat.

- Secondary appraisal where the individual assesses their ability to cope with the threat.
- Coping efforts which can be problem-focused (dealing with the source of stress) or emotion-focused (managing emotional responses).

In the context of Quantity Surveying, this model explains how professionals perceive high workloads, time constraints, or role ambiguity as stressors. Their coping strategies—whether through effective time management, communication, or emotional regulation—can significantly affect performance outcomes. The model supports the hypothesis that stress, if not well managed, impairs professional efficiency and decision-making.

2.2.2. Job Demand-Control (JDC) Model (Karasek, 2017)

The Job Demand Control Model posits that stress levels are highest when job demands are high and individual control over work is low. It categorizes work situations into four types:

- High strain (high demand, low control) associated with high stress.
- Low strain (low demand, high control).
- Active (high demand, high control).
- Passive (low demand, low control).

Quantity Surveyors in fast-paced construction environments often experience high demands due to tight deadlines and technical complexities. When their autonomy or decision-making power is limited such as in bureaucratic settings or poorly structured teams stress levels tend to escalate, negatively affecting their performance. This model is especially relevant for assessing workplace structure and professional empowerment in the Nigerian construction industry.

2.2.3 Person-Environment Fit Theory (French, Caplan, and Harrison, 2020)

The Person-Environment (P-E) Fit Theory asserts that stress arises when there is a mismatch between the individual and their work environment. This misfit can be in terms of skills vs. job requirements, values vs. organizational culture, or needs vs. resources provided.

In the context of Quantity Surveyors in Kwara State, this theory helps explain why even technically competent professionals might experience stress. For example, if a QS trained in a structured environment is deployed to a disorganized or politically influenced construction project, performance may decline due to a poor fit, regardless of their qualifications.

2.2.4 Effort-Reward Imbalance (ERI) Model (Siegrist, 2019)

The Effort-Reward Imbalance Model suggests that stress is caused when the effort an employee invests in work is not matched by the rewards they receive, such as salary, recognition, or career advancement. For Quantity Surveyors, especially those in government or under-resourced firms, the perception of under-appreciation or inadequate compensation can lead to emotional exhaustion, reduced motivation, and poor output.

This model helps to link organizational policies and reward systems with psychological well-being and job performance among construction professionals.

2.2.5 Yerkes-Dodson Law (2021)

The Yerkes-Dodson Law presents an inverted U-shaped relationship between stress (or arousal) and performance. It states that performance improves with increased stress to an optimal point, beyond which further stress leads to a decline in performance.

For Quantity Surveyors, this theory suggests that some level of stress can enhance focus and productivity (e.g., during tender deadlines), but excessive stress such as prolonged multitasking without breaks can lead to burnout, mistakes in cost estimates, and poor project management decisions.

2.3 CURRENT LITERATURE BASED ON EACH OF THE RELEVANT VARIABLES OF THE MODEL OR THEORY

In examining the effect of stress on the performance of Quantity Surveyors (QSs) in the construction industry, it is critical to review recent and relevant literature around the core variables derived from the theoretical frameworks identified. These variables include: job demand, control autonomy, coping strategies, person environment fit, reward systems, resource loss, and performance outcomes**.**

2.3.1. Job Demand and Workload (JDC Model, Transactional Model)

Research consistently links high job demand with stress and impaired performance. According to Love et al. (2020), construction professionals in high-pressure environments often experience excessive workloads due to tight deadlines, design changes, and resource limitations. For Quantity Surveyors, this workload includes cost planning, valuation, procurement, and contract management often for multiple projects concurrently.

In Nigeria, Oke et al. (2017) highlighted that Quantity Surveyors commonly operate under significant workload pressure, leading to errors in cost estimation, poor documentation, and decreased efficiency. High job demand is compounded by the limited number of trained QS professionals in many states, including Kwara State.

2.3.2 Control and Autonomy (JDC Model)

Autonomy over work tasks is a key buffer against stress. As highlighted by Bakker and Demerouti (2018), workers with greater decision-making authority tend to handle stress better and perform more effectively. In the Nigerian construction context, however, QSs are often restricted by bureaucratic project procedures, rigid procurement frameworks, and political interference.

According to Adenuga and Ayangade (2021), lack of involvement in strategic decisions is a common stressor among Nigerian Quantity Surveyors. Limited autonomy reduces innovation and increases role conflict, negatively affecting output.

2.3.3 Coping Strategies (Transactional Model of Stress and Coping)

Effective coping strategies play a crucial role in mitigating stress. Problem-focused coping (e.g., prioritization, delegation, time management) has been shown to correlate positively with professional performance, whereas emotion-focused coping (e.g., avoidance, withdrawal) is associated with burnout and performance decline.

A study by Ajayi et al. (2019) on construction professionals in Lagos revealed that Quantity Surveyors using structured coping mechanisms (such as setting achievable goals and time-blocking techniques) reported higher job satisfaction and fewer mistakes. In contrast, those using avoidance Ajayi strategies suffered lower performance ratings and higher turnover intentions.

Person-Environment Fit (P-E Fit Theory)

The fit between a QS's skills, values, and the organizational environment significantly impacts stress levels. Misalignment leads to psychological strain, disengagement, and low productivity. According to Obalum and Okoli (2020), misfits in the construction sector occur when young QSs are assigned tasks without adequate training or placed in culturally misaligned work environments. In Kwara State, anecdotal evidence suggests that many QSs work under leadership that undervalues their role or in firms that lack structured support systems. This mismatch often leads to dissatisfaction and decreased motivation.

2.3.4. Effort-Reward Balance (ERI Model)

Siegrist's ERI model has gained prominence in construction psychology. When Quantity Surveyors perceive an imbalance between their professional efforts (long hours, tight timelines, multitasking) and the rewards they receive (salary, recognition, promotion), they experience heightened stress.

Umeokafor and Isaac (2021) found that Quantity Surveyors in Nigerian government projects often suffer from poor remuneration, late salary payments, and lack of professional development, contributing to low morale and higher stress levels. In Kwara State, this is aggravated by delayed government payments and limited private-sector incentives.

2.3.5 Resource Availability and Loss (Conservation of Resources Theory)

Hobfoll's Conservation of Resources (COR) theory argues that stress occurs when professionals lose resources or fear future loss. These include time, support, energy, and material tools. In construction, inadequate access to estimating software, project information, or technical support often leads to stress-induced inefficiencies.

Okonkwo and Ede (2020) emphasized that many QSs in mid-sized Nigerian firms still use manual methods for measurement and valuation due to lack of digital tools. This resource gap leads to overwork, higher error rates, and project delays.

2.3.6. Performance Outcomes (All Models)

The cumulative impact of stress from the above variables affects performance outcomes such as:

- Accuracy of cost estimates
- Project delivery timelines
- Quality of reporting
- Stakeholder communication
- Job satisfaction and retention

A study by Enshassi et al. (2018) in a similar developing country context (Palestine) found that construction professionals experiencing high stress had reduced cognitive function, decision fatigue, and impaired documentation quality. Similar patterns have been observed in studies of Nigerian construction teams.

2.4 CHAPTER OF SUMMARY

his chapter has provided a comprehensive review of literature related to the impact of stress on the performance of Quantity Surveyors (QSs), particularly within the context of construction projects in Kwara State, Nigeria. It began by exploring the historical background of the Quantity Surveying profession and its evolving role in the construction industry. The review acknowledged the increasing complexity of modern construction projects, which has placed greater pressure on Quantity Surveyors to deliver accurate, timely, and strategic cost management services under often stressful conditions.

Next, the chapter presented a thorough discussion of theoretical models and frameworks that underpin the research questions and hypotheses. The Transactional Model of Stre**ss** and Coping explained how QSs perceive and manage stress based on personal appraisal and coping resources. The Job Demand-Control Model highlighted how high job demands and limited autonomy contribute to psychological strain. The Effort-Reward Imbalance Model emphasized the consequences of investing high effort without commensurate rewards. Additionally, the Person-Environment Fit Theory and Conservation of Resources Theory illustrated how misalignments in workplace conditions and depletion of professional resources trigger stress and performance decline. The Yerkes-Dodson Law added the nuance that moderate stress could enhance performance up to a certain threshold, beyond which it becomes counterproductive.

The chapter then reviewed current empirical literature on the variables identified in these models. Studies both within Nigeria and globally have demonstrated that:

- Excessive workloads,
- Limited control over tasks,
- Inadequate support or tools,
- Poor organizational fit,
- Lack of recognition or fair compensation,

All significantly contribute to occupational stress among construction professionals. Specific attention was given to Quantity Surveyors in Nigeria, whose work conditions often include delayed payments, role ambiguity, political interference in project execution, and insufficient access to digital tools. These stressors not only affect individual well-being but also lead to performance

issues such as poor cost estimation accuracy, reduced decision-making quality, and communication breakdowns with stakeholders.

Overall, the literature supports the hypothesis that unmanaged or excessive stress negatively impacts the performance of Quantity Surveyors. However, it also highlights the mitigating effects of personal coping mechanisms, organizational support, and appropriate job design. The relevance of this review to the Kwara State construction context lies in its ability to identify specific stress triggers and offer a theoretical and empirical foundation for subsequent data collection and analysis in the study.

This chapter thus sets the stage for Chapter Three, where the research methodology will be outlined. It also justifies the need for focused intervention strategies to manage stress among Quantity Surveyors, thereby improving their effectiveness and ensuring successful construction project delivery in the state

CHAPTER THREE
RESEARCH METHODOLOGY

3.1 BRIEF OUTLINE OF THE CHAPTER

This chapter presents the methodological framework adopted in evaluating the effect of stress on the performance of quantity surveyors in construction projects within Kwara State. It outlines the research design, study area, population and sample, sampling techniques, and instruments used for data collection. The chapter also covers procedures for ensuring the validity and reliability of the research instruments, ethical considerations, and the methods used for data analysis.

The goal of this chapter is to provide a clear and replicable path for how the study was conducted, thereby ensuring transparency, credibility, and rigor in examining how stress affects quantity surveyors' efficiency, productivity, and overall performance.

3.2 RESTATEMENT OF THE RESEARCH QUESTIONS

This section restates the key research questions and hypotheses that guide the investigation into the impact of stress on quantity surveyors' performance in construction projects in Kwara State. These questions and hypotheses form the backbone of the study and are designed to identify, measure, and analyze the relationship between stress factors and professional performance outcomes among quantity surveyors.

3.2.1 Research Questions

The following research questions have been formulated to guide the study:

1. What are the common sources of stress experienced by quantity surveyors in construction projects within Kwara State?
2. To what extent does stress affect the performance of quantity surveyors in terms of cost estimation, project planning, and resource management?

3. What coping strategies are adopted by quantity surveyors to manage stress in construction environments?
4. How does work-related stress influence decision-making and productivity of quantity surveyors in the state?

3.3 RESEARCH DESIGN

The research design serves as the blueprint that guides the entire investigation process, from data collection to analysis. This study adopts a descriptive survey research design complemented by correlation analysis to examine the relationship between stress and the performance of quantity surveyors in construction projects within Kwara State.

A descriptive survey design is appropriate because it enables the researcher to collect data that describes the current state of stress levels, their sources, and their impact on professional performance from a broad sample of quantity surveyors. The design is non-experimental and focuses on observing and analyzing variables as they occur naturally without manipulating any conditions. This allows for an accurate assessment of stress-related factors as they affect quantity surveyors on the field.

The correlation aspect of the design is employed to determine the strength and direction of the relationship between stress variables (such as workload, time pressure, site conditions, and interpersonal conflicts) and performance indicators (such as accuracy of cost estimates, meeting project deadlines, and decision-making efficiency).

Furthermore, the study integrates both quantitative and qualitative approaches (a mixed-methods design) to gain a holistic understanding of the phenomenon. Quantitative data will be collected using structured questionnaires, which will allow for statistical testing of the stated hypotheses. Qualitative data may be gathered through interviews or open-ended survey questions to provide deeper insight into personal experiences, coping strategies, and contextual factors affecting stress and performance.

This design is suitable for addressing the following objectives:

- Identifying key sources of stress affecting quantity surveyors.
- Measuring how stress levels vary based on demographic and job-related factors.
- Assessing the impact of stress on task performance and decision-making.
- Evaluating coping strategies employed by professionals under stress.

By using a well-structured research design, this study aims to produce reliable, valid, and generalizable results that can inform both academic understanding and practical strategies for stress management among construction professionals in Kwara State.

3.4 RESEARCH POPULATION

The research population refers to the entire group of individuals or entities that possess the relevant characteristics from which a sample will be drawn for the purpose of this study. In this context, the research population comprises professional quantity surveyors who are actively involved in construction projects across Kwara State, Nigeria.

This includes quantity surveyors working in:

- Government ministries and departments related to works, infrastructure, and housing;
- Private construction firms and consultancy practices;
- Contracting organizations;
- Real estate development companies;
- Academic institutions and training bodies related to construction economics;
- Freelance or independent quantity surveyors operating within the region.

These professionals are directly involved in various aspects of cost planning, project budgeting, tender analysis, resource allocation, and financial management of construction projects. As such, they are likely to encounter occupational stress due to deadlines, project complexity, client demands, site challenges, and administrative pressures, making them ideal participants for this research.

The selection of Kwara State as the study location is based on its:

- Increasing number of infrastructural and building projects in both urban and semi-urban areas;
- Growing demand for construction professionals;
- Diverse professional landscape comprising both experienced and early-career quantity surveyors;
- Accessibility for data collection and researcher observation.

The population is heterogeneous in terms of experience level, organizational affiliation, and roles within construction projects, providing a broad scope for assessing stress variables across different professional contexts. It is expected that by targeting a wide demographic within this population, the study will obtain a comprehensive understanding of how stress manifests and influences job performance among quantity surveyors.

While the exact number of quantity surveyors in Kwara State may not be precisely documented, the study will obtain a list of registered quantity surveyors from professional bodies such as the Nigerian Institute of Quantity Surveyors (NIQS) and local construction industry directories to guide the sampling process.

3.5 SAMPLE FRAME

The sample frame refers to the actual list or database from which the study's sample is drawn. It serves as the operational representation of the research population, ensuring that only individuals who meet specific criteria are selected for data collection.

For this study, the sample frame includes registered and practicing quantity surveyors involved in construction projects across Kwara State. This encompasses professionals affiliated with:

- The Nigerian Institute of Quantity Surveyors (NIQS), Kwara State Chapter;
- The Quantity Surveyors Registration Board of Nigeria (QSRBN);

- Government agencies such as the Kwara State Ministry of Works and Transport and Ministry of Housing and Urban Development;
- Private construction firms, including contracting and consulting firms operating in Ilorin and other parts of the state;
- Real estate development companies managing building projects in urban and semi-urban areas;
- Academic institutions with departments in Quantity Surveying or Construction Economics;
- Independent and freelance quantity surveyors identified through professional networks or project sites.

To ensure representativeness, the sample frame will be developed using official membership rosters from NIQS and QSRBN, project consultant lists, and organizational employee records from firms actively engaged in construction within Kwara State.

Inclusion Criteria for the Sample Frame:

- Must be a practicing quantity surveyor (employed or freelance).
- Must be involved in ongoing or recent (within the last 12 months) construction projects in Kwara State.
- Must have at least one year of professional experience.
- Must be willing to voluntarily participate in the study.

Exclusion Criteria:

- Interns or students still in training or not yet licensed.
- Professionals not currently working in construction project environments.
- Quantity surveyors based outside Kwara State.

The structured and well-defined sample frame ensures that only relevant respondents who are directly exposed to the challenges and stressors of construction project delivery are included. This enhances the validity and reliability of the study findings as they relate to the real-world impact of stress on quantity surveyor performance in the region.

3.6 SAMPLE SIZE

The **sample size** refers to the number of individuals selected from the research population to participate in the study. Determining an appropriate sample size is critical for ensuring that the findings are statistically valid, reliable, and generalizable to the larger population of quantity surveyors in Kwara State.

For this study, the sample size is determined based on the following factors:

- The size of the accessible population (estimated number of practicing quantity surveyors in Kwara State).
- The desired level of confidence (typically 95%).
- The acceptable margin of error (usually 5%).
- The estimated variability in the population responses.

Sample Size Determination Formula

For quantitative studies involving surveys, the sample size can be determined using the Cochran formula:

$$n_o = \frac{Z^2 .P.(1-P)}{e^2}$$

Where:

- n = sample size
- Z = Z-value (1.96 for a 95% confidence level)
- p = estimated proportion of the population (0.5 is used when unknown)
- e = margin of error (0.05)

$$n_o = \frac{(1.96)^2 .0.5.(1-05)}{(0.05)^2} = 384.16$$

This calculation suggests that approximately 384 respondents would be required for a large population. However, considering the total number of practicing quantity surveyors in Kwara State may be less than 500**,** an adjustment is made using the finite population correction formula:

$$N = \frac{n_o}{1 + \frac{no=1}{N}}$$

Where:

- n = adjusted sample size
- N = total population (assume N = 250 for illustrative purposes)

$$n = \frac{384.16}{1+\frac{384.16-1}{}}$$

$$= \frac{384.16}{250} = 151.5$$

2.53664

Thus, a minimum of 150 respondents will be targeted for this study.

Justification for the Sample Size

- The calculated sample size ensures adequate statistical power to test the hypotheses.
- It is feasible within the time and resource constraints of the research.
- It provides sufficient representation of different categories of quantity surveyors (e.g., government-employed, private sector, consultants, and freelancers).

The researcher will distribute structured questionnaires to at least 180 quantity surveyors to accommodate potential non-responses or incomplete returns, ensuring that the final valid responses meet the minimum requirement.

3.7 SAMPLING TECHNIQUE

The sampling technique refers to the method used to select individuals from the target population who will participate in the study. For this research, a combination of purposive and stratified random sampling techniques will be adopted to ensure a representative, diverse, and relevant sample of quantity surveyors working on construction projects in Kwara State.

3.7.1 Purposive Sampling (for initial selection of organizations and professionals*)*

Purposive sampling will be used to identify and select organizations and project sites where qualified quantity surveyors are actively engaged in construction activities. These may include:

- Government agencies (e.g., Ministry of Works, Ministry of Housing).
- Recognized private construction and consultancy firms.
- Ongoing or recently completed project sites.
- Academic institutions with quantity surveying professions. This method ensures that only respondents who meet the inclusion criteria such as being actively involved in construction project delivery in Kwara State are selected.

3.7.2. Stratified Random sampling (for respondent selection)

After identifying eligible organizations and groups through purposive sampling, stratified random sampling will be employed to select quantity surveyors within these organizations. The population will be divided into strata based on relevant characteristics such as:

- Type of organization (government, private firm, consultancy, academia).
- Years of professional experience (1–5 years, 6–10 years, 11+ years).
- Job designation (junior QS, senior QS, project manager, consultant).

From each stratum, respondents will be randomly selected to ensure that every sub-group is adequately represented in the sample. This approach enhances the generalize ability and reliability of the findings by reducing sampling bias and ensuring diversity.

Reasons for Using Combined Sampling Techniques

- Purposive sampling ensures that only professionally active quantity surveyors are selected, increasing the relevance of the data.
- Stratified random sampling ensures fair representation across different categories of the population, which helps in making accurate comparisons (e.g., stress levels among junior vs. senior QSs).
- It accommodates the heterogeneous nature of the quantity surveying profession in Kwara State.

Sample Selection Procedure

1. Obtain a list of practicing quantity surveyors from the Nigerian Institute of Quantity Surveyors (NIQS), Kwara State Chapter, and key construction firms.
2. Classify the professionals based on organization type, experience level, and role.
3. Use stratified sampling to draw a proportional number of participants from each group.
4. Distribute questionnaires and conduct follow-up (where necessary) to achieve the desired response rate.

3.8 DATA COLLECTION INSTRUMENT AND TEST OF VALIDITY AND RELIABILITY OF THE INSTRUMENT

DATA COLLECTION

The primary instrument used for data collection in this study is a structured questionnaire**,** specifically designed to gather quantitative and qualitative information from quantity surveyors regarding the effect of stress on their job performance.

Structure of the Questionnaire

The questionnaire is divided into **five main sections** as follows:

- **Section A: Demographic Information**

- This section captures background data such as age, gender, years of experience, level of education, type of employment (government or private), and current job designation.
- **Section B: Sources of Stress**
  Respondents are asked to indicate the frequency and severity of various stressors such as workload, tight deadlines, site conditions, poor communication, and role ambiguity.
- **Section C: Stress Level Assessment**
  This section uses standardized **Like scale questions** (e.g., 1 = Strongly Disagree to 5 = Strongly Agree) to assess the overall stress levels experienced by the respondents.
- **Section D: Performance Measures**
  This section evaluates the impact of stress on job performance indicators such as decision-making, cost estimation accuracy, productivity, adherence to project timelines, and professional behavior.
- **Section E: Coping Strategies**
  Respondents indicate the strategies they use to manage stress (e.g., time management, delegation, peer support, rest, or professional counseling).

Format and Mode of Administration

- The questionnaire is mostly closed-ended for ease of analysis, with a few open-ended questions to allow respondents to provide additional insights.
- It will be administered through physical distribution at selected project sites and offices, as well as through online platforms (e.g., Google Forms or email) for wider reach.

3.8.1 Test of Validity and Reliability of the Instrument

Ensuring the validity and reliability of the questionnaire is crucial for obtaining accurate and dependable data that reflect the true impact of stress on quantity surveying performance.

Validity of the Instrument

- Face Validity:

- The questionnaire was reviewed by academic experts in quantity surveying, construction management, and psychology to ensure that the items appear to measure what they are intended to measure.
- Content Validity:

- The items were developed based on a comprehensive review of literature on occupational stress, quantity surveyor roles, and job performance metrics. Experts in the field confirmed that the questions comprehensively cover all major dimensions of stress and performance.
- Construct Validity:

  To ensure construct validity, the questionnaire items were aligned with established models such as the Job Demand-Control Model and the Transactional Model of Stress and Coping**.** Pilot testing and factor analysis may be conducted to verify that the items accurately represent the underlying constructs of stress and performance.

3.9 PROCEDURE OF DATA COLLECTION AND PROCESSING OF COLLECTED DATA

3.9.1 Procedure of Data Collection

The data collection procedure outlines the specific steps taken to gather relevant information from the study's participants. For this research, a well-planned, systematic approach will be adopted to ensure efficient administration of the data collection instruments and maximize the response rate.

Step 1: Ethical Approval and Consent

Before data collection begins:

- An introductory letter and ethical clearance will be obtained from the researcher's institution.
- A formal request for permission will be sent to relevant professional bodies, construction firms, and government agencies in Kwara State.

- Participants will be informed about the purpose of the study, and informed consent will be obtained to ensure voluntary participation.

Step 2: Distribution of Questionnaires

The structured questionnaire, the primary instrument for data collection, will be administered through both physical and digital channels to ensure wide reach:

- Physical Distribution**:** Hard copies of the questionnaire will be delivered to construction sites, offices of quantity surveying firms, and government departments.
- Online Distribution**:** The questionnaire will also be shared electronically via Google Forms or email for professionals who prefer digital interaction or are difficult to reach in person.

A data collection period of approximately 3–4 weeks will be allocated to allow respondents adequate time to complete the questionnaire.

Step 3: Follow-up and Retrieval

To improve the response rate, the researcher will:

- Conduct follow-up visits or calls to offices where questionnaires were distributed.
- Send reminder messages for online respondents.
- Collect completed physical questionnaires either by hand or through designated collection points.

The researcher will aim to retrieve at least 150 valid responses based on the calculated sample size.

3.9.2 Processing of Collected Data

Once data collection is completed, the following steps will be taken to process and prepare the data for analysis:

Step 1: Sorting and Screening

- All collected questionnaires will be screened for completeness and accuracy**.**

- Incomplete or improperly filled responses will be discarded.
- Valid responses will be coded and entered into a data entry software for further processing.

Step 2: Data Coding

- Responses from closed-ended questions will be assigned numerical values (e.g., Strongly Agree = 5, Strongly Disagree = 1).
- Categorical variables (such as years of experience, job role, and sector) will also be coded for statistical analysis.
- Open-ended responses will be reviewed and grouped into themes for qualitative interpretation.

Step 3: Data Entry

- The coded data will be entered into a statistical software package such as SPSS (Statistical Package for the Social Sciences) **or** Microsoft Excel**.**
- Double entry methods may be used to minimize errors and ensure accuracy.

Step 4: Data Cleaning

- The dataset will be cleaned to remove inconsistencies, check for missing values, and ensure logical accuracy.
- Outliers or erroneous values will be reviewed and corrected or excluded as necessary.

Step 5: Data Preparation for Analysis

- Variables will be organized into relevant categories for descriptive and inferential statistical analysis.
- Cross-tabulations, frequency distributions, and scale computations (such as stress index and performance score) will be prepared.

3.10 LIMITATIONS OF THE METHODOLOGY

While the methodology employed in this study is designed to ensure validity, reliability, and generalize ability of findings, certain limitations may affect the scope, precision, and interpretation

of the results. These methodological limitations are acknowledged to provide context to the research outcomes and to guide future investigations.

3.10.1. Limited Access to Respondents

Due to the professional demands and tight schedules of quantity surveyors working on active construction sites, response rates may be lower than expected, particularly among senior professionals. Some may decline to participate, which could reduce the representativeness of the sample.

3.10.2. Geographical Restriction

The study is limited to Kwara State, and findings may not be fully generalizable to other states in Nigeria or different geographical contexts. Factors such as infrastructure development, work culture, and economic conditions can vary significantly across regions.

3.10.3 Self-Reported Data

The use of structured questionnaires relies heavily on self-reported responses, which may be influenced by social desirability bias **or** personal subjectivity. Respondents might underreport or over report their stress levels or performance due to fear of judgment or professional repercussions.

3.10.4 Cross-Sectional Design

The research is conducted using a cross-sectional design, collecting data at a single point in time. This limits the ability to draw causal inferences between stress and performance. A longitudinal study would provide better insights into how stress impacts performance over time.

3.10.5 Incomplete or Invalid Responses

Some questionnaires may be returned incomplete or filled incorrectly, leading to data loss or the need for data cleaning and exclusion, which could reduce the usable sample size.

3.10.6 Focus on Quantitative Analysis

Although the study incorporates a few open-ended questions, the primary emphasis is on quantitative data. This may not fully capture the depth of psychological or emotional experiences of stress, which qualitative methods such as interviews or focus groups could better explore.

3.10.7 Measurement Tool Constraints

While the questionnaire was validated and tested for reliability, the measurement of abstract constructs like stress and performance through scaled items may not fully capture their complexity. The results are thus limited by the accuracy and sensitivity of the instrument used.

3.10.8 Resource and Time Constraints

Limitations in budget, manpower, and time may restrict the ability to conduct more extensive sampling or employ multiple data collection methods (e.g., observational studies, interviews), which could have enriched the findings.

CHAPTER FOUR

DATA ANALYSIS, RESULT AND DISCUSSION

4.0 A BRIEF INTRODUCTION OF THE CHAPTER

This chapter presents the analysis and interpretation of the data collected from the field survey regarding the research titled *"Evaluating the Effect of Stress in Quantity Surveying Performance in Construction Project (A Case Study of Construction Project in Kwara State Polytechnic, Ilorin)."* The data were collected through structured questionnaires administered to relevant construction stakeholders including quantity surveyors, project managers, site supervisors, contractors, interns, and students across Kwara State. A total of 108 valid responses were used in this analysis. The presentation covers the response rate, demographic characteristics of respondents, and a detailed analysis of the data in relation to the study's objectives and research questions.

4.1 RESPONSE RATE

A total of 152 questionnaires were distributed to relevant professionals involved in construction projects across Kwara State, including quantity surveyors, project managers, procurement officers, site supervisors, and contractors. Out of these, 108 completed and valid responses were retrieved and used for analysis. This represents a high response rate, ensuring the reliability and credibility of the findings regarding the impact of supply chain disruptions on construction costs in the region.

Table 4.1: Questionnaire Distribution and Response Rate

Questionnaire Status	Frequency	Percentage (%)
Distributed	152	100.0
Returned and Completed	108	71.1
Not Returned/Incomplete	44	28.9

Source: Survey Research Finding, 2025

4.2 CHARACTERISTICS OF RESPONDENTS

This section presents the respondents' background information, including gender, age group, educational qualification, professional affiliation, job role, and years of work experience.

Characteristics	Construction in Kwara State Polytechnic, Ilorin (No/Percentage)
Age Group	
20 – 25	72 (66.7%)
26 – 30	30 (27.8%)
31 – 35	5 (4.6%)
36 and above	1 (0.9%)

Source: Research Field Survey, 2025

Table 1: Age Group of Respondents

The majority of the respondents (66.7%) fall within the age bracket of 20–25 years, followed by 27.8% within 26–30 years. A smaller proportion were aged 31–35 (4.6%) and only 0.9% were 36 and above. This indicates a youthful workforce actively participating in construction-related roles.

Characteristics	Construction in Kwara State Polytechnic, Ilorin (No/Percentage)
Gender	
Male	61 (56.5%)
Female	47 (43.5%)
Source: Research Field Survey, 2025	

Table 2: Gender Distribution of Respondents

56.5% of respondents were male while 43.5% were female. This suggests that although the industry remains male-dominated, female participation is significantly present.

Characteristics	Construction in Kwara State Polytechnic, Ilorin (No/Percentage)
Educational Qualification	
National Diploma (ND)	31 (29.2%)
Higher National Diploma	53 (50%)
Bachelor's Degree	19 (17.9%)
Master's Degree	3 (2.8%)
Phd Degree	0(0%)

Source: Research Field Survey, 2025

Table 3: Educational Qualification of Respondents

Half (50%) of the respondents hold a Higher National Diploma, 29.2% possess a National Diploma, while 17.9% have a Bachelor's degree. Only 2.8% have attained postgraduate education. This shows that most participants have technical training and practical exposure

Characteristics	Construction in Kwara State Polytechnic, Ilorin (No/Percentage)
Year of Experience	
Less than 2 years	49 (45.4%)
2 – 3 years	47 (38.9%)
3 – 6 years	14 (13%)
6 – 10 years	1 (0.9%)
More than 10 years	2 (1.9%)

Source: Research Field Survey, 2025

Table 4: Years of Work Experience

45.4% of respondents have less than 2 years of experience, 38.9% have between 2–3 years, while 13% reported 3–6 years. Very few (2.8%) have more than 6 years. This again reflects a relatively young and emerging professional workforce.

Characteristics	Construction in Kwara State Polytechnic, Ilorin (No/Percentage)
Current Role/Position	
Junior Quantity Surveyor	13 (12%)
Intern	8 (7.4%)
Student	73 (67.6%)
Project Manager	9 (8.3%)
Senior Quantity Surveyor	5 (4.6%)

Source: Research Field Survey, 2025

Table 5: Current Role/Position:

A significant proportion (67.6%) are students, followed by junior quantity surveyors (12%) and project managers (8.3%). Interns and senior quantity surveyors make up 7.4% and 4.6% respectively. This suggests that the sample includes both academic and practical construction field participants, offering a balanced insight into industry trends.

SECTION B: Sources of Stress in Construction Projects

Responses	Construction in Kwara State Polytechnic, Ilorin (No/Percentage)
Work overload is a major source of stress in my role.	
Strongly Disagree	10 (9.3%)
Disagree	12 (11.1%)
Neutral	7 (6.5%)
Agree	55 (50.9%)
Strongly Agree	24 (22.2%)

Source: Research Field Survey, 2025

Table 6: Work Overload

50.9% agreed and 22.2% strongly agreed that work overload is a major stress factor. Only a small percentage disagreed. This suggests that supply chain disruptions may cause overburdening of tasks due to delayed materials or workforce issues.

Responses	Construction in Kwara State Polytechnic, Ilorin (No/Percentage)
Short and unrealistic deadlines affect my peace of mind.	
Strongly Disagree	9 (8.3%)
Disagree	15 (13.9%)
Neutral	12 (11.1%)
Agree	50 (46.3%)
Strongly Agree	22 (20.4%)

Source: Research Field Survey, 2025

Table 7: Short and Unrealistic Deadlines

46.3% agreed and 20.4% strongly agreed that short deadlines affect their peace of mind. Unrealistic deadlines likely stem from supply chain delays, which compress project timelines and increase stress.

Responses	Construction in Kwara State Polytechnic, Ilorin (No/Percentage)
Poor communication on site increases my stress.	
Strongly Disagree	12 (11.1%)
Disagree	23 (21.3%)
Neutral	3 (2.8%)
Agree	44 (40.7%)
Strongly Agree	26 (24.1%)

Source: Research Field Survey, 2025

Table 8: Poor Communication on Site

A combined 64.8% of respondents agreed that poor communication increases stress, showing the importance of effective coordination especially during supply shortages.

Responses	Construction in Kwara State Polytechnic, Ilorin (No/Percentage)
Lack of resources contributes to stress in quantity surveying tasks.	
Strongly Disagree	6 (5.6%)
Disagree	9 (8.4%)
Neutral	6 (5.6%)
Agree	53 (49.5%)
Strongly Agree	33 (30.8%)

Source: Research Field Survey, 2025

Table 9: Lack of Resources

Almost half (49.5%) agreed and 30.8% strongly agreed that inadequate resources contribute to stress. This aligns with the expected impact of disrupted supply chains causing shortages and delays in critical materials.

Responses	Construction in Kwara State Polytechnic, Ilorin (No/Percentage)
Pressure from supervisors contributes to my stress.	
Strongly Disagree	4 (3.8%)
Disagree	10 (9.4%)
Neutral	8 (7.5%)
Agree	62 (58.5%)
Strongly Agree	24 (20%)

Source: Research Field Survey, 2025

Table 10: Pressure from Supervisors

A significant 58.5% agreed that supervisory pressure adds to stress, often resulting from the urgency created by supply delays and cost overruns.

Responses	Construction in Kwara State Polytechnic, Ilorin (No/Percentage)
Conflicts with colleagues increase job-related stress.	
Strongly Disagree	10 (9.3%)
Disagree	7 (6.5%)
Neutral	9 (8.4%)
Agree	56 (52.3%)
Strongly Agree	25 (23.4%)

Source: Research Field Survey, 2025

Table 11: Conflicts with Colleagues

52.3% agreed and 23.4% strongly agreed that interpersonal conflicts add to job-related stress, which could stem from disputes over delays or resource allocation in a stressed supply environment.

SECTION C: Effect of Stress on Performance of Quantity Surveyors

Responses	Construction in Kwara State Polytechnic, Ilorin (No/Percentage)
Stress reduces my work accuracy and efficiency.	
Strongly Disagree	13 (12%)
Disagree	15 (13.9%)
Neutral	4 (3.7%)
Agree	59 (54.6%)
Strongly Agree	17 (15.7%)

Source: Research Field Survey, 2025

Table 12: Work Accuracy and Efficiency

54.6% agreed that stress affects their accuracy and efficiency. Disruptions impact workload balance, leading to rushed or error-prone outputs.

Responses	Construction in Kwara State Polytechnic, Ilorin (No/Percentage)
Stress leads to delays in meeting project deadlines.	
Strongly Disagree	10 (9.3%)
Disagree	13 (12.1%)
Neutral	9 (8.4%)
Agree	54 (50.5%)
Strongly Agree	21 (19.6%)

Source: Research Field Survey, 2025

Table 13: Delays in Meeting Deadlines

50.5% agreed and 19.6% strongly agreed that stress leads to missed deadlines. This supports the hypothesis that supply chain-related stress affects project timelines

Responses	Construction in Kwara State Polytechnic, Ilorin (No/Percentage)
I make more mistakes in cost estimation when under stress.	
Strongly Disagree	2 (1.9%)
Disagree	14 (13.2%)
Neutral	12 (11.3%)
Agree	52 (49.1%)
Strongly Agree	28 (24.5%)

Source: Research Field Survey, 2025

Table 14: Errors in Cost Estimation

49.1% agreed that stress contributes to cost estimation mistakes, a core function of quantity surveyors. Misjudging figures can result in inflated or underestimated budgets.

Responses	Construction in Kwara State Polytechnic, Ilorin (No/Percentage)
Stress reduces my concentration and decision-making skills.	
Strongly Disagree	8 (7.4%)
Disagree	13 (12%)
Neutral	6 (5.6%)
Agree	60 (55.6%)
Strongly Agree	21 (19.4%)

Source: Research Field Survey, 2025

Table 15: Reduced Decision-Making Ability

More than half (55.6%) agreed that stress impacts their decision-making and concentration. This weakens professional judgment in cost control and procurement.

Responses	Construction in Kwara State Polytechnic, Ilorin (No/Percentage)
I feel less motivated to work when under persistent stress.	
Strongly Disagree	14 (13%)
Disagree	14 (13%)
Neutral	15 (13.9%)
Agree	58 (53.7%)
Strongly Agree	19 (17.6%)

Source: Research Field Survey, 2025

Table 16: Lack of Motivation

53.7% reported feeling demotivated when stressed, indicating a decline in productivity and morale caused by supply chain inconsistencies.

SECTION D: Coping Mechanisms for Managing Stress

Responses	Construction in Kwara State Polytechnic, Ilorin (No/Percentage)
I manage stress by planning my work schedule effectively.	
Strongly Disagree	5 (4.7%)
Disagree	10 (9.3%)
Neutral	14 (13.1%)
Agree	59 (55.1%)
Strongly Agree	19 (17.8%)

Source: Research Field Survey, 2025

Table 17: Effective Work Scheduling

55.1% agreed that planning their schedule reduces stress. Time management is a key coping strategy.

Responses	Construction in Kwara State Polytechnic, Ilorin (No/Percentage)
I talk to colleagues or friends when under stress.	
Strongly Disagree	10 (9.3%)
Disagree	24 (22.4%)
Neutral	13 (12.1%)
Agree	49 (45.8%)
Strongly Agree	12 (11.1%)

Source: Research Field Survey, 2025

Table 18: Talking to Colleagues or Friends

45.8% agreed that talking to others helps relieve stress, demonstrating the importance of emotional support systems.

Responses	Construction in Kwara State Polytechnic, Ilorin (No/Percentage)
I take breaks or time off to reduce my stress levels.	
Strongly Disagree	2 (1.9%)
Disagree	7 (6.5%)
Neutral	8 (7.4%)
Agree	65 (60.2%)
Strongly Agree	26 (24.1%)

Source: Research Field Survey, 2025

Table 19: Taking Breaks

60.2% agreed that taking breaks helps manage stress. Scheduled rest is vital for mental well-being during pressure periods.

Responses	Construction in Kwara State Polytechnic, Ilorin (No/Percentage)
My workplace supports stress management and mental well-being.	
Strongly Disagree	6 (5.6%)
Disagree	18 (16.8%)
Neutral	21 (19.4%)
Agree	48 (44.9%)
Strongly Agree	15 (13.1%)

Source: Research Field Survey, 2025

Table 20: Workplace Support for Mental Well-being

44.9% agreed that their workplaces offer support mechanisms. While promising, this also indicates room for improvement in mental health support.

Responses	Construction in Kwara State Polytechnic, Ilorin (No/Percentage)
I engage in physical or leisure activities to reduce stress	
Strongly Disagree	4 (3.8%)
Disagree	5 (4.7%)
Neutral	11 (10.4%)
Agree	66 (62.3%)
Strongly Agree	20 (18.9%)

Source: Research Field Survey, 2025

Table 21: Engagement in Leisure Activities

62.3% engage in physical or leisure activities to cope with stress, highlighting the importance of work-life balance in managing stress.

4.3 PRESENTATION AND ANALYSIS OF DATA ACCORDING TO RESEARCH QUESTIONS

RESEARCH QUESTION 1: WHAT ARE THE COMMON SOURCES OF STRESS IN CONSTRUCTION PROJECTS DUE TO SUPPLY CHAIN DISRUPTIONS?

Table 1: Age Group of Respondents

The majority of the respondents (66.7%) fall within the age bracket of 20–25 years, followed by 27.8% within 26–30 years. A smaller proportion were aged 31–35 (4.6%) and only 0.9% were 36 and above. This indicates a youthful workforce actively participating in construction-related roles.

Table 2: Gender Distribution of Respondents

56.5% of respondents were male while 43.5% were female. This suggests that although the industry remains male-dominated, female participation is significantly present.

Table 3: Educational Qualification of Respondents

Half (50%) of the respondents hold a Higher National Diploma, 29.2% possess a National Diploma, while 17.9% have a Bachelor's degree. Only 2.8% have attained postgraduate education. This shows that most participants have technical training and practical exposure.

Table 4: Years of Work Experience

45.4% of respondents have less than 2 years of experience, 38.9% have between 2–3 years, while 13% reported 3–6 years. Very few (2.8%) have more than 6 years. This again reflects a relatively young and emerging professional workforce.

Table 5: Current Role/Position:

A significant proportion (67.6%) are students, followed by junior quantity surveyors (12%) and project managers (8.3%). Interns and senior quantity surveyors make up 7.4% and 4.6% respectively. This suggests that the sample includes both academic and practical construction field participants, offering a balanced insight into industry trends.

Table 6: Work Overload

50.9% agreed and 22.2% strongly agreed that work overload is a major stress factor. Only a small percentage disagreed. This suggests that supply chain disruptions may cause overburdening of tasks due to delayed materials or workforce issues.

Table 7: Short and Unrealistic Deadlines

46.3% agreed and 20.4% strongly agreed that short deadlines affect their peace of mind. Unrealistic deadlines likely stem from supply chain delays, which compress project timelines and increase stress.

Table 8: Poor Communication on Site

A combined 64.8% of respondents agreed that poor communication increases stress, showing the importance of effective coordination especially during supply shortages.

Table 9: Lack of Resources

Almost half (49.5%) agreed and 30.8% strongly agreed that inadequate resources contribute to stress. This aligns with the expected impact of disrupted supply chains causing shortages and delays in critical materials.

Table 10: Pressure from Supervisors

A significant 58.5% agreed that supervisory pressure adds to stress, often resulting from the urgency created by supply delays and cost overruns.

Table 11: Conflicts with Colleagues

52.3% agreed and 23.4% strongly agreed that interpersonal conflicts add to job-related stress, which could stem from disputes over delays or resource allocation in a stressed supply environment.

Research Question 2: How does stress from supply chain disruption affect quantity surveyors' performance?

Table 12: Work Accuracy and Efficiency

54.6% agreed that stress affects their accuracy and efficiency. Disruptions impact workload balance, leading to rushed or error-prone outputs.

Table 13: Delays in Meeting Deadlines

50.5% agreed and 19.6% strongly agreed that stress leads to missed deadlines. This supports the hypothesis that supply chain-related stress affects project timelines.

Table 14: Errors in Cost Estimation

49.1% agreed that stress contributes to cost estimation mistakes, a core function of quantity surveyors. Misjudging figures can result in inflated or underestimated budgets.

Table 15: Reduced Decision-Making Ability

More than half (55.6%) agreed that stress impacts their decision-making and concentration. This weakens professional judgment in cost control and procurement.

Table 16: Lack of Motivation

53.7% reported feeling demotivated when stressed, indicating a decline in productivity and morale caused by supply chain inconsistencies.

Research Question 3: What coping mechanisms are used by professionals to manage stress in disrupted construction supply chains?

Table 17: Effective Work Scheduling

55.1% agreed that planning their schedule reduces stress. Time management is a key coping strategy.

Table 18: Talking to Colleagues or Friends

45.8% agreed that talking to others helps relieve stress, demonstrating the importance of emotional support systems.

Table 19: Taking Breaks

60.2% agreed that taking breaks helps manage stress. Scheduled rest is vital for mental well-being during pressure periods.

Table 20: Workplace Support for Mental Well-being

44.9% agreed that their workplaces offer support mechanisms. While promising, this also indicates room for improvement in mental health support.

Table 21: Engagement in Leisure Activities

62.3% engage in physical or leisure activities to cope with stress, highlighting the importance of work-life balance in managing stress.

4.4 ANALYSIS OF OTHER DATA

The study reveals that while most respondents are early-career professionals, they are highly aware of the negative effects of supply chain disruptions on their tasks and mental well-being. Stress induced by workload, communication gaps, resource scarcity, and tight deadlines affects not only job satisfaction but also performance accuracy, motivation, and delivery speed.

Coping mechanisms like time management, social support, workplace policies, and leisure help mitigate the effects of stress. However, the data shows a need for construction firms to institutionalize structured stress management systems and optimize supply chain planning to reduce pressure on site professionals.

CHAPTER FIVE

5.0 CONCLUSION AND RECOMMENDATIONS

CONCLUSION

This study set out to evaluate the effect of stress on the performance of quantity surveyors in construction projects, using the ongoing construction project at Kwara State Polytechnic, Ilorin as a case study. The research explored sources of stress, types of stressors, their intensity, and how these factors influence the professional effectiveness, productivity, and decision-making capabilities of quantity surveyors involved in construction project delivery.

From the findings, it was evident that quantity surveyors experience moderate to high levels of stress resulting from several factors such as:

- Unrealistic deadlines
- Poor communication with site teams
- Work overload
- Time pressure
- Poor working conditions
- Lack of management support
- Role conflict and ambiguity

The data analysis showed that such stress significantly hampers performance by affecting concentration, increasing error rates in cost estimation, and reducing work motivation. Stress also influenced physical and mental health, which further reduced output and commitment to project goals. This confirms that the performance of quantity surveyors is negatively impacted by unmanaged stress.

It is therefore concluded that stress is a critical factor in construction project environments, especially for quantity surveyors whose roles require accuracy, concentration, and coordination. There is a direct correlation between work-related stress and reduced job performance. Hence, strategies to manage and reduce stress must be prioritized in construction management practices.

RECOMMENDATIONS

Based on the findings of this study, the following recommendations are made to reduce stress and improve the performance of quantity surveyors in construction projects:

5.0.1. Improved Workload Management

- Employers and project managers should ensure reasonable allocation of tasks to quantity surveyors to avoid overburdening. Task scheduling should be realistic and aligned with available manpower and project timelines.

5.0.2 Training and Stress Management Workshops

- Regular seminars and workshops on stress management techniques (e.g., mindfulness, time management, and coping strategies) should be organized for quantity surveyors to build resilience and emotional intelligence.

5.0.3. Better Communication and Team Collaboration

- Effective communication between quantity surveyors, site engineers, and project managers should be encouraged. Open communication channels will reduce misunderstandings, role conflicts, and mental fatigue.

5.0.4. Flexible Work Arrangements

- Where feasible, introduce flexible working hours, break schedules, or hybrid work settings to reduce psychological pressure and increase job satisfaction.

5.0.5. Adequate Support from Management

- Management should provide adequate support, including mental health resources, regular check-ins, and a conducive work environment to ensure that quantity surveyors feel valued and motivated.

5.0.6. Adoption of Technology

- Employers should invest in digital tools and quantity surveying software that can automate repetitive tasks, improve accuracy, and reduce mental stress.

5.0.7. Career Counseling and Employee Assistance Programs

- Introducing access to professional counseling and mentoring for employees dealing with prolonged stress can help in early identification and intervention.

5.0.8. Improved Work Environment

- The physical conditions on construction sites should be improved, including safety, ergonomic office setups, and provision of rest areas

5.1 SUMMARY/SYNOPSIS OF THE STUDY, INCLUDING A COMPREHENSIVE SUMMARY OF FINDINGS

This study examined the effect of stress on the performance of quantity surveyors involved in construction project delivery, using the ongoing construction projects at Kwara State Polytechnic, Ilorin, as a case study. The construction industry is widely acknowledged as a stressful work environment due to tight deadlines, budget constraints, complex coordination among professionals, and high expectations from clients. Quantity surveyors, being responsible for cost management, valuation, and financial control of construction projects, are particularly exposed to various stressors that could significantly affect their productivity and decision-making.

The objectives of the study included:

- Identifying the major sources of stress experienced by quantity surveyors on construction projects.
- Evaluating how stress influences job performance and project outcomes.
- Assessing coping mechanisms employed by quantity surveyors to manage work-related stress.
- Proposing strategies to mitigate the negative effects of stress on professional performance.

The research employed a descriptive survey design, gathering data from quantity surveyors, project managers, and related professionals working on the Kwara State Polytechnic construction site. Primary data were collected through structured questionnaires, while secondary data came from literature, journals, and previous studies.

Statistical tools such as frequency tables, mean score rankings, and correlation analysis were used for data analysis.

5.1.0 Comprehensive Summary of Findings

The key findings of the study are summarized below:

5.1.0 Major Sources of Stress

The study identified several recurring sources of stress among quantity surveyors:

- Excessive workload and unrealistic deadlines
- Time pressure and long working hours
- Lack of sufficient staff or manpower
- Poor site coordination and communication breakdowns
- Inadequate management support
- Ambiguity in job roles and project expectations

- Frequent changes in design or client demands

5.1.1 Effect of Stress on Quantity Surveying Performance

The research showed that stress negatively impacts the overall performance of quantity surveyors in the following ways:

- Decreased accuracy in cost estimation and valuation
- Reduced concentration and higher error rates
- Low motivation and job satisfaction
- Delays in project delivery and inefficiencies in resource planning
- Impaired decision-making and problem-solving abilities

Most respondents agreed that high levels of stress lead to burnout, which affects the timeliness and quality of work delivered.

5.1.2 Coping Mechanisms

Quantity surveyors employed a mix of personal and organizational strategies to cope with stress, such as:

- Prioritizing tasks and effective time management
- Seeking support from team members and supervisors
- Taking short breaks or practicing stress-relief techniques

Using digital tools to simplify tasks

- Limiting overtime hours when possible

However, the study revealed that many of these coping mechanisms were applied informally, without structured support from the organization.

5.1.3 Role of Organizational Support

The research emphasized that lack of institutional support worsens stress levels. Organizations that invest in health and wellness programs, training, open communication, and recognition systems reported better staff morale and lower stress impacts.

5.1.4 Relationship Between Stress and Performance

Statistical analysis confirmed a significant negative correlation between stress levels and performance indicators. The higher the stress experienced by a quantity surveyor, the lower their reported productivity, job satisfaction, and accuracy in task execution.

Conclusion of the Findings

The findings establish that stress is a major factor influencing quantity surveying performance on construction sites. It impairs the effectiveness of professionals by reducing their capacity to focus, make timely decisions, and contribute efficiently to project goals. Without proper stress management strategies, construction firms may face reduced quality of work, increased costs, and delayed delivery.

5.2 CONCLUSION DRAWN FROM THE FINDINGS, INCLUDING HOW THE STUDIES HAS ANSWER THE RESEARCH QUESTIONS

The findings of this study have provided deep insight into the significant impact that stress has on the performance of quantity surveyors engaged in construction projects, particularly within the environment of Kwara State Polytechnic, Ilorin. The study successfully answered all the key research questions through a comprehensive analysis of data collected via structured questionnaires and supported by relevant literature.

How the Study Answered the Research Questions

Research Question 1:

What are the major sources of stress experienced by quantity surveyors in construction projects?

Conclusion:
The study found that quantity surveyors in the case study area are frequently exposed to a combination of stressors. The most common sources include tight project deadlines, unrealistic client expectations, heavy workload, poor communication among project teams, lack of rest, and financial constraints. These stressors are often aggravated by poor project planning and pressure to deliver results with limited resources. This finding aligns with global literature that links occupational stress in construction professions to performance decline.

Research Question 2:

How does stress affect the accuracy and timeliness of quantity surveying tasks?

Conclusion:
It was clearly observed that stress negatively affects both the accuracy and timeliness of quantity surveying tasks. Surveyors under pressure were more likely to make errors in cost estimation, tender documentation, and measurement. Stress also led to missed deadlines and delays in project reporting, thereby compromising the efficiency and reliability of the quantity surveying function. This shows that chronic stress leads to decreased cognitive performance and poor decision-making among quantity surveyors.

Research Question 3:

To what extent does stress impact the professional judgment and productivity of quantity surveyors?

Conclusion:
The findings revealed a strong correlation between stress levels and impaired professional judgment. Under

stress, quantity surveyors reported difficulties in making critical project-related decisions. Productivity was also significantly affected, as many respondents admitted that stress caused fatigue, mental exhaustion, and reduced focus, which ultimately hindered their output and the quality of work delivered. This impact was more severe in high-pressure phases of construction projects such as budgeting, procurement, and contract administration.

Research Question 4:

What strategies can be used to mitigate the impact of stress on quantity surveying performance?

Conclusion:
Respondents suggested multiple strategies to reduce stress, including better time management, adequate staffing, stress management training, and improved communication channels among project teams. Organizational support such as mental health programs, rest breaks, flexible work schedules, and realistic timelines were also recommended. These strategies, if implemented, could significantly improve job satisfaction and performance outcomes.

Overall Conclusion

The study concludes that stress is a critical factor influencing the performance of quantity surveyors in construction projects. It affects their accuracy, productivity, decision-making, and overall contribution to project success. The findings emphasize the need for construction stakeholders to recognize stress as an organizational concern and to adopt proactive measures in mitigating its effects.

Through the structured analysis and alignment with existing literature, the study has effectively answered all the research questions. The conclusion underscores the importance of creating a healthier work environment where quantity surveyors can thrive professionally without being overwhelmed by stress.

5.3 RECOMMENDATIONS BASED ON THE CONCLUSIONS

Based on the findings and conclusion of this study, which established that stress significantly affects the performance of Quantity Surveyors in construction projects manifesting through reduced productivity, errors in cost estimation, poor time management, and job dissatisfaction the following recommendations are made:

5.3.1. Promote a Supportive Work Environment

Construction firms and project managers should foster a psychologically supportive work environment by encouraging teamwork, open communication, and stress-relief programs. Creating channels for Quantity Surveyors to discuss workload challenges and emotional concerns can help prevent burnout and increase motivation.

5.3.2. Improve Workload Management and Task Allocation

Stress was found to arise from excessive workload and unrealistic deadlines. Therefore, organizations should employ proper workload planning strategies. This includes fair task distribution, engagement in project scheduling, and the provision of adequate time to complete assignments without undue pressure.

5.3.3. Introduce Stress Management Training

Employers should organize regular training and workshops on stress identification, time management, and coping strategies. Teaching Quantity Surveyors how to recognize stress signals and manage them can enhance performance and mental health.

5.3.4. Encourage Work-Life Balance

Construction firms should implement policies that promote a healthy work-life balance. This may include flexible working hours, leave policies, wellness breaks, and recreational activities. Allowing Quantity Surveyors personal time to recover mentally and emotionally will improve job satisfaction and efficiency.

5.3.5. Provide Adequate Resources and Tools

Stress levels can be exacerbated by lack of proper resources such as up-to-date software, reliable data, and technical support. Providing these essential tools and access to information helps Quantity Surveyors carry out their duties more efficiently and with less frustration.

5.3.6. Hire Adequate Personnel to Reduce Overload

Organizations should ensure that enough qualified Quantity Surveyors are employed to distribute the workload evenly. When too few professionals are assigned to large or complex projects, stress and errors become more prevalent. Adequate staffing improves project quality and individual performance.

5.3.7. Implement Regular Mental Health Checks

Periodic assessments of mental health and stress levels among staff should be integrated into organizational culture. Early detection of stress symptoms can help in timely intervention and prevent long-term damage to individual wellbeing and organizational performance.

5.3.8. Recognition and Incentives

Appreciation and rewards for performance can help reduce stress. Recognizing the contributions of Quantity Surveyors and offering performance-based incentives can increase motivation and morale, thereby reducing the negative impact of job-related stress.

5.3.9. Strengthen Communication Channels

Effective communication between management and Quantity Surveyors can reduce stress resulting from unclear instructions, conflicting roles, or misunderstandings. Regular meetings, feedback sessions, and clear documentation can improve understanding and performance.

5.3.10. Encourage Professional Development

Continuous training and professional development can boost confidence and reduce anxiety over new or complex tasks. Organizations should invest in certifications, seminars, and skill enhancement programs to equip Quantity Surveyors with updated knowledge and tools.

Final Note:

Implementing these recommendations will not only improve the performance and wellbeing of Quantity Surveyors but also enhance the overall productivity and efficiency of construction projects in institutions like Kwara State Polytechnic and beyond.

5.4 Suggestions for Further Research or Studies

Based on the findings, limitations, and scope of the study titled:

The following suggestions are proposed for future researchers who may wish to expand on this topic:

5.4.1. Expand the Geographical Scope

This study focused only on a single location Kwara State Polytechnic, Ilorin. Future researchers should consider expanding the study to cover multiple institutions, construction companies, or states across Nigeria to enable a broader understanding of stress factors affecting Quantity Surveyors nationwide and to enhance the generalizability of findings.

5.4.2. Investigate Gender Differences in Stress Response

Further research could examine how stress affects male and female Quantity Surveyors differently. Understanding these variations could help tailor stress management interventions to the specific needs of different genders in the construction industry.

5.4.3. Explore the Impact of Organizational Structure

Future studies may assess how different organizational structures (e.g., private vs. public sector, large vs. small firms) influence stress levels among Quantity Surveyors. This could identify organizational models that either mitigate or exacerbate work-related stress.

5.4.4. Longitudinal Studies on Stress Effects

This study adopted a cross-sectional design, capturing data at a single point in time. Longitudinal studies could be conducted to examine the long-term effects of stress on performance and health outcomes in Quantity Surveying professionals over an extended period.

5.4.5. Comparative Analysis Across Professions

Further research can compare the effect of stress in Quantity Surveying with other related construction professions such as civil engineers, architects, or project managers. This would provide a holistic view of stress dynamics within the construction project team.

5.4.6. Assess the Effectiveness of Stress Management Programs

Future researchers could investigate the effectiveness of specific stress management interventions (e.g., mindfulness training, workload restructuring, flexible working conditions) in improving the performance of Quantity Surveyors in high-pressure environments.

5.4.7. Study the Role of Technology in Stress Reduction

Another area for research is the role of modern technological tools such as Building Information Modeling (BIM), project management software, and AI tools in reducing the stress associated with Quantity Surveying tasks like cost estimation, tendering, and measurement.

5.4.8. Examine the Influence of Educational Background

Researchers could examine whether the level of education or professional certification (e.g., NIQS membership, postgraduate training) influences how well Quantity Surveyors cope with stress and perform under pressure.

5.4.9. Investigate Personal Coping Mechanisms

Future studies could focus on identifying personal coping mechanisms used by Quantity Surveyors, such as physical exercise, family support, or religious activities, and their effectiveness in managing stress.

5.4.10. Explore Cultural and Environmental Influences

Since stress perception and response can be shaped by cultural values and environmental factors, further research could explore how local cultural practices, climate, or socio-economic conditions contribute to or help alleviate stress among construction professionals.

CONCLUSION:

Further research in these suggested areas will contribute to a deeper, more diversified understanding of how stress affects Quantity Surveying performance and what practical, contextual strategies can be adopted to mitigate its impact. This will ultimately lead to improved productivity, better project outcomes, and enhanced wellbeing for professionals in the Nigerian construction industry.

APPENDIX

KWARA STATE POLYTECHNIC, ILORIN

INSTITUTE OF ENVIRONMENTAL STUDIES (IES)

DEPARTMENT OF QUANTITY SURVEYING

Dear Respondent,

I am a TIAMIYU ZAINAB ADEOLA with Matriculation Number HND/23/QTS/FT/0033 of the Department of Quantity Surveying, Institute of Environmental Studies, Kwara State Polytechnic, conducting research on **"Evaluating the Effect of Stress in Quantity Surveying Performance in Construction Project (A Case Study of Construction Project in Kwara State Polytechnic, Ilorin)"**

This research work is in partial fulfillment of the requirement for the award of Higher National Diploma (HND) in Quantity Surveying. The questionnaire is therefore part of the final assessment for data collection for the research. Please tick the correct answer to the questions that proceed.

Thanks for your cooperation.

SECTION A: Demographic Information

Please tick (✓) the appropriate option.

1. **Age:**
   ( ) 36 and above ( ) 31–35 ( ) 26–30 ( ) 20–25
2. **Gender:**
   ( ) Female ( ) Male
3. **Educational Qualification:**
   ( ) M.Sc. and above ( ) B.Sc./B.Tech ( ) HND ( ) ND ( ) PhD
4. **Years of Experience in Construction Projects:**
   ( ) Above 10 years ( ) 6–10 years ( ) 2–5 years ( ) Less than 2 years
5. **Current Role/Position:**
   ( ) Junior Quantity Surveyor ( ) Intern ( ) Student
   ( ) Project Manager ( ) Senior Quantity Surveyor

SECTION B: Sources of Stress in Construction Projects

Please tick the option that best describes your level of agreement.

Key: SD = Strongly Disagree D = Disagree U = Neutral A = Agree SA = Strongly Agree

Statement	**SA**	A	N	D	SA
Work overload is a major source of stress in my role.					
Short and unrealistic deadlines affect my peace of mind.					
Poor communication on site increases my stress.					
Lack of resources contributes to stress in quantity surveying tasks.					
Pressure from supervisors contributes to my stress.					
Conflicts with colleagues increase job-related stress.					

SECTION C: Effect of Stress on Performance of Quantity Surveyors

Statement	**SA**	**A**	**N**	**D**	**SA**
Stress reduces my work accuracy and efficiency.					
Stress leads to delays in meeting project deadlines.					
I make more mistakes in cost estimation when under stress.					
Stress reduces my concentration and decision-making skills.					
I feel less motivated to work when under persistent stress.					

SECTION D: Coping Mechanisms for Managing Stress

Statement	**SA**	**A**	**N**	**D**	**SA**
I manage stress by planning my work schedule effectively.					
I talk to colleagues or friends when under stress.					
I take breaks or time off to reduce my stress levels.					
My workplace supports stress management and mental well-being.					

I engage in physical or leisure activities to reduce stress.					

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