# IMPACT OF FACTORS INFLUENCING BUILDING REHABILITATION PERFORMANCE IN TANZANIA: A CASE OF TARIME PRISON IN MARA REGION

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# **CERTIFICATION**

The undersigned certifies that he has read and hereby recommends for acceptance by the Open University of Tanzania a dissertation entitled: "Impact of Factors Influencing Building Rehabilitation Performance in Tanzania: A Case of Tarime Prison in Mara Region", in partial fulfillment of the requirements for the award for the Degree of Master of Arts in Monitoring and Evaluation.

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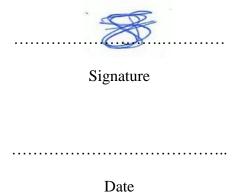
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# **DECLARATION**

I, Elizabeth Joshua Manjano, declare that, the work presented in this dissertation is original. It has never been presented to any other University or Institution. Where other people's works have been used, references have been provided. It is in this regard that I declare this work as originally mine. It is hereby presented in partial fulfillment of the requirement for the Degree of Master of Arts in Monitoring and Evaluation.



# **DEDICATION**

I am deeply grateful to my parents, Joshua Manjano and Grace Sule, for their unwavering support and guidance throughout my academic journey. Their love and efforts have been instrumental in my research. I dedicate this study to them as a token of my profound appreciation.

#### ACKNOWLEDGMENT

I am humbly grateful for the grace and blessings bestowed upon me by the Lord, as exemplified in Philippians 4:13: "I can do all things through Christ who strengthens me." With heartfelt appreciation, I begin by acknowledging the divine guidance and inspiration that accompanied me throughout this research journey.

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#### ABSTRACT

This study intended to examine the factors influencing building rehabilitation performance in Tanzania, particularly Tarime Prison. Specific objectives of the study were to examine the influence of project planning on building rehabilitation performance, to examine the influence of project financing on building rehabilitation performance, and to examine the influence of project team competence on building rehabilitation performance in Tarime prison in the Mara region. The agency theory and institutional theory were utilized. This study employed a post-positivism philosophical framework and a quantitative research approach. A descriptive research design was utilized and the population consisted of 136 staff members, and a simple random sampling technique was used to select a sample size of 101 individuals. Data was collected through structured questionnaires and a review of relevant documents. The collected data was analyzed using descriptive and inferential statistical methods with the aid of SPSS software. The findings of the study confirmed a significant relationship between project planning and building rehabilitation performance. Similarly, the study revealed that project financing also had a significant relationship with building rehabilitation performance. Additionally, there was a significant relationship found between project team competence and building rehabilitation performance. Based on these findings, it is recommended to adopt a mixed-methods approach, starting with qualitative research techniques to gain a comprehensive understanding of the crucial characteristics and variables that impact rehabilitation performance. This approach will provide valuable insights for optimizing building rehabilitation outcomes.

**Keywords:** Project Planning, Project financing, Project team Competence.

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# LIST OF ABBREVIATIONS

CAG Comptroller and Auditor General

GNP Gross National Product

PPA Public Procurement Act

SPSS Statistical Package for the Social Sciences

VfM Value for Money

#### **CHAPTER ONE**

#### INTRODUCTION

#### 1.1 Overview

Building projects are a strategic concern for the growth and development of any country, especially one with a booming economy. This study seeks to examine factors influencing building rehabilitation performance in Tanzania. The key justifications for the investigation are emphasized in this chapter, along with background information on the issue, a problem description, research objectives, research questions, the relevance of the study, and its scope and organization.

# 1.2 Background to the Study

One of society's basic requirements, housing is assisted by the construction industry, which plays a crucial part in a country's growth. Building projects, civil projects, road projects, and other construction-related activities are all included in construction projects (Fathi and Stevovic, 2017). These days, the topic of building projects is receiving more attention as a crucial component of economic development, particularly in the infrastructure, health, and other sectors, which help to streamline government processes in the direction of economic progress (Lamprou and Vagiona, 2018). The majority of building projects, however, are not carried out to a suitable level globally. They only stay for a short length of time before beginning to form fractures and ridges (Al-Shaaby and Ahmed, 2018).

Globally, there have been more construction projects with restraints, and this has an impact on performance. Dalcher (2018) claims that several construction projects in

Lebanon, Turkey, India, and Brazil were unsuccessful. The issue of poor performance in construction projects may be seen in many different ways. For example, many road projects are late, expensive, or fail to meet other performance benchmarks. In the past, several construction projects throughout the Middle East and Asia were unsuccessful (Ogunbayo and Mhlanga, 2022). This is due to several evidentiary reasons, including client hurdles, a lack of materials, project closure, changes to the design and drawing, additional work, waiting for a decision, turning over, variation orders, changes to the bill of quantities, and a delay in obtaining drawings (Deep et al., 2022).

In Africa, the growth and accomplishment of the continent's aims are significantly aided by the building sector. In African countries, construction is one of the main sectors and accounts for around 30% of the GNP (Amusan et al., 2021). African nations have, however, previously noted several difficulties with construction initiatives. For instance, the Ghanaian government has acknowledged, in conjunction with development partners that cost overruns, payment for unfinished projects, and failure to follow PPA requirements are among the issues that have an impact on the performance of construction projects (Ikuabe and Adekunle, 2022). Construction projects in Uganda are significantly impacted by contractor ineptitude, bad site management, inadequate oversight, and project cancellation (Ogunbayo, 2018). Poorly written projects, bad project management, a lack of technology, corruption, and poor relationship management are just a few of the obstacles that South Africa identified as impeding the execution of construction projects (Irfan et al, 2019).

When it comes to the size and proportion of the development process in East Africa, the building industry is quite important. The physical buildings required for many productive activities, including services, commerce, utilities, and other industries, are provided by the construction items, claims Bitamba (2020). In addition to being significant for the final product, the construction industry both directly and indirectly employs a sizable workforce, which has an impact on the economy of a nation or region throughout the actual construction process (Shafique and Amjad, 2020). However, a large number of building projects in Kenya and Uganda report poor performance as a result of numerous demonstrably project-specific factors, including a lack of materials, excessive design and drawing modifications, a lack of coordination, ineffective monitoring and feedback, as well as a lack of project leadership skills (World Bank, 2020). Due to this subpar performance, the East African government has suffered significant financial losses through projects (Arachchige, 2018).

In Tanzania, the construction industry is regarded as the nation's economic growth engine since it connects and creates jobs for other sectors. Throughout the past five years, the construction sector has contributed 7–10% on average to the national GDP (URT, 2020). The construction industry has experienced tremendous expansion recently, with developers coming up with a variety of building projects to draw in and satisfy their clients' different wants. Several factors have been cited as hurdles in the poor implementation of these projects, including changes to the design and drawings, a lack of collaboration between the participants, and inadequate oversight(Dixit et al. 2017). This leads to the abandonment of several projects and the loss of millions of taxpayer money. It is against this background, that the current study sought to examine factors influencing the building rehabilitation performance in Tanzania with a special focus on Tarime prison in the Mara region.

#### 1.3 Statement of the Problem

The construction industry in Tanzania holds a pivotal role in translating the needs and aspirations of its populace into tangible reality by erecting a diverse array of structures (URT, 2018). However, as this industry evolves, becoming progressively intricate, the imperative for a more sophisticated approach to address the challenges associated with building rehabilitation becomes increasingly evident. It's become clear that effective management throughout the entire project lifecycle, spanning initiation, planning, funding, design, authorization, implementation, and completion, is paramount. Regrettably, a plethora of hurdles stand in the way of successful building rehabilitation projects in Tanzania.

The Comprehensive Annual Government (CAG) report for the financial year ending in 2021/2022 underscores several pivotal factors contributing to the less-than-satisfactory performance of building projects in Tanzania. These include inadequate supervision, delayed disbursement of funds, insufficient community engagement, and suboptimal contractor relationship management (Mhando, Mlinga, & Alinaitwe, 2022). Recognizing the pivotal role of the construction sector in propelling the nation's economy, the Tanzanian government has rolled out a series of initiatives aimed at ensuring the punctual and high-quality completion of construction projects. These initiatives emphasize adherence to building code requirements, efficient information dissemination, effective project management, the enhancement of technical expertise, the recruitment of competent and dedicated practitioners, and judicious budget allocation. Nonetheless, the specter of substandard building projects continues to loom over Tanzania's building rehabilitation efforts.

While studies probing the performance of construction projects have diligently explored various facets, including efficiency, customer satisfaction, and value for money, the performance of building rehabilitation projects has occupied a relatively modest share of the research landscape (Serfontein, 2019). The predominant body of research has concentrated its gaze on other project types, such as water projects (Mkunga & Karanja, 2019), road constructions (Zainun, 2021), and bridge constructions (Meyer, Bruning, & Nyhuis, 2022). Consequently, the factors that wield substantial influence on the efficacy of building rehabilitation in Tanzania remain largely uncharted, despite theoretical and empirical attention lavished elsewhere.

Thus, this study embarked on a mission to fill this knowledge gap by conducting a comprehensive examination of the factors that exert influence on the performance of building rehabilitation projects in Tanzania, with a special focus on the Tarime prison in the Mara region. To elevate the quality, efficacy, and overall triumph of building rehabilitation endeavors in Tanzania, this research delved deep into these intricacies, striving to extract practical insights into techniques and practices that can be harnessed. The study was driven by a dedication to enrich the body of knowledge and guide participants in the Tanzanian construction sector toward the realization of sustainable and efficient building rehabilitation methods by identifying crucial criteria and deciphering their impact on project outcomes.

# 1.4 Research Objectives

#### 1.4.1 General Objective

To examine the factors influencing the building rehabilitation performance in

Tanzania.

# 1.4.2 Specific Objectives

- i. To examine the influence of project planning on building rehabilitation performance in Tarime prison in the Mara region.
- To examine the influence of project financing on building rehabilitation performance in Tarime prison in the Mara region
- iii. To examine the influence of project team competence on building rehabilitation performance in Tarime prison in the Mara region

# 1.5 Research Questions

- i. What is the influence of project planning on building rehabilitation performance in Tarime prison in the Mara region?
- ii. What is the influence of project financing on building rehabilitation performance in Tarime prison in the Mara region?
- iii. What is the influence of project team competence on building rehabilitation performance in Tarime prison in the Mara region?

# 1.6 Scope of the Study

This study was specifically conducted within the confines of Tarime Prison in the Mara area, with the primary objective of closely examining the influential factors that contribute to building rehabilitation performance in Tanzania. The selection of this particular research topic was driven by the researcher's extensive familiarity with the subject matter and the ease of access to the study site, which greatly facilitated the data collection process. A complete methodology was used, including the

collection of both primary and secondary data sources, to ensure a detailed and reliable conclusion in line with the study's aims. The study aims to give a more thorough, realistic, and holistic examination of the various factors that impact building rehabilitation performance within the specific context of Tarime Prison. by merging primary and secondary data.

# 1.7 Significance of the Study

This study holds significant implications for the government and policymakers, as it provides valuable insights to guide the implementation of building projects in public institutions, which play a vital role in driving national development. By effectively managing the factors that contribute to the successful completion of construction projects, this study can assist construction professionals in enhancing the overall success rate of such projects. Architects, engineers, quantity surveyors, construction project managers, and site agents can benefit from the study's findings, using them as a guide for their building projects. The study's results can also be valuable to project developers and clients, enabling them to improve the success of their building endeavors by mitigating potential risks that may hinder project completion. Moreover, the study adds to the existing body of knowledge on building projects, providing a reference point for academicians and offering insights into the effective management of construction projects in related fields.

# 1.8 Organizational of the Study

This dissertation consists of five chapters, each serving a specific purpose. Chapter One introduces the study, providing background information, stating the problem, and outlining the research objectives. Chapter Two reviews the relevant literature, expands the conceptual framework, and identifies knowledge gaps. Chapter Three details the research methods, including the study design, population, sampling, instruments, validity, reliability, analysis procedures, and ethical considerations. Chapter Four presents the study's findings related to the research objectives. Finally, Chapter Five provides a comprehensive discussion, summary, and conclusions based on the obtained results.

#### **CHAPTER TWO**

#### LITERATURE REVIEW

#### 2.1 Introduction

The chapter covers both the empirical research that has been conducted in a relevant field of study as well as the theoretical foundations that govern the elements impacting the performance of building rehabilitation in Tanzania. A conceptual framework is built to present a diagrammatical representation of the research variables.

# 2.2 Conceptual Definitions

# 2.2.1 Project

Projects are endeavors in which "human, material, and financial resources are organized in a novel way, to undertake a particular scope of work, of given specification, within the constraints of cost and time, to achieve beneficial change defined by quantitative and qualitative objectives," according to Dalcher (2018). This description makes it clear that project-based work involves a range of complex issues, the resolution of which necessitates a project specialist's skillful fusion of relevant qualifications, competence, expertise, and leadership.

# 2.2.2 Project Planning

According to Deep et al., (2022), Project planning is the process through which the time, money, effort, and human resources needed to complete the project are estimated, along with timetables, personnel, milestones, equipment, and budget estimations. The methodical allocation of project resources is the best strategy to

achieve the project's goals. It may also be referred to as one of the crucial instruments that stakeholders use to guarantee the success of initiatives (Irfan et al. 2022).

# 2.2.3 Project Financing

According to Thale (2017), project finance is the process through which a customer contributes cash to cover the cost of design, planning, labor, and permissions necessary to guarantee the construction project is completed. Financial institutions with a high risk tolerance are frequently among the sponsors, or investors, in a project finance arrangement.

# 2.2.4 Project Team Competence

Competence, in the words of Naaranoja and Savolainen (2016), is the successful display of a project team in carrying out certain tasks that are connected to behavior that is appropriate to the work, motivation, and technical knowledge/skills. Competence in project management for buildings refers to the capacity to carry out tasks in a project environment to anticipated and accepted standards.

# 2.2.5 Building Rehabilitation

According to Byaruhanga (2017), rehabilitation of buildings may be thought of as a collection of procedures intended to raise the caliber of a building's systems to achieve compliance with functional requirement criteria that are tougher than those envisaged. The primary goal of rehabilitation is to repair or restore a structure's functionality to levels that are comparable to or higher than those of a newly built

facility. Rehabilitation addresses the need to significantly improve a building's failing features by strengthening or replacing the failing components.

#### 2.3 Theoretical Literature Review

# 2.3.1 Agency Theory

In 1976, Jensen and Meckling created the Agency theory. The authors classified agency disputes into two categories. In the first, the dispute between management and shareholders is the main topic, whereas in the second, the conflict between equity and debt holders is the main topic. Disputes between shareholders and managers develop as a result of the fact that managers do not have whole claims, making it impossible for them to profit fully from their value-maximizing actions. According to Proverbs and Olomolaiye(2017), the second sort of conflict between debt holders and equity holders occurs when debt holders provide equity holders with an incentive to spend less than ideal.

According to the argument, asset managers who are left on their own are supposed to work in their employers' or electors' best interests. This indicates that the entire project should be carried out in a way that benefits owners, according to Gupta and Sloan (2018). According to the agency theory, project managers are the agents and the project beneficiaries are the principals. Hence, the agents are required to exert control for the advantage of the principal by providing adequate returns as they have authority on the principal's behalf. As stated by (Moyo, 2016). Managers should always work in the beneficiaries' best interests since agency theory outlines processes that decrease loss and increase benefits (wealth generation) to the

principal. This theory is important for project management because it underlines the importance of considering stakeholder interests in all project management choices. Agency theory applied to the study in that it supports the works of project managers in ensuring project planning, project financing, and project team competence influence the building rehabilitation performance in Tanzania particularly Tarime prison in the Mara region.

# 2.3.2 Institutional Theory

According to the institutional theory put out by Mayer and Rowan in 1977, as an organization interacts with the surrounding social systems, the institutional surroundings have an impact on the formation of formal organizational structures. The idea places a strong emphasis on how the application of rules, norms, laws, and regulations affects an organization's performance and growth (Mayer and Rowan, 1977). This indicates that to increase efficiency, an organization must adhere to established rules, conventions, laws, and regulations; these factors may also enhance the success of building projects. The institutional theory affects construction projects. The institutional theory emphasizes that for everyone to carry out their obligations by contract, both parties involved in construction projects must abide by the procedures, regulations, norms, and laws. Amusan et al. (2021) claim that institutional theory application may be compared to several aspects of construction projects. Contractors, for instance, are required to plan all construction activities and to abide by all applicable laws, rules, regulations, and standards. Moreover, social systems including politics, economics, technology, and other social system activities tend to affect how well building projects turn out. As Bitamba (2020) has claimed, the meddling of political activities in procurement caused many public institutions to fall short of their expectations in building projects. Therefore, the institutional theory was appropriate to determine how project planning, financing, and team competence influence the performance of building rehabilitation in Tanzania.

#### 2.3.3 Strength and Weakness of the Theories

For business executives and board members making strategic decisions, agency theory offers precise parameters (Immergut, 2017). It is useful if decision-makers have a propensity for greedy gain at the expense of the business. The narrowness of agency theory's behavioral presumptions and its theoretical emphasis are its biggest flaws. A larger spectrum of human motivations is disregarded by agency theory since it primarily emphasizes self-interested and opportunistic human behavior. It is also a good rule of thumb when a company's long-term goals collide with decisions that might benefit stakeholders sooner but at a lower cost (Powell, 2017).

The Institutional Theory served as the framework for a thorough examination of innovation. By drawing on theoretical contributions that highlight the differences between formal and informal institutions, as well as between regulative, normative, and cultural-cognitive types of institutions, as well as between the many levels of institutions (Dempster and Wildavsky, 2016). As a counterargument to then-dominant conceptualizations that regarded organizations in rationalist and decontextualized ways, institutional theory aimed to make sense of organizations as components of complex social systems. Insignificance, disobedience, and instability are the three categories of institutional weakness identified by Calvert (2018). Weak

institutions stay that way on purpose. So, even when they wish to bring about change, they lack the power to do it.

# 2.4 Empirical Literature Review

#### 2.4.1 Global Studies

To better understand how team dynamics and project success interact, Juras (2019) looked at the competency profiles of project team members. During the spring of 2018, a cross-sector empirical study was carried out, and 83 members of the project team's responses to questionnaires were used to collect data. With the inclusion of Hayes' (2018) Process Macro for SPSS - v3.2, the collected data was entered into and processed in SPSS 23.0. When evaluating the findings of cluster analysis and mediation effects connected to the interaction of project team members' competency profile, project team dynamics, and project performance, results from descriptive, bivariate, and multivariate analyses provided highly intriguing insights and conclusions.

In the public sector major engineering projects of Pakistan, Usman (2018) evaluated the impact of various project difficulties and project management skills of project managers and their effect on project performance. For this specific research study, quantitative research methods have been used. A total of 100 survey questionnaires were distributed to respondents; 82 of those proved to be suitable for further investigation. Along with leadership, managerial abilities, communication, ethics, and honesty, the results demonstrate that project management competency has a beneficial impact on project performance. Second, while the theory of environmental

complexity has not supported project performance, technical and organizational complexity have a detrimental impact on project performance. Moreover, a handful of complexity received good marks. For instance, when it comes to their influence on project performance, objectives, tasks, and market circumstances all received extremely high rankings.

To understand the enabling elements influencing the success of building projects in the architecture engineering and construction sector, Dixit (2020) undertook an analysis. The study's technique is the use of structured questionnaire surveys to gather primary data from the Indian construction sector. Reliability and factor analyses were used to analyze the data that had been obtained. The study's findings show how reliable the data gathered by a questionnaire survey was, with a Cronbach's alpha score of (0.86). Based on the correlation between the traits, exploratory factor analysis also identified five key important variables, which were further subdivided into aspects like site management and coordination, leadership and financial management, planning, commitment, and coordination influencing the success of building projects.

#### 2.4.2 African Studies

To determine the severity of these characteristics and how they impact the execution of building projects in Mombasa County, Sammy (2020) set out to identify and assess these aspects. A thorough examination of the literature was conducted to compile data from previous studies on the variables that determine how well construction projects perform. Data were then collected through structured

questionnaire distribution and interviews. The proper sampling approach, one that gives the population equal odds, was chosen: random sampling. The SPSS 17.0 was used to code and analyze the data. The project manager's competency, tough competition during tendering, resource allocation to projects, and stakeholder enragement influence during construction were recognized as the four primary elements impacting the performance of construction projects by the researcher.

With a focus on gated communities in Nairobi County, Kihoro and Waiganjo (2018) intended to conduct a survey to look at the variables impacting the success of building projects in Kenya. The survey design was descriptive. Closed and openended questionnaires were the data-gathering tools employed. The statistical program SPSS was used to analyze the data. The results show a high positive correlation between project planning, funds management, project team competency, and project performance. According to the findings of this study, performance is a dependent variable that is influenced by several independent variables. The majority of property managers firmly believed that planning, funds management, and the project manager's competency were crucial to the success of a project. The report advised using multiple criterion analysis during planning as well as effective relationship management amongst all project stakeholders.

Using the Village Saving Loan Association Project in the Gasabo District of World Vision as an example, Ruzibiza (2017) evaluates the impact of project team competencies on the execution of development initiatives in Rwanda. In this study, a descriptive research design was used. The proper measurement of the connections

between the dependent and independent variables was done using correlations. The data was gathered using structured questionnaires with a total sample size of 92 respondents. According to study results, professional competence and project performance have a high positive connection of 0.613; The weak positive correlation between social competence and project performance is 0.465, while the weak positive correlation between leadership competence and project performance is 0.041. So, this study came to the conclusion that social and professional competency affected how well development programs performed. This study makes several recommendations, including expanding access to workshops and training sessions for professional development; encouraging and mentoring one another through established social networks to promote the implementation of development projects; and emphasizing the importance of project leadership competency from the very top.

Muute (2019) set out to investigate how project planning procedures affected the success of building projects in Kenya's Nairobi City County. Primary data were gathered via a semi-structured questionnaire. The Statistical Package for the Social Sciences was used to code and input the data for analysis (SPSS). According to the study's findings, the majority of businesses train their project team members. The findings showed that the project was being completed without much difficulty and that the planned finances were sufficient. The analysis also showed that the project's outcome had been specified and that all of the material resources allotted had been used. The survey also discovered that planning for quality projects was being done efficiently. The study came to the conclusion that project team members' skills and expertise, planning for human resources, managing time, planning for materials, and

planning for finances considerably and favorably affect how well construction projects operate. According to the study's findings, construction companies should implement appropriate training programs that are ongoing to grow the industry's human resource base. According to the study, cost estimation should be based on the project scope and linked to the project schedule.

Siborurema (2018) assessed the impact of project funding in Rwanda on project performance. The target audience was divided into two groups: one group was made up of those responsible for planning and funding the project, while the other group was made up of those in charge of overseeing its implementation. Data were gathered through a specially designed questionnaire, the review of pre-existing records, and interviews. According to data analysis, the technical design and cost estimation both harm the financing policy for projects and the planned project execution time. Conclusions and suggestions based on best practices were made in light of the findings.

#### 2.4.3 Tanzania Studies

Munyoki (2020) set out to determine the variables that affect how quickly building projects are completed. The study's method for gathering data was a questionnaire. Descriptive statistics, inferential statistics, and Spearman's correlation coefficients were all employed in the data analysis process, and regression analysis was performed to determine a mathematical connection between the variables. The results demonstrated how details about the length of a construction contract and the manner of project delivery selected, respectively, affect how quickly construction projects

are completed. The results demonstrated that, even though the method of project delivery chosen may vary for several reasons, it is the most effective in assuring project completion. According to the report, projects should be overseen by qualified project managers, and clients should supply sufficient project money. Contractors shouldn't experience cash flow issues, and project teams should get project success factor training.

The Musoma and Butiama District Councils were the sites of Kazare's (2019) assessment of the factors impacting the performance of construction projects in public institutions. Both a quantitative and a qualitative method were utilized to gather data for the study using questionnaires and a review of the supporting documentation. Factor analysis, linear regression analysis, and correlation analysis were used to assess the data that had been gathered. The study discovered a substantial correlation between project planning, project timeline, communication, political interference, project supervision, and technical proficiency with project performance, as all predictors were 0.05. The survey also found that the main difficulties facing building projects at public institutions are a shortage of technical expertise, a delay in project completion, and insufficient funding. It also found that 63% of respondents thought a lack of technical staff was the biggest obstacle to construction projects in public institutions. To ensure VfM in public construction projects, the research advised public institutions to ensure thorough project planning and project schedule preparation by experienced staff.

# 2.5 Research Gap

Several comprehensive reports analyzing building projects have been completed, each of which provides insights into the factors impacting project performance. However, most of these studies have not comprehensively explored all performance measures and have primarily focused on the commercial sector and organizations in other countries, rather than the public sector, specifically Tanzanian prisons. Moreover, the findings from previous research have been inconsistent and inconclusive, highlighting the need for further investigation. Notable studies conducted by Juras (2019), Usman (2018), Muute (2019), and Siborurema (2018) have contributed to the existing body of knowledge. To address this research gap, the present study aims to examine the factors influencing building rehabilitation performance in Tanzania, with a specific focus on Tarime prison in the Mara region.

# 2.6 Conceptual Framework

The conceptual framework of this study explains the relationship between independent variables and dependent variables. Independent variables in this study are project planning, project financing, and project team competence. The dependent variable of this study is building rehabilitation performance.

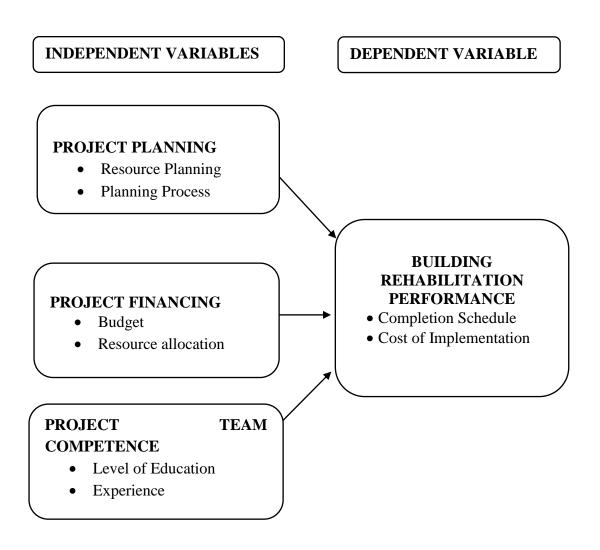


Figure 2.1: Conceptual Framework

**Source:** Researcher, (2023)

# 2.6.1 Description Measurements of the Variables

The description measurements indicate the relationship between independent variables and building rehabilitation performance linkages for the objectives of this study. The table shows a description of variables explaining differences in building rehabilitation performance measures and those linkages in three levels of the study concerning the factors influencing building rehabilitation uses.

Table 2.1: Definitions of the factors influencing the building rehabilitation performance

VARIABLE NAME	VARIABLE DEFINITION
<b>Building Rehabilitation</b>	Number of projects completed within schedule
Performance	Total cost of implementation within budgeted
<b>Project Financing</b>	Total number of required inputs
	Number of stages used for project planning
Project Financing	Budget allocated to the projects
	Resource allocated to the projects
<b>Project Team Competence</b>	The level of education of the project members
	Experience of the project members

**Source:** Described by the researcher from the conceptual framework (2023).

#### CHAPTER THREE

#### RESEARCH METHODOLOGY

## 3.1 Chapter Overview

This chapter presented the methods employed to conduct the specific investigation. It outlined the research methodology, study region, target population, sample size and design, sampling procedures, types of data utilized in the study, data collection tools and methods, and the data analysis strategy. A comprehensive account of these elements was provided in this chapter, offering detailed insights into the methodology adopted for the investigation.

## 3.2 Research Philosophy

In this study, the philosophical framework of post-positivism was employed. The post-positivist paradigm, as explained by Majid (2017), is a philosophical perspective that departs from the exclusively objective approach of logical positivists and instead emphasizes the subjectivity of reality. The researcher chose to utilize the post-positivism philosophy as it recognizes inherent biases and provides a novel perspective. Recognizing that reality is socially constructed, the focus shifted toward the discursive process and external factors to construct the research.

## 3.3 Research Approach

The study employed a quantitative research strategy, which involves explaining phenomena using numerical data and mathematically based methodologies, particularly statistics (Brestoff, 2018). Closed questionnaires were utilized to collect quantitative data, employing a quantitative approach. This approach was employed in

the study to gather information and perspectives on the factors influencing building rehabilitation performance in Tanzania.

# 3.4 Research Design and Strategy

In the study, a research design was utilized to outline the processes and methodologies that determined the course of the investigation (Altman, 2015). According to Denzin and Lincoln (2017), a research design involves selecting research participants, identifying study locations, and determining data collection methods. In this study, a descriptive research design was employed to examine the relationships between the variables under investigation. The choice of a descriptive design allowed for flexibility in terms of time and resources, as well as a strategic approach to overcoming challenges associated with repeatedly pursuing respondents to achieve a high response rate.

#### 3.4.1 Area of the Study

The study was conducted at Tarime prison in the Mara region of Tanzania to address the existing gap in research on factors influencing building rehabilitation performance. This choice was made due to the lack of previous studies in this specific area. The selected location offered valuable insights and opinions on the factors affecting the effectiveness of building rehabilitation. The prison staff from Tarime Prison provided detailed information on the current situation and offered suggestions regarding the variables impacting the rehabilitation of the facility. These insights were objectively presented in the research papers using appropriate words, phrases, and textual analysis. Additionally, the familiarity of the researcher with the

study area facilitated the collection of information, making it an ideal choice for the study.

# 3.4.2 Population of the Study

Browner (2018) defined a study population as a clearly defined group of people or things known to possess specific characteristics. Typically, every individual or entity within a population shares a common identifying trait. In this study, a total of 136 staff members from Tarime Prison were included in the study population.

# 3.4.3 Sample and Sampling Techniques

The researcher employed the probability sampling method for participant selection in this study. Specifically, a simple random sampling approach was utilized, where each member of the statistical population had an equal chance of being selected (Kamangar, 2018). Equal opportunities were given to employees of Tarime prison to participate in the study. Determining an appropriate sample size is a critical aspect of any empirical study aiming to conclude a population from a sample. In this investigation, a minimum sample size of 100 individuals was selected from the population expected to respond to surveys. The sample size was determined using the formula developed by Krejcie and Morgan (1970);

$$n = \frac{N}{1 + N \cdot e^2} n = \frac{136}{1 + 136 \cdot 0.05^2} = 101$$

Where n = number of samples, N = total population; e = standard error of sampling (5%) is tolerated.

Table 3.1: Targeted sample size

Department	Population	Sample Size	Sampling Technique
Department of Administration	6	4	Random sampling
Department of Finance	2	1	Random sampling
Department of Human Resource	2	1	Random sampling
Department of Customer Service	4	3	Random sampling
Department of Quality Assurance	12	9	Random sampling
Department of Operations	42	31	Random sampling
Department of IT	2	1	Random sampling
Department of Production	63	49	Random sampling
Department of Procurement	3	2	Random sampling
TOTAL	135	101	

Source: Researcher (2023).

#### 3.5 Data Collection

This investigation harnessed data from both primary and secondary sources, a methodological choice made to ensure a comprehensive and well-rounded research endeavor. Primary data collection was executed through the administration of structured questionnaires to the study's respondents. These questionnaires were thoughtfully designed to contain two distinct sections, each serving a specific purpose. The first section was crafted to elicit general information about the participants, information that was deemed relevant to the research's objectives. The second section was constructed to gauge the respondents' perspectives and opinions by having them indicate their level of agreement with a series of belief statements. The choice of a questionnaire-based approach was grounded in its proven effectiveness in gathering thorough and structured data (Majid, 2017). In this research context, it provided a structured framework for collecting responses and

facilitating data organization and analysis. The selected sample, being proactive

participants, independently completed the questionnaires. A drop-and-pick-up method for questionnaire distribution was employed, offering convenience to the respondents and ensuring the efficient collection of data.

In addition to primary data, secondary data was gathered through a comprehensive review of relevant documents. This step was taken to augment and corroborate the primary data findings with existing literature and records. The adoption of both primary and secondary data collection approaches was driven by a well-considered recognition that each method has its distinct advantages. The use of structured questionnaires allowed for the precise collection of targeted data from the study's participants, while the review of secondary sources enriched the research with a broader contextual understanding. This dual-method approach aimed to maximize the depth and breadth of insights, outweighing any potential drawbacks and contributing to a robust research outcome.

## 3.6 Data Analysis

Data analysis involves the computation and exploration of relationships between variables, encompassing tasks such as editing, coding, classification, and tabulation of the gathered data (Hutter and Bailey, 2018). In this study, the researcher utilized the Statistical Package for Social Science (SPSS) to conduct both descriptive and inferential analyses. The descriptive analysis provided a comprehensive overview of how project planning, project financing, and project team competence influence building rehabilitation performance. Additionally, correlation analysis was employed to examine the associations between the study's variables, revealing the strength and

direction of their relationships with each other. These analytical approaches allowed for a deeper understanding of the data and facilitated the interpretation of the study's findings.

# 3.7 Data Cleaning and Processing

According to Fowler (2016), data cleaning involves the process of identifying and correcting missing, inaccurate, unreliable, or irrelevant information by adding, modifying, or removing data from the collected dataset, table, or database. Similarly, Greene (2017) defined data processing as the compilation of processes, including data validation, coordination, conversion, inclusion, and extraction, performed to transform raw data into a suitable output format for further use. In this study, the researcher ensured that the data was cleaned and analyzed to provide insightful results.

## 3.8. Reliability and Validity of the Instrument

Validity and reliability tests were conducted by the researcher to ascertain whether the data obtained were valid and reliable.

## 3.8.1 Reliability of the Instrument

To ensure the dependability and reliability of the data collection instrument, it was evaluated with a different sample of respondents. The responses collected will be analyzed to check for consistency and reliability. The dependability of the research tool is established when the findings can be replicated using a comparable method (Grady, 2015). The reliability of the collected data was assessed using Cronbach's

alpha, which measures internal consistency. According to Creswell and Miller (2018), a Cronbach's alpha coefficient above 0.6 indicates higher reliability and is considered acceptable. The results indicate that the variables of Project Planning and Building Rehabilitation Performance demonstrated high internal consistency, with Cronbach's alpha values of .849 and .823, respectively. This suggests that the items within these variables reliably measure the constructs they represent. However, the variables of Project Financing and Project Team Competence showed moderate internal consistency, with Cronbach's alpha values of .635 and .692, respectively. While these values indicate acceptable reliability, there is room for improvement. The reliability statistics confirm the dependability of the data collected and provide confidence in the accuracy and consistency of the study's findings.

**Table 3.2: Reliability Statistics** 

Reliability Statistics						
Variable	Cronbach's Alpha	N of Items				
Project Planning	.849	10				
Project Financing	.635	10				
Project Team Competence	.692	10				
Building Rehabilitation Performance	.823	10				

**Source:** Field Data (2023)

## 3.8.2 Validity of the Instrument

The study's validity was evaluated using the Kaiser-Meyer-Olkin measure, which determines the sampling adequacy for factor analysis. As per Grady (2015), a Kaiser-Meyer-Olkin value of 0.6 or above is considered acceptable, and the Bartlett test should yield a significance value of less than 0.05. The variables in the study exhibited satisfactory sampling adequacy, as indicated by the Kaiser-Meyer-Olkin

measure. The values obtained were as follows: Project Planning (0.652), Project Financing (0.708), Project Team Competence (0.747), and Building Rehabilitation Performance (0.679). These values exceeding 0.6 indicate that the data collected was appropriate for factor analysis. Furthermore, Bartlett's Test of Sphericity yielded highly significant results for all variables, with p-values of 0.000. This signifies a strong correlation among the variables, supporting the suitability of conducting factor analysis. The findings validate the reliability and robustness of the data collected in the study, enabling accurate analysis and interpretation of the results.

Table 3.3: Kaiser-Meyer-Olkin Measure of Sampling Adequacy

Variable	Kaiser-Meyer-Olkin	Bartlett's Test of Sphericity			
	Measure of Sampling	Approx.	df	Sig.	
	Adequacy	Chi-Square			
Project Planning	.652	634.387	45	.000	
Project Financing	.708	648.980	45	.000	
Project Team	.747	657.831	45	.000	
Competence					
Building Rehabilitation	.679	414.145	28	.000	
Performance					

Source: Field Data (2023).

#### 3.9 Ethical Consideration

As articulated by Altman (2015), moral decisions that govern behavior and interactions with others are shaped by established norms and standards. In the context of this study, rigorous precautions were meticulously undertaken to safeguard the well-being of the participants and preempt any potential harm or adverse consequences that might arise from the research procedures. Paramount in these precautions was the protection of participant rights, which was vigilantly ensured by transparently communicating the academic purpose of the study and

delineating their entitlements, which encompassed the crucial tenets of confidentiality and anonymity.

Furthermore, respondents were not left in the dark regarding the consent process; they were comprehensively informed through a letter of reference from the Open University of Tanzania, which not only offered them insight but also served as a guiding document. These proactive measures were systematically implemented with the overarching objective of upholding the highest ethical standards. In doing so, they not only served as a shield for the rights and welfare of all participants involved in the study but also reinforced the principles that underscore ethical research practices.

#### **CHAPTER FOUR**

## FINDINGS AND DISCUSSION

#### 4.1 Introduction

This chapter showcases the research findings regarding the factors influencing building rehabilitation performance in Tanzania particularly Tarime prison in Mara region. Thoroughly collected and analyzed, the data obtained through questionnaires have been effectively presented, offering valuable insights illustrated through figures and tables. These visual representations contribute to a comprehensive understanding of the research findings, enriching the overall knowledge of the factors influencing building rehabilitation performance in Tanzania.

## **4.2 Sample Description**

An exceptional achievement was reached with a remarkable 100% response rate for the study, as all 101 distributed questionnaires were completed and returned by the respondents. This remarkable level of involvement is a result of the rigorous work done to promote and enable the participation of all those who have been identified as being relevant. It was made sure that responders understood the goals and objectives of the study by sending them personalized invitations along with clear and explicit instructions. A variety of contact options were used to increase accessibility, and thank-you messages were issued to acknowledge the recipients' significant contributions. These tactics were crucial in promoting high levels of participation and producing a large dataset for analysis, which further increased the validity and importance of the study's findings.

# **4.3 Demographic Information**

The social background of the study participants was given great consideration under this paragraph. A set of well-designed questions was used to collect pertinent demographic data. These inquiries sought information on three crucial categories: gender, respondents' ages, and respondents' level of education.

## 4.3.1 Gender of the Respondents

From Figure 4.1 below, the gender distribution among the participants revealed that 72.3% were male, while 27.7% were female. This gender disparity raises the possibility that there may be an imbalance in the involvement and decision-making processes about Tarime Prison's building repair. It is imperative to advance gender mainstreaming and make sure that women actively participate in project planning and decision-making to rectify this imbalance.

GENDER OF THE RESPONDENTS

Female
28%

Male
72%

Figure 4.1: Gender

Source: Field Data (2023).

# **4.3.2** Age Distribution

The age distribution of the participants in Figure 4.2 showed a relatively balanced representation across different age groups, with 27.7% in the 25-34 years category, 43.6% in the 35-44 years category, and 28.7% aged 45 years and above. This diversity in age suggests the involvement of individuals from various age brackets in the project planning process for building rehabilitation. Leveraging this diversity can bring valuable perspectives, experiences, and skills to the table, fostering an environment of innovation and enabling a more comprehensive and well-rounded approach to building rehabilitation. It allows for the exchange and combination of ideas from different generations, leading to better stakeholder engagement, more informed decision-making, and improved project outcomes for Tarime Prison in the Mara region.

AGE DISTRIBUTION

Series Frequency Percent

45
40
35
30
25
20
15
10
5
0
25-34 Years
35-44 Years
45 Years and above

Figure 4.2: Age Distribution

Source: Field Data (2023).

#### 4.3.3 Education Level

Figure 4.3 below which is about education levels, a significant majority (51.5%) of the participants held a bachelor's degree, while 28.7% had postgraduate qualifications. This indicates that individuals with higher education qualifications are actively engaged in project planning for building rehabilitation in Tarime Prison. The presence of educated professionals contributes significantly to the planning process, bringing in expertise, knowledge, and critical thinking skills. Their involvement ensured a well-informed and strategic approach to the rehabilitation project, leading to more effective and sustainable outcomes.

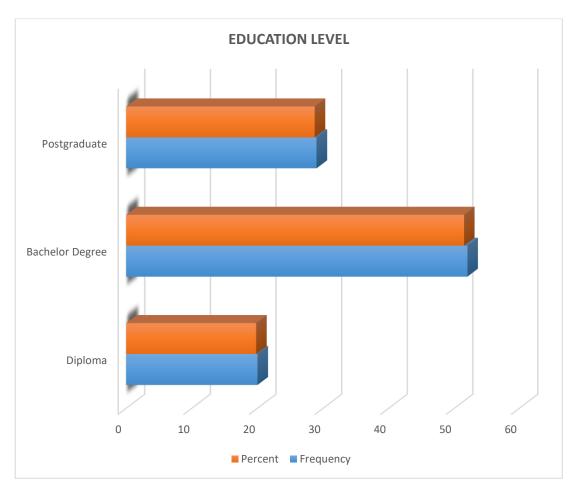


Figure 4.3: Education Level

Source: Field Data (2023).

# **4.4 Presentation of Findings**

The study findings present an assessment of the factors influencing building rehabilitation performance in Tanzania. The assessment utilized a five-point scale to categorize mean scores: scores below 1.5 were classified as "No Extent," scores between 1.5 and 2.5 as "Little Extent," scores between 2.5 and 3.5 as "Moderate Extent," scores between 3.5 and 4.5 as "Large Extent," and scores from 4.5 to 5 as "Very Large Extent." The standard deviation (SD) was considered as a measure of dispersion, where a low value indicated close clustering of data around the mean, while a high value indicated greater dispersion. Findings based on the research objectives are provided below.

# 4.4.1 Influence of Project Planning on Building Rehabilitation Performance

The study aimed to examine the influence of project planning on building rehabilitation performance in Tarime prison in the Mara region. The findings and results of this analysis are summarized in Table 4.1 as follows:

Table 4.1: Influence of Project Planning on Building Rehabilitation

Performance

STATEMENTS	Mean	SD
The building rehabilitation project efficiently allocates all	4.4	0.72
available resources, including skilled employees and		
infrastructure.		
The allocation of adequate resources significantly impacts the	3.3	0.69
performance and success of the project.		
The project manager of the building rehabilitation project	4.3	0.85
demonstrates the ability to accurately estimate project costs.		
Before commencing the building rehabilitation, a comprehensive	3.2	1.42
evaluation of project costs is conducted.		
Thorough scheduling is implemented before initiating a structure	3.5	1.43
rehabilitation project.		
Building rehabilitation performance is continuously monitored to	3.6	1.24
track scheduled dates, compare them with actual dates, and assess		
the consequences of any schedule modifications.		
Activity durations are estimated to effectively determine the	2.9	1.26
required time for completing building rehabilitation activities.		
The planning phase encompasses comprehensive risk assessment	3.4	1.13
to proactively identify and address potential challenges.		
Effective stakeholder engagement and communication channels	3.2	1.46
are established as integral parts of the project planning process.		
The planning process incorporates sustainability considerations to	3.5	1.20
ensure long-term benefits and minimize environmental impact		
COMPOSITE MEAN	3.53	

Source: Field Data (2023).

The majority of respondents indicated that the building rehabilitation project efficiently allocates all available resources, including skilled employees and necessary infrastructure (Mean = 4.4, SD = 0.72). This shows that efficient resource management improves the overall effectiveness of building repair initiatives. Furthermore, the project manager's ability to accurately estimate project costs was reported to have a large extent of influence on the project's success (Mean = 4.3, SD = 0.85). Accordingly, precise cost assessment is essential for efficient financial planning and resource allocation. An accurate cost estimate for the project improves

budgeting and financial management, which increases the likelihood that the project will be completed successfully. The study also found that a comprehensive evaluation of project costs is conducted to a moderate extent before commencing the building rehabilitation (Mean = 3.2, SD = 1.42). This means that there is potential for improvement in carrying out in-depth cost studies. To effectively control costs throughout the rehabilitation process and identify potential cost overruns, a more thorough cost evaluation of the project is recommended.

Thorough scheduling, although reported to be implemented to a moderate extent, is essential for efficient project execution (Mean = 3.5, SD = 1.43). This suggests that optimizing scheduling can result in better building rehabilitation performance by providing proper time allocation, sequencing of tasks, and coordination. The study highlights the importance of continuous monitoring and tracking of building rehabilitation performance (Mean = 3.6, SD = 1.24). This suggests that regular monitoring of scheduled dates, comparing them to actual dates, and evaluating the effects of any schedule alterations might assist in identifying delays or deviations and taking remedial actions as soon as they are discovered.

Effective risk assessment and stakeholder engagement were reported to be integral parts of the project planning process to a moderate extent (Mean = 3.4, SD = 1.13). This suggests that there is an opportunity for improvement in terms of anticipating and proactively resolving possible problems. A smoother project execution process and higher stakeholder satisfaction may be achieved by strengthening the risk assessment process and creating effective stakeholder engagement and communication channels.

Also, the study emphasizes the incorporation of sustainability considerations into the project planning process to a moderate extent (Mean = 3.5, SD = 1.20). There is a need to further integrate sustainability practices and principles into building rehabilitation projects. By considering long-term benefits and minimizing environmental impact, the project contributes to sustainable development and leaves a positive legacy. The average mean of 3.53 indicates that, to a large extent project planning influences building rehabilitation performance.

# 4.4.2 Influence of Project Financing on Building Rehabilitation Performance

The study sought to examine the influence of project financing on building rehabilitation performance in Tarime prison in the Mara region. The findings and results of this analysis are summarized in Table 4.2 as follows:

Table 4.2: Influence of Project Financing on Building Rehabilitation

Performance

STATEMENTS	Mean	SD
Enough resource allocation leads to building rehabilitation	3.9	0.94
performance		
Donor funding leads to building rehabilitation performance	3.6	1.21
Government funding facilitates the achievement of intended	3.0	1.22
goals in the building rehabilitation project		
Financial adequacy influences the building rehabilitation	3.5	1.42
performance		
Budget availability influences the building rehabilitation	3.6	1.11
performance		
Sufficient funding enables the use of high-quality materials	3.8	0.58
and skilled labor		
Timely disbursement of funds enhances the efficiency and	3.5	0.96
progress of the building rehabilitation project.		
The availability of contingency funds helps address	4.2	0.64
unforeseen challenges and maintain project performance.		
Effective financial management practices contribute to	2.7	0.89
optimal building rehabilitation performance.		
Financial institutions' collaboration and accessing external	3.3	1.31
funding opportunities strengthen the financing capacity		
COMPOSITE MEAN	3.51	

**Source:** Field Data (2023)

The study indicates that sufficient resource allocation is associated with building rehabilitation performance (Mean = 3.9, SD = 0.94). This suggests that getting excellent results in building rehabilitation projects depends significantly on the efficient allocation of resources, including materials and trained personnel.

Respondents emphasized the importance of donor funding in building rehabilitation performance (Mean = 3.6, SD = 1.21). This suggests that external funding sources have a substantial impact on the success of the project. Additionally, government funding was reported to facilitate the achievement of goals in the building

rehabilitation project (Mean = 3.0, SD = 1.22), highlighting the significance of adequate financial support from the government.

On the other hand, the findings indicate that financial adequacy and budget availability may not be perceived as major influences on building rehabilitation performance. The study findings highlight the agreement among respondents regarding the influence of financial adequacy and budget availability on project performance. It was observed that financial adequacy significantly impacts project performance (Mean = 3.5, SD = 1.42), and similarly, budget availability was found to have a significant impact (Mean = 3.6, SD = 1.11). The findings show that having enough financial resources is essential for obtaining successful building rehabilitation outcomes, especially in terms of the caliber of materials and personnel. Additionally, respondents acknowledged the importance of timely disbursement of funds, recognizing it as a beneficial factor that enhances the efficiency and progress of the building rehabilitation project (Mean = 3.5, SD = 0.96). This finding emphasizes the significance of adequate and timely financial resources in ensuring the successful execution of building rehabilitation initiatives.

Availability of contingency funds was also deemed important, as it helps address unforeseen challenges and maintains project performance (Mean = 4.2, SD = 0.64). The study further highlights the importance of effective financial management practices. Transparent budgeting and accurate cost tracking were found to contribute to optimal building rehabilitation performance (Mean = 2.7, SD = 0.89). This emphasizes the need for sound financial management throughout the project to ensure successful outcomes.

Collaborating with financial institutions and accessing external funding opportunities were reported to strengthen the financing capacity and positively influence building rehabilitation performance to a moderate extent (Mean = 3.3, SD = 1.31). This implies that exploring partnerships and external funding sources can enhance the financial viability of the project and contribute to improved performance. The average mean of 3.51 indicates that, to a large extent the project financing influences building rehabilitation performance.

# 4.4.3 Influence of Project Team Competence on Building Rehabilitation Performance

The study sought to examine the influence of project team competence on building rehabilitation performance in Tarime prison in the Mara region. The findings and results of this analysis are summarized in Table 4.3 below.

**Table 4.3: Project Team Competence on Building Rehabilitation Performance** 

Statements	Mean	SD
Performance in building rehabilitation is a direct outcome	3.8	1.20
of the project team's professionalism.		
Building rehabilitation projects benefit from professional	3.5	1.20
experience.		
Stakeholder satisfaction is produced by the presence of	3.9	0.94
professional skills in building rehabilitation.		
Due to the presence of professional knowledge, building	3.6	1.21
rehabilitation projects are finished on schedule, within		
budget, and according to scope.		
Building rehabilitation performance is influenced by team	3.0	1.22
professional competency.		
The project team's professional devotion ensures that the	3.5	1.42
building rehabilitation project is finished on schedule,		
within budget, and according to scope.		
Building rehabilitation project is finished within schedule,	3.6	1.11
budget & scope due to the project team's capacity to		
utilize Professional skills.		
Most of the Project team members in the building	3.8	0.58
rehabilitation project are equipped to execute professional		
competence.		
The project team's effective coordination and	3.5	0.96
collaboration contribute to improved building		
rehabilitation performance.		
The presence of a diverse range of skills and expertise	4.2	0.64
within the project team enhances the overall quality and		
success of building rehabilitation projects.		
COMPOSITE MEAN	3.64	

Source: Field Data (2023).

Respondents claimed that performance in building rehabilitation is a direct outcome of the project team's professionalism to a large extent (Mean = 3.8, SD = 1.20). This highlights the significance of having a highly skilled and competent project team in achieving successful outcomes. The majority of the respondents asserted that building rehabilitation projects benefit from professional experience (Mean = 3.5, SD = 1.20). This implies that the expertise and experience of the project team members positively contribute to the success of the projects.

Stakeholder satisfaction was reported to be produced by the presence of professional skills in building rehabilitation (Mean = 3.9, SD = 0.94). Stakeholders, such as clients, residents, and other involved parties, perceive and appreciate the value of professionalism in delivering satisfactory results. The research findings showed agreement that due to the presence of professional knowledge, building rehabilitation projects are finished on schedule, within budget, and according to scope (Mean = 3.6, SD = 1.21). This indicates that the project team's professional expertise plays a crucial role in achieving project objectives and ensuring project success.

Building rehabilitation performance was found to be influenced by the team's professional competency (Mean = 3.0, SD = 1.22). The skills, knowledge, and abilities of the project team members directly impact the performance and outcomes of the building rehabilitation project. The study further indicates that the project team's professional devotion ensures that the building rehabilitation project is finished on schedule, within budget, and according to scope (Mean = 3.5, SD = 1.42). This emphasizes the importance of the team's commitment and dedication to delivering successful results.

The results indicate that the building rehabilitation project is finished within schedule, budget, and scope due to the project team's capacity to utilize professional skills (Mean = 3.6, SD = 1.11). This implies that the project team's ability to apply their professional skills effectively contributes to meeting project objectives. Most of the project team members in the building rehabilitation project were reported to be equipped to execute professional competence (Mean = 3.8, SD = 0.58). This suggests

that the majority of the team possesses the necessary skills and expertise to perform their roles effectively.

The project team's effective coordination and collaboration were found to contribute to improved building rehabilitation performance (Mean = 3.5, SD = 0.96). This highlights the importance of teamwork and effective communication among team members in achieving successful project outcomes.

The study results also noted agreement among respondents that the presence of a diverse range of skills and expertise within the project team enhances the overall quality and success of building rehabilitation projects (Mean = 4.2, SD = 0.64). This indicates the value of having a well-rounded team with a variety of skills and knowledge to address different aspects of the project effectively. The average mean of 3.64 indicates that, to a large extent the project team's competence influences building rehabilitation performance.

#### 4.5 Inferential Statistics

## 4.5.1 Correlation Analysis

Correlation Analysis is a statistical method used to examine the relationship between two or more variables. In this section, the study focused on applying correlation analysis to assess the relationships between various factors influencing building rehabilitation performance in Tanzania.

**Table 4.4: Correlations** 

		Project Planning	Project Financing	Project Team Competence	Building Rehabilitation Performance
Project	Pearson	1		•	
Planning	Correlation				
	Sig. (2-tailed)				
	N	101			
Project	Pearson	.488**	1		
Financing	Correlation				
	Sig. (2-tailed)	.000			
	N	101	101		
Project Team	Pearson	.632**	.247*	1	
Competence	Correlation				
	Sig. (2-tailed)	.000	.013		
	N	101	101	101	
Building	Pearson	.605**	.709**	.609**	1
Rehabilitation	Correlation				
Performance	Sig. (2-tailed)	.000	.000	.000	
	N	101	101	101	101

Source: Field Data (2023)

Findings shown in Table 4.4 indicate that project planning has a significant relationship with building rehabilitation performance with a coefficient of 0.605. This suggests that effective project planning positively influences the overall performance of building rehabilitation projects. Also, project financing is shown to have a significant relationship with building rehabilitation performance, with a coefficient of 0.709. This implies that securing adequate financial resources and proper financial management are important factors in achieving successful outcomes in building rehabilitation projects. Furthermore, project team competence exhibits a significant relationship with building rehabilitation performance, as evidenced by a coefficient of 0.609. This suggests that the expertise, skills, and effectiveness of the project team members play a crucial role in ensuring the success of building

rehabilitation projects. The correlations are significant at the 0.01 level. The above results imply that all independent variables had a positive significant relationship with the dependent variable building rehabilitation performance.

## 4.5.2 Regression Analysis

A multivariate regression model was applied to determine the factors influencing the building rehabilitation performance in Tanzania. Multiple linear regressions used in this model were as follows:

**Table 4.5: Model Summary** 

Model SummaryModelRAdjusted RStd. Error of the EstimateDurbin-Watson1.839a.704.6952.95690.778

a. Predictors: (Constant), Project Team Competence, Project Financing, Project Planning

b. Dependent Variable: Building Rehabilitation Performance

Source: Field Data (2023)

The Model Summary for the regression analysis reveals that the predictors (Project Team Competence, Project Financing, and Project Planning) have a strong positive correlation (R = 0.839) with the dependent variable (Building Rehabilitation Performance). The R Square value of 0.704 indicates that approximately 70.4% of the variance in Building Rehabilitation Performance can be explained by the predictors. The Adjusted R Square value of 0.695 considers the number of predictors and provides a more conservative estimate of the proportion of variance explained. The Std. The error of the Estimate is 2.95690, representing the average difference between observed and predicted values. The Durbin-Watson statistic of 0.778 suggests no significant autocorrelation.

Table 4.6: ANOVA

<b>ANOVA</b> <sup>a</sup>
---------------------------

		Sum of				
Model		Squares	df	Mean Square	F	Sig.
1	Regression	2021.211	3	673.737	77.058	.000 <sup>b</sup>
	Residual	848.096	97	8.743		
	Total	2869.307	100			

a. Dependent Variable: Building Rehabilitation Performance

Planning

Source: Field Data (2023).

The findings presented in Table 4.5 provide strong evidence that the model utilized in this study has a statistically significant predictive capability for the relationship between the dependent variable (building rehabilitation performance) and the independent variables (project team competence, project financing, and project planning). The significance value (P value) of 0.000, which is less than the predetermined threshold of 0.05, indicates a high level of statistical significance. This supports the validity of the first assumption, as at a 5% level of significance and a 95% confidence level, the significant value (P value) in the ANOVA and coefficient regression falls within the range of P < 0.000-0.05. These results provide confidence that the model used in this study effectively predicts the relationship between the variables and contributes to our understanding of the factors influencing building rehabilitation performance.

b. Predictors: (Constant), Project Team Competence, Project Financing, Project

**Table 4.7: Coefficients** 

		C	oefficients <sup>a</sup>				
	Unsta	andardized	Standardized			Collinea	arity
	Coe	efficients	Coefficients	t	Sig.	Statist	ics
						Toleranc	
Model	В	Std. Error	Beta			e	VIF
1 (Constant)	4.85	1.859		2.612	.010		
	6						
Project Planning	.037	.063	.047	.596	.002	.484	2.06
							8
Project	.513	.056	.578	9.101	.000	.756	1.32
Financing							3
Project Team	.473	.077	.437	6.108	.000	.596	1.67
Competence							8

a. Dependent Variable: Building Rehabilitation Performance

Source: Field Data (2023).

The regression equation  $(Y = \beta O + \beta 1X_1 + \beta 2X_2 + \beta 3X_3 + \alpha)$  was;

$$Y = 4.856 + 0.037X_1 + 0.513X_2 + 0.473X_3 + \alpha$$

Where by  $Y = Building Rehabilitation Performance; <math>X_1 = Project Planning; X_2 = Project Financing; X_3 = Project Team Competence$ 

Based on the regression equation established in the analysis, when considering all factors while holding the constant at zero, the predicted outcome for Building Rehabilitation Performance is 4.856. The data further indicate that Project Team Competence, Project Financing, and Project Planning have substantial contributions to Building Rehabilitation Performance. Specifically, for each unit increase in Project Planning, Building Rehabilitation Performance is expected to increase by 0.037 units. Similarly, a unit increase in Project Financing is associated with a 0.513 unit increase in Building Rehabilitation Performance, while a unit increase in Project Team Competence is associated with a 0.473 unit increase in Building Rehabilitation Performance.

The p-values associated with each coefficient represent the statistical significance of the corresponding independent variable. In this case, both Project Planning and Project Team Competence have p-values less than 0.05, indicating that they are statistically significant predictors of Building Rehabilitation Performance. Similarly, Project Financing has a p-value of 0.000, indicating a highly significant relationship with the dependent variable.

The collinearity statistics, represented by Tolerance and VIF (Variance Inflation Factor), assess the multicollinearity between the independent variables. The values indicate that collinearity is not a significant concern, as all Tolerance values are above 0.2 and all VIF values are below 5. This suggests that the independent variables in the regression model are not highly correlated.

#### 4.6 Discussion of Findings

# 4.6.1 Influence of Project Planning on Building Rehabilitation Performance

Project planning is a crucial process in project management that involves defining project goals, objectives, scope, and deliverables, as well as creating a comprehensive roadmap for executing the project successfully. It lays the foundation for the project by identifying tasks, allocating resources, setting timelines, and establishing a framework for monitoring and controlling project progress. The findings of this study revealed that the building rehabilitation project efficiently allocates all available resources, including skilled employees and necessary infrastructure. The performance and success of the project depend on this effective

resource allocation. It implies that a project has a better chance of succeeding when it has access to sufficient resources.

The results designate that the allocation of adequate resources significantly impacts the performance and success of the project but to a large extent the project manager of the building rehabilitation project demonstrates the ability to accurately estimate project costs. For the resources to be used effectively and efficiently, it is essential to be able to estimate project costs precisely. This conclusion underscores how crucial it is for project managers to have the knowledge and experience needed to make accurate cost estimates because doing so has a direct impact on the efficiency and success of the project. Munyoki (2020) advises encouraging an excellence-focused culture in the building industry in light of these findings. This suggestion emphasizes the significance of keeping high standards and quality in the building rehabilitation project while also resonating with efficient resource allocation and accurate cost estimation. The initiative might aim to increase performance and achieve positive results by fostering an environment of excellence within Tarime Prison and the Tanzania Prison Service.

The findings of the study indicate that, to a moderate extent, respondents emphasized the importance of conducting a comprehensive evaluation of project costs and implementing scheduling before commencing building rehabilitation. This emphasizes how important good financial planning and cost estimation are to the accomplishment of rehabilitation projects. Additionally, it is stressed how crucial it is to properly plan and carry out projects within the allotted term, particularly in the

setting of Tarime Prison. These results are consistent with those of Kazare's (2019) research, which likewise found a strong connection between technical competence and project planning, schedule management, project supervision, and technical planning.

In this study, the findings highlighted the agreement among respondents regarding the continuous monitoring of building rehabilitation performance. It was acknowledged that tracking scheduled dates, comparing them with actual dates, and evaluating the consequences of any schedule modifications are essential practices in ensuring project success. Tarime Prison's rehabilitation program is being thoroughly watched so that any delays or deviations can be found and immediately fixed. The significance of excellent project management and control in obtaining successful building rehabilitation outcomes is highlighted by this research. Notably, Muute (2019) emphasizes the need for good planning for the general success of construction projects. The focus on good planning highlights the need to prioritize careful planning to attain desired results. The Tarime Prison will function better and produce excellent results if building renovation projects combine the techniques of continuous monitoring and quality planning.

The study findings indicate that the project planning phase plays a crucial role in building rehabilitation performance. The study calls attention to a project planning aspect that involves a thorough risk assessment. By using a proactive approach, possible problems can be recognized and fixed before they have a chance to negatively affect the rehabilitation project. Furthermore, it was thought that

establishing efficient stakeholder participation and communication channels was a crucial step in the project planning process. This result is consistent with Sammy's research (2020), which showed that stakeholder engagement has a big impact on how well construction projects are executed.

Furthermore, the majority of respondents in the study affirmed that the project planning process incorporates sustainability considerations. This shows that achieving long-term benefits and minimizing environmental effects are priorities. The Tarime Prison rehabilitation project seeks to create beneficial results that support environmental goals by adopting sustainability concepts. The Institutional Theory, which emphasizes the necessity for contractors to organize all construction activities and abide by pertinent rules, regulations, and standards, supports this conclusion. This adherence aids in the sustainability and long-term benefits of the project.

The findings from the correlation analysis revealed a significant relationship between project planning and building rehabilitation performance. This shows that project planning is essential for deciding whether rehabilitation efforts are a success. The results are consistent with Dixit's research (2020), which discovered that management and coordination, financial management, planning, and coordination have a big impact on construction project success. This shows that a project is more likely to succeed if it is well-structured and thoroughly planned. Additionally, a study by Kihoro and Waiganjo (2018) revealed a strong positive association between project performance and the competence of the project team, the administration of project funds, and project planning. Tarime Prison's project planning is crucial to the overall success of construction projects.

#### 4.6.2 Influence of Project Financing on Building Rehabilitation Performance

Project financing involves the process of securing the necessary financial resources to fund a specific project. It involves identifying and obtaining the required capital to initiate, develop, and complete the project successfully. The study findings revealed that sufficient resource allocation is a crucial factor in building rehabilitation performance. This implies that having access to sufficient resources, particularly finance, is important for making sure that rehabilitation initiatives are carried out successfully at Tarime Prison. This result is consistent with Sammy's research (2020), which discovered that project resource allocation affects construction project performance.

Furthermore, the study indicated the influence of various sources of funding on building rehabilitation performance. Specifically, donor funding, government funding, and financial adequacy were identified as factors that impact the success of rehabilitation projects. This highlights how crucial it is to obtain the necessary funding and to guarantee budget availability to support the execution of building rehabilitation activities. In contrast, Kazare (2019) discovered that a lack of technical know-how, delays in project completion, and insufficient money are the three biggest challenges experienced by building projects at public institutions. Even though these results diverge significantly from those of the current study, it is significant to note that both studies recognize the importance of funding in the context of construction projects. This demonstrates how donor financing, government funding, and financial sufficiency affect Tarime Prison's success in building repair.

The study findings indicate that sufficient funding has a positive impact on building

rehabilitation performance at Tarime Prison. Ample money makes it possible to deploy experienced personnel and high-quality materials, both of which are essential for obtaining excellent rehabilitation outcomes. This result is consistent with the research of Munyoki (2020), who recommended that project teams receive training on project success elements and that participants of the project should not encounter cash flow problems. Tarime Prison's adequate budget guarantees that the essential tools and knowledge are available to properly support the rehabilitation program.

Moreover, the study findings highlight the importance of the timely disbursement of funds in enhancing the efficiency and progress of the building rehabilitation project. Prompt disbursement of funding makes project execution easier and reduces delays. A contingency fund's availability is also essential for handling unforeseen difficulties that can occur throughout the repair process. At Tarime Prison, having contingency money makes it easier to keep projects performing by giving them the tools they need to get beyond unforeseen challenges. These results support Muute's (2019) research, which hypothesized that the operational effectiveness of building projects is considerably and favorably influenced by planning for materials and finances.

The study findings highlight the importance of effective financial management practices in achieving optimal building rehabilitation performance at Tarime Prison. The identification of clear budgeting and precise cost tracking as important elements influencing successful rehabilitation outcomes. This result is consistent with studies by Kihoro and Waiganjo (2018), who discovered that project success is influenced by funds management. Project managers can guarantee that resources are distributed

properly and expenses are kept under control at Tarime Prison by using strong financial management procedures, which will enhance project performance.

Additionally, the study findings indicate that collaborating with financial institutions and accessing external funding opportunities strengthen the financing capacity and positively influence building rehabilitation performance. Project managers at Tarime Prison can expand the pool of financial resources available to fund rehabilitation initiatives by interacting with financial institutions and looking into outside financing sources. This result is consistent with the agency theory, which holds that considering stakeholders' interests while making project management decisions reduces risks and boosts gains. At Tarime Prison, cooperative efforts with financial institutions and stakeholders improve financing capability, which eventually improves the overall effectiveness of the rehabilitation project.

The findings from the correlation analysis suggest a significant relationship between project financing and building rehabilitation performance at Tarime Prison. This suggests that a key factor in determining the success of rehabilitation projects is the availability and sufficiency of project financing. These results are in line with those of Siborurema's (2018) study, which discovered that project financing influences project performance favorably. The proper allocation and efficient use of all relevant resources, including financial ones, are ensured by effective project finance throughout the rehabilitation process. Adequate project financing makes it possible to acquire materials, hire qualified workers, and carry out necessary tasks, all of which have a favorable effect on the rehabilitation project at Tarime Prison as a whole.

# 4.6.3 Influence of Project Team Competence on Building Rehabilitation Performance

Project team competence encompasses the abilities and qualifications that team members bring to the table, allowing them to effectively perform their assigned roles and responsibilities within the project. In this study, the researcher discovered that the professionalism of the project team has a significant influence on building rehabilitation performance at Tarime Prison. According to the respondents, the level of professionalism exhibited by the project team directly affects the outcomes of the rehabilitation project. This result supports Sammy's (2020) claim that the performance of construction projects is significantly influenced by the function of the project manager. At Tarime Prison, a skilled and qualified project manager is essential to achieving project success.

Furthermore, the research findings reveal that the presence of professional knowledge within the project team contributes to completing building rehabilitation projects on schedule, within budget, and according to the scope. This indicates that the expertise and competence of the project team members play a vital role in achieving project objectives at Tarime Prison. These findings are related to the research conducted by Kihoro and Waiganjo (2018), who found that the competency of the project manager influences the success of a project.

The study findings highlight the significance of the project team's professional devotion and their capacity to utilize professional skills in achieving successful building rehabilitation performance at Tarime Prison. The project team members'

commitment, dedication, and ability to effectively use their professional talents all help to ensure that the rehabilitation project is completed on schedule, within the allotted budget, and by the specified scope. This result is consistent with Ruzibiza's (2017) claim that the effectiveness of development initiatives is influenced by professional competency.

Additionally, the findings indicate that most project team members involved in the building rehabilitation project possess the necessary professional competence to execute their roles effectively. This shows that the team members are equipped with the necessary information, abilities, and expertise to help Tarime Prison's rehabilitation project be carried out successfully. Additionally, the project team's efficient coordination and teamwork were noted as contributing elements to better building rehabilitation performance. In line with the conclusions of this study, Munyoki (2020) stressed the significance of having qualified project managers oversee projects and clients giving adequate project funding.

The study results found that the presence of a diverse range of skills and expertise within the project team is perceived as contributing to the overall quality and success of building rehabilitation projects. Respondents agreed that having team members with varied skills and expertise enhances the capabilities of the project team, which in turn positively influences the outcomes of the rehabilitation projects. Competence guarantees that team members have the knowledge and skills required to do their respective jobs and contribute to the project's overall goals. It enables individuals to produce high-quality work, make wise judgments, and get through obstacles that

could appear when implementing a project. This result is consistent with Muute's findings from 2019 that project team members' abilities and expertise have an impact on how well construction projects run.

Furthermore, the correlation analysis findings reveal a significant relationship between project team competence and building rehabilitation performance. This shows that a key factor in determining the success of rehabilitation projects is the competency and proficiency of the project team members. These results are in line with the research by Juras (2019), who discovered a connection between the competency profiles of project team members, project team dynamics, and project performance. Usman (2018) also discovered that project management proficiency has a positive effect on project performance.

#### **CHAPTER FIVE**

### CONCLUSIONS AND RECOMMENDATIONS

#### **5.1 Introduction**

This chapter presents the summary, conclusion, and recommendations of the study on the factors influencing the building rehabilitation performance in Tanzania. It presents a summary of major findings according to specific objectives, conclusions, and finally recommendations, specifying recommendations for action and further studies.

## **5.2 Summary of the Findings**

## 5.2.1 Influence of Project Planning on Building Rehabilitation Performance

The first objective of this study aimed to examine the influence of project planning on building rehabilitation performance in Tarime prison in the Mara region. The findings revealed that the building rehabilitation project effectively allocates available resources, including skilled employees and necessary infrastructure. Adequate resource allocation was found to significantly influence the project's performance and success, with the project manager demonstrating the ability to accurately estimate project costs. Additionally, the study indicated that a comprehensive evaluation of project costs is conducted before commencing the rehabilitation, and thorough scheduling is implemented to ensure proper planning. Continuous monitoring of the rehabilitation process, including tracking scheduled dates and comparing them with actual dates, was emphasized to assess the consequences of any schedule modifications. Activity durations were estimated to determine the required time for completing the rehabilitation activities effectively.

Furthermore, the project planning phase encompassed a comprehensive risk assessment to proactively identify and address potential challenges, while establishing effective stakeholder engagement and communication channels. The study also highlighted the integration of sustainability considerations within the project planning process, aiming to achieve long-term benefits and minimize environmental impact. The average mean score of 3.53 indicated a substantial influence of project planning on building rehabilitation performance. Correlation analysis further confirmed a significant relationship between project planning and building rehabilitation performance (r=0.605), while the regression analysis suggested that a unit increase in project planning would result in a 0.037 increase in building rehabilitation performance when other independent variables are held at zero.

## 5.2.2 Influence of Project Financing on Building Rehabilitation Performance

Secondly, the study sought to examine the influence of project financing on building rehabilitation performance in Tarime prison in the Mara region. The findings highlighted the significance of sufficient resource allocation, which positively influenced building rehabilitation performance. Respondents strongly asserted that donor funding played a crucial role in achieving building rehabilitation performance, with government funding facilitating the attainment of project goals. Furthermore, the study revealed a lack of consensus regarding the influence of financial adequacy and budget availability on building rehabilitation performance. Adequate funding was found to enable the utilization of high-quality materials and skilled labor, thereby positively impacting the rehabilitation process. The research also identified

that timely disbursement of funds enhanced project efficiency and progress, while the availability of contingency funds addressed unforeseen challenges and maintained performance. Effective financial management practices, such as transparent budgeting and accurate cost tracking, were found to contribute to optimal building rehabilitation performance. Collaborating with financial institutions and accessing external funding opportunities were also identified as factors strengthening the financing capacity and positively influencing performance. The average mean score of 3.51 suggested a significant influence of project financing on building rehabilitation performance. Correlation analysis further confirmed a significant relationship between project financing and building rehabilitation performance (r = 0.709), while the regression analysis indicated that, with other independent variables held at zero, a unit increase in project financing would result in a 0.513 increase in building rehabilitation performance.

# 5.2.3 Influence of Project Team Competence on Building Rehabilitation Performance

The third objective of this study focused on exploring the influence of project team competence on building rehabilitation performance in the Tarime prison of the Mara region. The findings indicated that the professionalism of the project team played a critical role in the success of building rehabilitation projects. Respondents strongly agreed that performance in building rehabilitation directly stems from the team's professional expertise. The presence of professional skills in building rehabilitation was associated with improved stakeholder satisfaction and the successful completion of projects within schedule, budget, and scope. The study further revealed that the

team's professional dedication and ability to utilize their skills were instrumental in achieving project goals. The research findings emphasized that a competent project team, equipped with diverse skills and expertise, enhances the overall quality and success of building rehabilitation projects. The average mean score of 3.64 suggested a significant influence of project team competence on building rehabilitation performance. Correlation analysis supported this, showing a significant relationship between project team competence and building rehabilitation performance (r = 0.609). Additionally, the regression analysis indicated that, with other independent variables held at zero, a unit increase in project team competence would lead to a 0.473 increase in building rehabilitation performance.

#### **5.3 Implication of the Study**

The government can utilize the study to inform the development of policies and guidelines that prioritize effective project planning, financing, and team competence, ultimately improving building rehabilitation projects nationwide. Policymakers can incorporate the study's results into policy frameworks, focusing on resource allocation, efficient fund disbursement, and sustainable practices. Tanzania Prisons can enhance their project management practices by emphasizing project planning, securing adequate financing, and nurturing team competence. For researchers and academicians, the study serves as a stepping stone for further research, allowing for deeper exploration of factors influencing building rehabilitation performance. The study's contribution to the academic knowledge base enables a better understanding of best practices in building rehabilitation projects.

#### **5.4 Conclusions**

This study sought to assess the factors influencing the building rehabilitation performance in Tanzania particularly Tarime Prison - Mara region. The study concludes that project planning is a crucial factor in driving building rehabilitation performance. The study underlines the importance of proper resource allocation, accurate cost estimation, thorough project cost evaluation, and meticulous scheduling in assuring the success of rehabilitation projects. A solid project plan lays the groundwork for achieving goals and making the best use of the resources at hand. Additionally, the study concludes that project financing has a substantial impact on building rehabilitation performance. A project's outcomes are positively impacted by having enough funding to deploy high-quality resources and manpower. The efficiency and development of a project are improved by timely money disbursement, and the presence of contingency funds enables the project to continue operating while addressing unforeseen obstacles. Optimizing the performance of building rehabilitation requires effective financial management procedures, such as clear budgeting and precise cost tracking.

Furthermore, the study concludes that project team competence is a key determinant of building rehabilitation performance. Project outcomes are positively impacted by the presence of a committed project team, expertise, and professional skills. Improved performance and the overall success of the project are influenced by effective coordination, collaboration, and the use of a variety of experiences within the project team.

## **5.5** Recommendations of the Study

Based on the study findings, the following short recommendations were made:

- i. Tarime Prison needs to create and put into practice thorough criteria and principles for project planning in building rehabilitation activities. These recommendations should cover crucial topics like cost analysis, planning, and ongoing monitoring. Tarime Prison can maintain consistency and effectiveness in the planning process and improve the results of building repair projects by creating clear protocols.
- ii. Prioritizing prompt and effective delivery of money for Tarime Prison construction repair projects is crucial. The funding procedure should be streamlined to reduce delays and guarantee that funds are allocated as soon as possible. Tarime Prison may efficiently manage resources and reduce potential setbacks by optimizing project funding, enabling more seamless execution of building rehabilitation projects.
- iii. Tarime Prison ought to support programs that aim to improve the technical know-how and project teams engaged in building rehabilitation. This investment should concentrate on training courses, seminars, and chances for ongoing education that support a professional culture. Tarime Prison can improve the quality of project execution and yield better results in building rehabilitation efforts by equipping project teams with the appropriate knowledge and abilities.

## **5.6 Limitations of the Study**

Respondents showed hesitation during the survey when asked questions about prisons. They might have been hesitant to respond to the surveys' requests for information because they were worried about the potential consequences of prison administration if they disclosed negative information about the facility. The researcher took action to reassure the respondents that their identity would be kept and the data they supplied would be treated with the utmost confidentiality to address this issue. The fact that the information will only be utilized for academic reasons was highlighted. Additionally, respondents showed hesitation when giving or granting access to critical information out of concern that any flaws or faults in the building rehabilitation initiatives would become known to the general public. The researcher painstakingly described the goal of the study, highlighting the possible significance of the findings in raising the general effectiveness of building rehabilitation operations in Tanzania, to counteract this restriction.

#### **5.7 Recommendations for Further Studies**

It is crucial to conduct further empirical studies not only in different areas but also in other East African countries. This study recommends using a mixed-methods approach, starting with qualitative research techniques to have a thorough grasp of the essential characteristics and variables affecting rehabilitation performance. Using qualitative methods, researchers can explore and describe the dynamics that can be seen in the study context. A quantitative methodology can then be used to test and validate the results. It would be wise to investigate other independent variables that might have an impact on the performance of building rehabilitation. By expanding

the variety of factors they consider, researchers can develop new insights and increase their understanding of the many factors affecting successful rehabilitation outcomes.

#### REFERENCES

- Al-Shaaby, A. and Ahmed, A. (2018). How Do We Measure Project Success? A Survey, *Journal of Information Technology & Software Engineering*. 08 (02): 1-5.
- Altman D.G. (2015) Statistics notes: Absence of evidence is not evidence of absence. *Bmj.* 19;311(7003):485.
- Amusan, L.; Aigbavboa, C.; Olubiyi, T.; Babatunde, O. (2021) Informatics Approach to Innovative Site Management Practices for Improving Construction Works. *Int. Rev. Civ. Eng*, 12, 108–122.
- Arachchige, B. J. (2018). Critical success factors for construction project: A Literature Review. *Electronic Journal*, Vol. 9, issue 1, pp. 94-122.
- Bitamba, B. (2020) Study on factors affecting the performance of construction projects in the Democratic Republic of the Congo. S. Afr. J. Ind. Eng, 31, 12–25
- Brestoff J.R. (2018) Study Size Planning. In Epidemiology: *Principles and Practical Guidelines (pp.* 137-155). Springer Netherlands.
- Browner, S.R. (2018) Getting ready to estimate sample size: hypotheses and underlying principles. *Designing clinical research*.;2:51-63.
- Byaruhanga, A. (2017). Contractor monitoring and performance of road infrastructure projects in Uganda. A management model. *Journal of Building Construction and Planning Research*, 5, 30-34.
- Calvert, R. L. (2018) The Rational Choice Theory of Institutions: Implications for Design, in D. Weimer, ed. Institutional Design (Dordrecht: Kluwer).

- Controller and Auditor General (CAG) Report (2021/2022)
- Creswell, J. W., & Miller, D. L. (2018). Determining Validity in Qualitative Inquiry.

  Theory Into Practice, 39(3), 124-130.
- Dalcher, D. (2018). Book Review: Global Project Management Handbook: Planning, Organizing, and Controlling International Projects. Second Edition. Project Management.
- Deep, S.; Banerjee, S.; Dixit, S.; Vatin, N.I. (2022) Critical Factors Influencing the Performance of Highway Projects: Empirical Evaluation of Indian Projects. *Buildings*, 12, 849.
- Dempster, M.A.H and Wildavsky, A. (2016) On Change: Or, There is No Magic Size for an Increment, Political Studies 27, 371–89.
- Denzin, N. K., & Lincoln, Y. S. (2017). The SAGE Handbook of Qualitative Research. Sage.
- Dixit, S. (2020)Study of factors affecting the performance of construction projects in the AEC industry. *Organization*, *Technology*, and *Management in Construction* 2020; 11: 2275–2282
- Fathi, E. and Stevovic, S. (2017). Measurement of the efficiency of building project management, *Ekonomika*. 62 (4): 129–140.
- Fowler, F. J. (2016). Survey research methods (4th ed.). Thousand Oaks, CA: Sage.
- Giorgi, A. (2019). The descriptive phenomenological method in psychology: A modified Husserlian approach. Pittsburgh, PA: Duquesne University Press.
- Grady D. (2015) Designing a randomized blinded trial. *Designing clinical* research.;3:147-61.
- Greene, J. C. (2017). Mixed methods in social inquiry. San Francisco: Jossey-Bass.

- Gupta, N. and Sloan, B. (2018). Factors influencing municipal construction project performance, *Proceedings of the Institution of Civil Engineers Municipal Engineer*. 167 (2): 108–117. [
- Hutter, I., & Bailey, A. (2018). Qualitative Research Methods. Sage.
- Ikuabe, M. and Adekunle, S.A. (2022) Review of Culture in Maintenance Management of Public Buildings in Developing Countries. *Bldgs*, 12, 677.
- Immergut, E. (2017) The Theoretical Core of the New Institutionalism, Politics and Society 26, 5–34.
- Irfan, M.; Thaheem, M.J.; Gabriel, H.F.; Malik, M.S.A.; Nasir, A.R. (2019) Effect of stakeholder's conflicts on project constraints: A tale of the construction industry. *Int. J. Confl. Manag*, 30, 538–565.
- Juras, A. (2019)Competency Profile of Project Team Members Interplay with Team Dynamics and Project Success. *Journal of Corporate Governance, Insurance, and Risk Management (JCGIRM)*, Volume 6, Series 2, 1-17
- Kamangar F. (2018) Sample size calculation for epidemiologic studies: principles and methods. *Archives of Iranian Medicine (AIM)*. 1;16(5).
- Kazare, B. (2019) The Determination Of Factors Influencing Construction Project Performance In Public Institutions A Case Of Musoma&Butiama District Council. Masters Thesis, Mzumbe University
- Kihoro, M. and Waiganjo, E. (2018) Factors Affecting Performance Of Projects In The Construction Industry In Kenya: A Survey Of Gated Communities In Nairobi County. *Journal of Management*, Vol. 2 (50), pp 37-66, J
- Krejcie, R.V. and Morgan, D.W. (1970) Determining Sample Size for Research Activities. Educational and Psychological Measurement, 30, 607-610.

- Lamprou, A. and Vagiona, D. (2018). Success criteria and critical success factors in project success: a literature review, *International Journal of Real Estate and Land Planning*. 1 (1): 276–284.
- Majid, U. (2017) Methods to Business research inquiry: an introduction [Presentation]. The Methodologist (TMT); 2
- Meyer, G., Bruning, B., &Nyhuis, P. (2022). Employees Competence in Bridge constructions - An Expert Survey. *Journal of Management Development* Vol34., 1004-1018.
- Meyer, J., & Rowan, B. (1977). Institutionalized Organizations Formal Structure as Myth and Ceremony. *American Journal of Sociology*, 83, 340-363.
- Mhando, Y. B., Mlinga, R. S., & Alinaitwe, H. M. (2022). Perspectives of the causes of variations in public building projects in Tanzania. *International Journals of Construction Engineering and Management*, 6(1), 1-12.
- Mkunga, D., &Karanja, N. (2019). Influence of e-procurement on the performance of water projects in Kenya. *International Journal of Social Sciences Management and Entrepreneurship*, 4(2), 212-226.
- Moyo, T. (2016). Factors Affecting Labor Productivity on Building Projects in Zimbabwe, International Journal of Architecture, Engineering and Construction. 3 (1): 57–65.
- Munyoki, S. K (2020)Factors Influencing Completion Of Construction Projects; A

  Case Of Construction Projects In Nairobi Kenya. Masters Thesis, University
  of Nairobi
- Muute, N. C. (2019)Project Planning Practices And Performance Of Construction Projects In Nairobi City County, Kenya. Masters Thesis, Kenyatta University

- Naaranoja, M., &Savolainen. (2016). Project change stakeholder communication.

  International Journal of Project Management, 34(8), 1579-1595.
- Ogunbayo, B.F. (2018) Assessing the Impact of Quality Supervision on Construction Operatives 'Project Delivery in Nigeria. *Int. J. Civ. Eng. Technol*, 9, 426–439.
- Ogunbayo, S.B.; Mhlanga, N. (2022) Effects of Training on Teachers' Job Performance in Nigeria's Public Secondary Schools. *Asian J. Assess. Teach.*Learn, 12, 44–51.
- Powell, A. (2017) Making History: Agency, Structure, and Change in Social Theory (Cambridge: Polity).
- Proverbs, D. G. and Olomolaiye, P. O. (2017). Critical success criteria for mass house building projects in developing countries, *International Journal of Project Management*. 26 (6): 675–687.
- Ruzibiza, J. (2017) Effect of Project Team Competences on Performance of
   Development Projects in Rwanda: A Case of World Vision's Village Savings
   Loan Association Project in Gasabo District. *Developing Country Studies*,
   Vol.7, No.9, 1-12
- Sammy, K. (2020)Factors Affecting The Performance Of Construction Projects In Mombasa County, Kenya. Masters Thesis, University of Nairobi
- Shafique, M. N., & Amjad, N. (2020). Analysis of key performance factors affecting the performance of Residential construction projects. *Arabian Journal of Business Management Review*, 3(10), 9-14.

- Siborurema, J. B. (2018) The Effects Of Project Funding On Their Performance In Rwanda A Case Study Of Bukomane-Gikoma Road. *International Journal of Economics, Commerce and Management*, Vol. III, Issue 8, August 2015
- Silva, S. K. (2016). Critical Success Factors: EnRout for the success of construction projects. *International Journal of Social Sciences and Management*, 7(3), 27-37.
- Thale, E. (2017). Infusing Value for Money (VfM) into the public procurement system in Botswana. *Journal of Public Procurement*, 7(3), 281-314.
- URT. (2018). CAG report for the financial year ended 2017/2018 on the audit of development projects. Dares Salaam: Office of Controller and Audit General.
- URT. (2020). *Performance evaluation report for financial year 2018/2019*. Dodoma: Public Procurement Regulatory Authority.
- Usman, M. (2018) Effect of different project complexities and project management competence of project managers in public sector mega engineering projects of Pakistan and their effect on project performance. Master's Thesis in Business Administration III, 30 Credits, Spring
- World Bank. (2020). *Benchmarking Public Procurement*. Washington DC: World Bank Group.
- Zainun, N. H. (2021). Improving time performance in road construction projects:

  Perspective of the contractor. *International Journal of Scientific and Research Publications*, 10(8), 46-50.

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**APPENDICES** 

APPENDIX I: LETTER FOR RESEARCH QUESTIONNAIRE

Dear Respondents,

Dear Participants,

I am ELIZA JOSHUA MANJANO, a student at the OPEN UNIVERSITY OF

TANZANIA, currently pursuing a Master of Monitoring and Evaluation. As part of

my program requirements, I am conducting research on the impact of factors

influencing building rehabilitation performance in Tanzania, with a specific focus on

the Tarime Prison in the Mara Region. Your participation in this study is crucial, and

I kindly request your assistance in answering the following questions by selecting the

appropriate options. Please feel free to provide your responses objectively. Rest

assured that all information shared will be treated with the utmost confidentiality and

used solely for academic purposes. Should you have any further inquiries, please do

not hesitate to contact me at 0753 444 956.

Thank you for your cooperation.

Best regards, ELIZA JOSHUA MANJANO

# APPENDIX II: RESEARCH QUESTIONNAIRE

## PART ONE: DEMOGRAPHIC INFORMATION

## (Tick the appropriate answer)

Gender	Male
	Female
Age	18-24 Years
	25-34 Years
	35-44 Years
	45 Years and above
<b>Education Level</b>	No Education
	Primary Education
	Secondary Education
	College Education

# **PART TWO: RESEARCH QUESTIONS (Tick the appropriate answer)**

## **SECTION A**

The following part seeks to examine the influence of project planning on building rehabilitation performance in Tarime prison in the Mara region

1=No Extent 2= Little Extent 3=Moderate Extent 4=Large Extent 5=Very Large Extent

Project Planning	Options				
	1	2	3	4	5
The building rehabilitation project efficiently allocates all					
available resources, including skilled employees and necessary					
infrastructure.					
The allocation of adequate resources significantly impacts the					
performance and success of the project.					
The project manager of the building rehabilitation project					
demonstrates the ability to accurately estimate project costs.					
Before commencing the building rehabilitation, a comprehensive					
evaluation of project costs is conducted.					
Thorough scheduling is implemented before initiating a structure					
rehabilitation project.					
Building rehabilitation performance is continuously monitored to					
track scheduled dates, compare them with actual dates, and					
assess the consequences of any schedule modifications.					

Activity durations are estimated to effectively determine the required time for completing building rehabilitation activities.			
The project planning phase encompasses a comprehensive risk assessment to proactively identify and address potential challenges.			
Effective stakeholder engagement and communication channels are established as integral parts of the project planning process.			
The project planning process incorporates sustainability considerations to ensure long-term benefits and minimize environmental impact			

# **SECTION B**

The following part seeks to examine the influence of project financing on building rehabilitation performance in Tarime prison in the Mara region

1=No Extent 2= Little Extent 3=Moderate Extent 4=Large Extent 5=Very Large Extent

Project Financing		Options					
	1	2	3	4	5		
Enough resource allocation leads to building rehabilitation performance							
Donor funding leads to building rehabilitation performance							
Government funding facilitates the achievement of intended goals in the building rehabilitation project							
Financial adequacy influences the building rehabilitation performance							
Budget availability influences the building rehabilitation performance							
Sufficient funding enables the use of high-quality materials and skilled labor, positively impacting building rehabilitation performance.							
Timely disbursement of funds enhances the efficiency and progress of the building rehabilitation project.							
The availability of contingency funds helps address unforeseen challenges and maintain project performance.							
Effective financial management practices, including transparent budgeting and accurate cost tracking, contribute to optimal building rehabilitation performance.							
Collaborating with financial institutions and accessing external funding opportunities strengthens the financing capacity and positively influences building rehabilitation performance.							

## **SECTION C**

The following part seeks to examine the influence of project team competence on building rehabilitation performance in Tarime prison in the Mara region

1=No Extent 2= Little Extent 3=Moderate Extent 4=Large Extent 5=Very Large

## Extent

Project Team Competence		Options			
	1	2	3	4	5
Performance in building rehabilitation is a direct outcome of the project team's professionalism.					
Building rehabilitation projects benefit from professional experience.					
Stakeholder satisfaction is produced by the presence of professional skills in building rehabilitation.					
Due to the presence of professional knowledge, building rehabilitation projects are finished on schedule, within budget, and according to scope.					
Building rehabilitation performance is influenced by team professional competency.					
The project team's professional devotion ensures that the building rehabilitation project is finished on schedule, within budget, and according to scope.					
Building rehabilitation project is finished within schedule, budget & scope due to the project team's capacity to utilize Professional skills.					
Most of the Project team members in the building rehabilitation project are equipped to execute professional competence.					
The project team's effective coordination and collaboration contribute to improved building rehabilitation performance.					
The presence of a diverse range of skills and expertise within the project team enhances the overall quality and success of building rehabilitation projects.					

## **SECTION D**

The following part seeks to examine the indicators of building rehabilitation performance in Tarime prison - Mara region

1=No Extent 2= Little Extent 3=Moderate Extent 4=Large Extent 5=Very Large Extent

<b>Building Rehabilitation Performance</b>	Options				
	1	2	3	4	5
Improved allocation of resources.					
A rise in workplace productivity.					
Improved activity planning.					
Better financial management.					
Improved activity cost control.					
Reduction in the amount of time needed to do a task					
Decrease in the amount of time needed for decision-making					
A rise in the decision-making standards.					