ASSESSING THE ROLE OF MOBILE PHONES IN ENHANCING TANZANIA PRISON OFFICERS JOB PERFORMANCE: INSIGHT FROM DODOMA REGION

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2025

CERTIFICATION

The undersigned certify that they have read and hereby recommend for acceptance by the Open University of Tanzania a dissertation entitled*: **"Assessing the Role of Mobile Phones in enhancing Tanzania Prison Officers' Job Performance; Insight from Dodoma Region",*** in partial fulfilment of the requirements for the Degree of Master of Human Resources Management (MHRM) of the Open University of Tanzania.

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DECLARATION

I, **Nuhu Mussa Nkayanghwa,** declare that the work presented in this dissertation is original. It has never been given 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 fulfilment of the requirements for the Degree of Master of Human Resources Management (MHRM) of the Open University of Tanzania

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Signature

……

Date

DEDICATION

I dedicate this research to my family, whose unwavering support and encouragement have been a constant source of strength throughout this endeavor. Their patience, understanding, and belief in me have been instrumental in my perseverance and dedication to this study. I am grateful for their love, motivation, and sacrifices that have enabled me to pursue my academic goals. This research represents not only my efforts but also the collective support and sacrifices made by my family, and I am forever thankful for their presence in my life.

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or another. I hope that the findings of this study will be beneficial to the Tanzanian Prisons Services and contribute to the development of effective policies and strategies for improving job performance among prison officers.

ABSTRACT

The study assessed the role of mobile phones in enhancing Tanzania prison officers' job performance; insight from Dodoma region. Three objectives guided the study; to determine the role of mobile phones in enhancing communication, to examine the role of mobile phones in streamlining administrative tasks and to assess the role of mobile phones in facilitating coordination in prison operations on prison officers' performance. The study employed the Technology Acceptance Model. Positivism philosophy was used in this study. A quantitative approach and explanatory research design were also employed. 100 sample size from Dodoma prison officers were randomly sampled from 134 population. Structured questionnaires were used to collect data. Descriptive statistics and multiple regression analysis were used as tools of data analysis. It was found that all three independent variables from the role of mobile phones; communication, streamlining and coordination were found to be positive and significantly related to prison officers' performance. The study concludes that mobile phones significantly improve communication, operational efficiency, and decision-making among prison officers, contributing to enhanced job performance in Tanzania's prison system. It is recommended that prison authorities integrate mobile phone usage more effectively into daily operations to improve communication efficiency. Also, prison management further incorporates mobile technology to optimize administrative processes, such as scheduling, document management, and performance tracking. Lastly, prison authorities should enhance communication infrastructure by equipping officers with smartphones or devices that support real-time updates and coordination across departments.

Keywords: *Mobile phones, Prison officers, Job performance and Impacts*

TABLE OF CONTENTS

CERTIFICATION ..... **ii**

COPYRIGHT ..... **iii**

DECLARATION ..... **iv**

DEDICATION ..... **v**

ACKNOWLEDGEMENTS ..... **vi**

ABSTRACT ..... **vii**

LIST OF TABLES ..... **xiii**

LIST OF FIGURES ..... **xiv**

LIST OF ABBREVIATIONS AND ACRONYMS ..... **xv**

CHAPTER ONE **1**

INTRODUCTION **1**

1.1 Chapter Overview 1

1.2 Background of the Study 1

1.3 Statement of the Problem 6

1.4 Objectives of the Study 7

1.4.1 General Objective 7

1.4.2 Specific Objectives 7

1.5 Significance of the Study 8

1.6 Scope of the Study 9

1.7 Organization of the Study 9

CHAPTER TWO **11**

LITERATURE REVIEW **11**

2.1 Chapter Overview 11

2.2 Conceptualization of the Key Concepts 11
2.2.1 Mobile Phones 11
2.2.2 Prison Officer 12
2.2.3 Prison Officers Performance 12
2.3 Theoretical Literature Review 13
2.3.1 The Technology Acceptance Model 13
2.4 Empirical Literature Review 18
2.4.1 The Role of Mobile Phones in enhancing Communication on Prison Officers' Performance 18
2.4.2 The Role of Mobile Phones in streamlining Administrative tasks on Prison Officers' Performance 20
2.4.3 The Role of Mobile Phones in Facilitating Coordination in Prison Operations on Prison Officers' Performance 22
2.5 Research Gap 24
2.6 Conceptual Framework 25
2.7 Hypotheses Development 28
CHAPTER THREE 29
RESEARCH METHODOLOGY 29
3.1 Chapter Overview 29
3.2 Research Philosophy 29
3.3 Research Approach 30
3.4 Research Design 30
3.5 Area of the Study 31
3.6 Population of the Study 32

3.7 Sampling Technique and Sample Size 33
3.7.1 Sampling Technique 33
3.7.2 Sample Size 33
3.8 Data collection 34
3.8.1 Structured Questionnaire 34
3.9 Data Cleaning and Processing 35
3.9.1 Pilot Study Results 35
3.9.2 Error Check 35
3.9.3 Missing Data 36
3.10 Data Analysis 36
3.10.1 Regression Model 36
3.11 Regression Assumptions 37
3.11.1 Linearity Assumption 37
3.11.2 Normality Assumption 38
3.11.3 Outlier Assumption 38
3.11.4 Homoscedasticity Assumption 38
3.11.5 Multicollinearity Assumption 39
3.12 Validity 39
3.13 Reliability 39
3.14 Ethical Considerations 40
CHAPTER FOUR 42
RESEARCH FINDINGS ANALYSIS AND DISCUSSION 42
4.1 Chapter Overview 42
4.2 Demographic Characteristics of the Respondents 42

4.2.1 Gender Characteristics of the Respondents 42

4.2.2 Age Characteristics of the Respondents 43

4.2.3 Education Characteristics of the Respondents 44

4.2.4 Experience with Prison 44

4.3 Descriptive Statistics for the Variables 45

4.3.1 Role of Mobile Phone in Enhancing Communication 46

4.3.2 Role of Mobile Phone in Streamlining Administrative Tasks 47

4.3.3 Role of Mobile Phones in Facilitating Coordination of Prison Operations 49

4.3.4 Prison Officers' Performance 51

4.4 Regression Assumptions Analysis Results 53

4.4.1 Normality Test Results 54

4.4.2 Linearity Test Results 55

4.4.3 Homoscedasticity Results 55

4.4.4 Multicollinearity Test Results 56

4.5 Multiple Regression Analysis Results 57

4.5.1 Model Summary Results 57

4.5.2 ANOVA Results 58

4.5.3 Regression Coefficients Results 59

4.6 Discussion of the Findings 60

4.6.1 The Role of Mobile Phones in Enhancing Communication on Prison Officers Performance 61

4.6.2 The Role of Mobile Phones in Streamlining Administrative Tasks on Prison Officers Performance 63

4.6.3 The Role of Mobile Phones in Coordination of Prison Operations on Prison Officers' Performance 64

CHAPTER FIVE 67

SUMMARY OF THE FINDINGS, CONCLUSION AND RECOMMENDATIONS 67

5.1 Chapter Review 67

5.2 Summary of the Findings 67

5.3 Conclusion 69

5.4 Implications 69

5.4.1 Implication for Policymakers 69

5.4.2 Implication for the Industry 70

5.4.3 Implication for Academia 70

5.5 Recommendations 71

5.5.1 The Role of Mobile Phones in Enhancing Communication on Prison Officers' Performance 71

5.5.2 The Role of Mobile Phones in Streamlining Administrative Tasks on Prison Officers' Performance 72

5.5.3 The Role of Mobile Phones in Coordination of Prison Operations on Prison Officers' Performance 72

5.6 Limitations 73

5.7 Recommendations for Further Studies 73

REFERENCES 75

APPENDICES 84

LIST OF TABLES

Table 3.1: Population of the Study 32

Table 3.2: Reliability Test Results 40

Table 4.1: Gender Characteristics of the Respondents 43

Table 4.2: Age Characteristics of the Respondents 43

Table 4.3: Education Characteristics of the Respondents 44

Table 4.4: Experience with Prison 45

Table 4.5: Role of Mobile Phones in Enhancing Communication 47

Table 4.6: Role of Mobile Phones in Streamlining Administrative Tasks 49

Table 4.7: Role of Mobile Phones in Facilitating Coordination of Prison Operations 51

Table 4.8: Prison Officers' Performance 53

Table 4.9: Multicollinearity Test Results 57

Table 4.10: Model Summary Results 58

Table 4.11: ANOVA Results 59

Table 4.12: Regression Coefficient Results 60

LIST OF FIGURES

Figure 2.1: Conceptual Framework..... 27

Figure 4.1: Histogram 54

Figure 4.2: P- P – Plot for Unstandardized Residuals..... 55

Figure 4.3: Scatter Plot for the unstandardized Residuals 56

LIST OF ABBREVIATIONS AND ACRONYMS

AI	Artificial Intelligence
COVID-19	Coronavirus Disease 2019
E-governance	Electronic Governance
ICT	Information and Communication
MPCO	Mobile Phone in Coordination
MPEC	Mobile Phone in Enhancing Communication
MPSAT	Mobile Phone in Streamlining Administrative Tasks
MVA	Missing Value Analysis
OLS	Ordinary Least Square
PEOU	Perceived Ease of Use
POP	Prison Officers' Performance
PU	Perceived Usefulness
BI	Behavioural Intention
SD	Standard Deviation
SPSS	Statistical Package for the Social Sciences
TAM	Technology Acceptance Model
VIF	Variance Inflation Factor

CHAPTER ONE

INTRODUCTION

1.1 Chapter Overview

Chapter one presents the background of the study whereby issues are presented based on global, African and Tanzania perspectives. This is followed by a statement of the problem whereby the problem is stated and evidence of previous studies with the intention of the study is explained. Objectives of the study are stipulated here whereby the general objective of the study which focuses on assessing the role of mobile phones on prison officers' performance is presented followed by three specific objectives. The last part of the chapter presents the significance of the study, the scope and the organization of the study.

1.2 Background of the Study

The use of mobile phones by prison officers has grown in popularity globally in prison correctional facilities, as they help officers interact with each other, obtain necessary data, and get updates in real time. These mobile devices provide a platform for officers to quickly and effectively report issues and improve communication and reaction skills inside the prison correctional facility, (Elliot, et al., 2023)

Globally is it presented that, the use of mobile phones can give prison officers instant access to databases, manuals of procedures, and training materials that enable them to keep up with changing procedures and policies (Garcia & Patel, 2023). The prevalent adoption and use of mobile phones have significantly transformed various

aspects of African correctional facilities (Herce, et al., 2020). Among the professionals affected by the widespread use of mobile phones is prison management. Prison officers play a crucial role in maintaining order, ensuring inmate safety, and implementing institutional programs within correction facilities; however, prison officers face unique challenges in managing the use of mobile phones within correction facilities (McKay, 2022; Magola-Makina, et al., 2022).).

In the United Kingdom, the use of mobile phones by prison officers is generally prohibited to maintain security and prevent the smuggling of contraband (Peterson, Kim, & Shukla, 2024). However, incidents have occurred where officers have been involved in smuggling mobile phones into prisons, leading to serious security breaches. For example, a BBC investigation revealed that some prison officers were earning substantial amounts by smuggling mobile phones into jails, facilitating illegal activities among inmates (Hamilton, Smith, White, Wright, & Pitt, 2023).

In China, the prison system has implemented strict measures to control the spread of COVID-19, including demanding officers work on 'lockdown shifts.' While this approach was effective in containing the virus, it placed a heavy burden on the personal lives of the officers. The study emphasizes the need for balancing effective control measures with the well-being of prison staff (Junger, & Kooi, 2023).

In the United States, the unauthorized use of mobile phones by inmates has been linked to increased violence and criminal activities within prisons. Prison officials have expressed concerns that cell phones contribute to inmate violence, as they can

be used to coordinate illegal activities (Urban Institute, 2023). To address these issues, correctional facilities have implemented contraband cell phone interdiction strategies, including technological solutions like cell phone jammers and detection systems, as well as non-technological approaches such as staff training and policy enforcement. A comprehensive guide has been developed to assist correctional agencies in implementing these strategies effectively Federal Communications Commission (Baker, et al., 2020).

From an African perspective, the role of mobile phones in enhancing prison officers' job performance in Africa is a complex issue, influenced by various factors including technological integration, staff training, and organizational policies (Maina, 2020). While direct studies on this specific topic are limited, related research provides valuable insights into the broader context of prison management and staff performance across different African countries.

In Kenya, a study examined the impact of technology on the efficiency of correctional services, highlighting the importance of technological tools in enhancing operational efficiency (Kioko, 2020; Mwanyekange, 2021). Effect of Technology Acceptance and Modernization Programs on the Performance of Customs Officers, Mombasa, Kenya. While the study does not specifically mention mobile phones, it underscores the role of technology in supporting staff and maintaining security within correctional facilities. Research in Ghana explored job satisfaction and organizational commitment among prison officers, identifying intrinsic factors such as opportunities for inmate rehabilitation and recognition as contributors to job

satisfaction (Akoensi, 2021). Extrinsic factors, including salaries and working conditions, also play a significant role. Although this study does not directly address the impact of mobile phones, it emphasizes the importance of supportive work environments in enhancing staff performance (Edward, 2024; Shakir, et al, 2024).

In Tanzania, mobile phones have been utilized in public health surveillance, demonstrating their potential for data collection and communication (Bull, Thomas, Nyanza, & Ngallaba, 2018). A study on rabies surveillance implemented a large-scale intersectoral surveillance system using mobile phones, highlighting their effectiveness in real-time data collection and reporting (Tembo, 2023). While this study focuses on health surveillance, it underscores the utility of mobile technology in enhancing operational efficiency.

The role of mobile phones in enhancing prison officers' performance at Dodoma Central Prison in Tanzania is not extensively documented in publicly available sources (Shaban, 2023; Theonest, et al, 2024). However, understanding the broader context of prison management and technological integration in Tanzanian correctional facilities can provide valuable insights. While specific information about Dodoma Central Prison is limited, Tanzanian correctional facilities have explored technological solutions to improve operational efficiency. For instance, the use of mobile phones in public health surveillance has demonstrated their potential in data collection and communication within correctional settings. A study on rabies surveillance implemented a large-scale intersectoral surveillance system using mobile phones, highlighting their effectiveness in real-time data collection and

reporting. Although this study focuses on health surveillance, it underscores the utility of mobile technology in enhancing operational efficiency. The working conditions of prison officers significantly impact their performance (Podgorski, Lobnikar, Mihelič, & Prislan, 2023). A report by Penal Reform International discusses how factors such as staff training, support, and resources affect the quality of prison management (Koome, 2020). While it does not specifically mention mobile phones, the report emphasizes the importance of adequate resources and support systems in enhancing staff performance.

This study has been guided by the technology acceptance model. The Technology Acceptance Model (TAM) is a suitable framework for assessing the role of mobile phones in enhancing Tanzania prison officers' job performance, as it helps explain how external factors influence users' acceptance and usage of technology (Davis, 1989). TAM posits that perceived ease of use and perceived usefulness are critical determinants of users' intentions to adopt new technologies, making it ideal for studying the impact of mobile phones on prison officers' performance.

By using TAM, this study can explore how prison officers in the Dodoma region perceive mobile phones in terms of their effectiveness in improving job efficiency, communication, and operational performance. TAM's focus on user acceptance can provide valuable insights into whether mobile phone adoption leads to improved job outcomes and how it influences the day-to-day duties of prison officers (Venkatesh & Davis, 2000).

1.3 Statement of the Problem

Mobile phones have become an integral part of modern life, they provide not only means for communication but also serve as versatile tools for a wide range of activities. They are in various shapes, sizes, and specifications and offer different features to cater to the diverse needs and preferences of users. The use of mobile phones in prisons poses difficulties and problems in addition to the possible benefits. Unauthorized communication between prison officers and convicts poses a security risk that can result in the disclosure of sensitive information or even encourage unlawful activity inside correctional facilities (Brown, et al., 2023; Raher, 2020).

However, another potential concern for the use of mobile phones is to produce distractions, which can reduce officers' concentration and effectiveness in performing their jobs (Uther, Cleveland, & Jones, 2020). Taylor-McCune, (2020); and Taylor, (2024) state that mobile phones within prisons threaten the safety, security, and stability of the correctional environment and pose a significant risk of danger to both inmates as well as staff members within the facility. These devices can give room for the continuation of criminal activity as well as unmonitored access to society. However, mobile phone usage in prisons has been linked to activities such as extortion, escape attempts, drug trafficking, gang activity, and even murder plots (Cain, J2022).

Prison staff in Tanzania face challenges such as overcrowding, inadequate resources, and limited access to technology (Hamad, 2023). A study on reducing overcrowding in prisons highlights issues like water shortages, lack of electricity, and insufficient

medical supplies, which affect the ability of prison staff to perform their duties effectively. While this study does not specifically address the use of mobile phones, it underscores the need for improved resources and infrastructure to enhance staff performance. Because technology is growing very fast and prison regulations do not allow the use of mobile phones in prisons, mobile phones are used in prisons to support daily activities, even though the regulations have many advantages over their disadvantages. Therefore, this study has aimed to address threats facing prison correctional facilities from the use of mobile phones in communication.

1.4 Objectives of the Study

1.4.1 General Objective

Generally, the study aimed to assess the impacts of mobile phone use by Tanzanian prison officers on job performance in Dodoma. The following are the specific objectives:

1.4.2 Specific Objectives

i. To determine the role of mobile phones in enhancing communication on prison officers performance
ii. To examine the role of mobile phones in streamlining administrative tasks on prison officers performance
iii. To assess the role of mobile phones in facilitating coordination in prison operations on prison officers performance

1.5 Significance of the Study

The study has addressed a gap in the existing literature and contributed to a better understanding of the intersection between the use of mobile phones and institutional efficiency in prisons. The study's results will provide correctional authorities with evidence-based insights to make informed decisions about mobile phone policies and practices and provide practical implications for policy development and resource allocation within the Tanzanian prison system. With the optimization of mobile phone usage, the study aims to enhance prison officers' job performance, communication, and overall effectiveness in maintaining prison security.

Furthermore, the study will inform different strategies to enhance relevant communication, security protocols, and overall operational effectiveness within the prison environment. Improved efficiency among prison officers in Tanzanian prisons can potentially lead to a safer and more secure environment for both prison staff and inmates. This assessment can provide valuable insights into various aspects of the Tanzanian prisons' working environment and performance.

Moreover, this study may have broader implications for similar contexts in the global context by providing insights into the challenges and opportunities that are associated with mobile phone use in prison settings. This comparative perspective can contribute to the development of best practices and policies in the management of the use of mobile phones in prisons, ultimately benefiting the criminal justice system at large.

1.6 Scope of the Study

The study was conducted within the Dodoma region, specifically looking at prisons located within the region in this case Msalato Prison. This provided a localized perspective on the issue, taking into account regional challenges, infrastructure, and the specific context of Tanzania. The primary participants in this study were prison officers working in the prison of Msalato. It focused on their experiences and perceptions of mobile phone use as it relates to their day-to-day responsibilities and performance. The study will explore how mobile phones are used by prison officers in various aspects of their work, including, enhancing communication and coordination among prison staff and other stakeholders, assisting in the streamlining of administrative tasks and reporting and assessing the role of mobile phone in facilitating coordination in prison operations on prison officers' performance. The study was guided by guided by the Attention Theory and a time frame of six months duration.

1.7 Organization of the Study

The introduction, literature review, methodology, and five other chapters make up the structure of the study. The study's background, problem description, aims, research questions, scope, significance, and limitations are all described in Chapter One. Important ideas, theoretical stances, empirical research, and the conceptual framework are all covered in Chapter Two. The study's kind, location, demographic, sample size, sampling procedures, data sources, validity considerations, and data analysis methodologies are all covered in length in Chapter Three. The demographic information of the respondents, descriptive statistics, correlation and regression

analysis results, and a discussion of the results are all presented in Chapter Four. The study's summary, conclusion, and suggestions are presented in Chapter Five, the last chapter.

CHAPTER TWO

LITERATURE REVIEW

2.1 Chapter Overview

This chapter reviewed the existing research on mobile phone use in prisons and its impact on prison officer's performance. It defined key concepts, theories, and empirical studies, identified gaps, and discussed the prevalence and reasons for mobile phone use among prison officers. Lastly, the conceptual framework and hypotheses development are presented.

2.2 Conceptualization of the Key Concepts

Conceptualization of the key terms in the study is a crucial step in the research process as it involves defining and clarifying key terms, which helps a researcher communicate effectively and ensures a shared understanding of the study focus (Hammond, & Wellington Prison Officer, 2012). Here is a breakdown of the key terms related to the study mobile phones,

2.2.1 Mobile Phones

These are cell phones, portable devices that combine the functionalities of telephones with features such as internet browsing, camera capabilities, and various applications. They operate on cellular networks by allowing users to make and receive calls and messages and access data services wirelessly. Smith (2023) defines mobile phones as portable devices that are used to connect to a telecommunications network to transmit and receive voices, videos, or data.

2.2.2 Prison Officer

These are security individuals responsible for overseeing and managing the daily operations of prisons or correctional facilities. They maintain order, security, safety, and law for inmates, staff, and visitors by monitoring activities and enforcing rules and regulations within the prison environment. They also support and guide inmates by addressing behavioural issues, offering counselling services, and facilitating rehabilitation programs (Reddy, 2009).

2.2.3 Prison Officers Performance

Prison officers' performance refers to their ability to fulfil organizational goals effectively, such as maintaining security, ensuring prisoner welfare, and rehabilitating inmates, while adhering to policies and legal standards. It encompasses both individual and team contributions to achieving these objectives (Johnson, & Price, 2020). While Robbins and Judge, (2021) define prison officers' performance is defined as their exhibited behaviours and activities that directly contribute to the safety, order, and rehabilitation objectives of correctional institutions, measured through compliance with duties, interpersonal relations, and successful inmate management.

In this study prison officers performance refers to the effectiveness, efficiency, and professionalism with which prison officers carry out their duties to ensure the safety, security, and orderly operation of correctional facilities. It involves maintaining discipline, supervising inmates, enforcing rules and regulations, and contributing to the rehabilitation and reintegration of prisoners into society. Performance is assessed

through measurable outcomes such as reduced incidents of violence, adherence to operational procedures, quality of service delivery, and achievement of institutional goals, such as maintaining a secure and humane environment.

2.3 Theoretical Literature Review

2.3.1 The Technology Acceptance Model

The Technology Acceptance Model (Davis, 1989) suggests that perceived ease of use and perceived usefulness influence an individual's attitude and intention to use technology. The intention to use technology is a key predictor of actual usage, users' attitudes and beliefs shape this intention, but external factors can also influence their relationship. Using mobile phones for prison officers, if the intention is user-friendly and deemed beneficial for tasks like communication, access to information, and coordination, may positively influence their job efficiency. Factors such as training, support, and social influences can impact users' perceptions and adoption of technology. The principles of the Technology Acceptance Model (TAM) form the basis for understanding and predicting users' acceptance and adoption of technologies such as mobile phones.

The Technology Acceptance Model (TAM) is based on several key assumptions that explain how users come to accept and use new technology. These assumptions are; Perceived Ease of Use (PEOU) whereby Users are more likely to adopt a technology if they believe it is easy to use and does not require significant effort (Davis, 1989). This assumption reflects the notion that perceived simplicity positively impacts technology acceptance.

Secondly, Perceived Usefulness (PU) whereby Technology is more likely to be accepted if users believe it enhances their job performance or personal life (Davis, 1989). The assumption is that users will adopt technology that improves their efficiency or productivity.

Thirdly, Behavioural Intention (BI) whereby TAM assumes that the decision to use technology is influenced by users' intention, which is driven by their perception of the technology's usefulness and ease of use (Venkatesh & Davis, 2000). Users will adopt the technology if they have a favourable intention toward it.Fourth, External Variables whereby TAM assumes that external factors, such as system characteristics, social influence, and organizational support, can influence both perceived ease of use and perceived usefulness (Venkatesh et al., 2003). These external influences shape users' attitudes toward adopting technology. Lastly, Attitude Toward Use Whereby Although originally not part of the model, later extensions of TAM assume that users' attitudes toward using technology mediate the relationship between perceived ease of use and perceived usefulness and their actual usage (Davis et al., 1989). Positive attitudes lead to greater adoption.

The Technology Acceptance Model (TAM) is applied in assessing the role of mobile phones in enhancing Tanzania prison officers' job performance by exploring how their perceptions of mobile phone technology influence their adoption and use. According to TAM, two key constructs Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) are essential in understanding how prison officers might

incorporate mobile phones into their daily tasks. Perceived Usefulness (PU) suggests that if prison officers believe that mobile phones can improve their job performance, such as facilitating communication, coordinating tasks, or enhancing security monitoring, they are more likely to adopt the technology (Davis, 1989). For example, if officers perceive that mobile phones enable quicker communication with colleagues, improve coordination during emergencies, or enhance operational efficiency, the perceived usefulness of the technology will positively influence their job performance.

Perceived Ease of Use (PEOU), on the other hand, implies that mobile phones must be easy to use for prison officers, who may not always be familiar with advanced technological tools. If officers believe that the technology is simple to operate, their acceptance and usage are likely to be higher (Venkatesh & Davis, 2000). For instance, user-friendly mobile phones with straightforward features would encourage adoption, leading to improved performance in managing prisoners and operational tasks.

By applying TAM, the study can identify how these factors PU and PEOU impact the adoption and effective use of mobile phones by Tanzania prison officers, enhancing their ability to perform tasks such as managing communication, coordinating security operations, and ensuring better supervision. Furthermore, external factors, such as training, organizational support, and technological infrastructure, could influence these perceptions, making TAM a valuable framework for exploring the dynamics between technology acceptance and job

performance in correctional settings (Venkatesh et al., 2003). The Technology Acceptance Model (TAM) is widely used to assess technology adoption in various fields, including correctional settings like Tanzania prisons. Below are the strengths and weaknesses of applying TAM in the context of assessing the role of mobile phones in enhancing prison officers' job performance.

TAM's straightforward structure, focusing on Perceived Usefulness (PU) and Perceived Ease of Use (PEOU), makes it an ideal model for assessing mobile phone adoption among prison officers. It provides a clear understanding of the key factors that influence technology acceptance (Davis, 1989). By using these constructs, the model can easily capture the officers' perceptions regarding the effectiveness and ease of mobile phone use in performing their duties.

Also, TAM has strong predictive capabilities, especially in assessing user behaviour and acceptance. It can predict whether prison officers will adopt mobile phones based on their perceptions of the technology's usefulness and ease of use. If officers perceive mobile phones as enhancing communication, security, and job efficiency, TAM suggests they are more likely to embrace the technology, leading to improved job performance (Venkatesh & Davis, 2000). TAM allows for measurable data collection through surveys, which can help gather insights from a large number of prison officers in Tanzania. By using Likert-scale questionnaires based on PU and PEOU, the model facilitates the gathering of standardized data that can be analysed statistically to assess the factors influencing mobile phone adoption and its impact on job performance.

However, one of the primary criticisms of TAM is its simplicity. While it identifies PU and PEOU as critical factors, it fails to consider other potentially important influences on mobile phone adoption among prison officers, such as social influence, organizational culture, or institutional constraints like resource availability (Venkatesh et al., 2003). In Tanzania's prison system, where resources may be limited, these external factors could play a significant role in technology adoption, which TAM does not fully address.

Also, TAM assumes that the constructs of PU and PEOU are universal, but this may not always hold in specific contexts, such as in Tanzania's correctional environment. Prison officers' perceptions of mobile phones may be influenced by factors unique to the local environment, such as issues related to security concerns, trust in technology, or the socio-political context (Chuttur, 2009). TAM does not inherently account for these contextual differences, which can limit its applicability in specific settings like Tanzania’s prison system.

Lastly, TAM primarily focuses on individual perceptions of technology, but mobile phones' role in enhancing job performance might involve collective or organizational factors. For example, how mobile phones are integrated into daily operations, the availability of training for officers, or the institutional policies on technology use might also affect overall job performance. TAM tends to overlook these broader organizational and environmental influences, which are critical in a complex

2.4 Empirical Literature Review

2.4.1 The Role of Mobile Phones in enhancing Communication on Prison Officers' Performance

Khasawneh, et al., (2024) studied the Using smartphone applications to administer the educational process. To accomplish the aims of the investigation, the researcher employed a descriptive research design and utilized a quantitative approach, depending on the questionnaire as the primary instrument for data collection. The research was carried out on a sample of 230 educators, comprising both male and female individuals, from the Zarqa Governorate. The participants were chosen using a random selection technique. The findings of this study suggest that the integration of smartphone applications in educational management is influenced by various factors, including managing the teaching process, the evaluation process, student affairs, and employee affairs. The findings suggest that there is no statistically significant variation in the extent of smartphone application usage for educational management in schools within the Zarqa Governorate while taking into account the variables of gender and level of qualification. The strengths of Khasawneh et al. (2024) lie in their innovative exploration of smartphone applications to enhance education by improving communication and accessibility, while their weaknesses include a limited focus on long-term impacts and potential challenges such as digital literacy and resource disparities.

Akinsanya, Adeniyi and Okunola, (2020) studied the Influence of Information and Communication (ICT) Maturity on Nigerian Correctional Education Services. A descriptive survey of ex post facto type was adopted with four objectives, four

research questions and a null hypothesis. A Modified Questionnaire Information and Communication Technology Maturity Scale with 0.73 reliability was administered to 120 participants selected using multi-stage sampling techniques. Frequency distribution, percentage and multiple correlation matrix were used to test for the null hypothesis at 0.05 alpha level. Results of the relationship between independent and dependent variables show that skill dependence indicates that the independent variable has a positive influence on skill dependence and organizational competence whereas it negatively influences task performance, restricted ability and high ability. It is concluded that ICT maturity is poor and cannot drive correctional education service delivery efficiently in Nigerian correctional facilities; therefore, most inmates do not have access to it. It is recommended that ICT infrastructure should be provided to reposition education service delivery in the Nigerian correctional system by the Federal government of Nigeria.

The study by Akinsanya, Adeniyi, and Okunola (2020) demonstrates strength in highlighting the positive impact of ICT maturity on improving Nigerian correctional education services, but it has a gap in addressing infrastructural and policy challenges that limit the widespread implementation of ICT in correctional facilities.
Quandt, et al., (2020) studied Mobile phone use is associated with higher smallholder agricultural productivity in Tanzania, and East Africa. In this paper, they examine perceptions about the impacts of mobile phones on agricultural productivity and the relationships between mobile phone use and agricultural yield. They did so by fitting multilevel statistical models to data from farmer-phone owners (n = 179) in 4rural communities in Tanzania, controlling for site and demographic factors.

Results show a positive association between mobile phone use for agricultural activities and reported maize yields. Further, many farmers report that mobile phone use increases agricultural profits (67% of respondents) and decreases the costs (50%) and time investments (47%) of farming. The findings suggest that there are opportunities to target policy interventions at increasing phone use for agricultural activities in ways that facilitate access to timely, actionable information to support farmer decision-making. Quandt et al. (2020) effectively highlight the role of mobile phones in boosting smallholder agricultural productivity in Tanzania by enhancing access to critical information, but their study lacks consideration of adoption barriers like affordability and digital literacy.

2.4.2 The Role of Mobile Phones in streamlining Administrative tasks on Prison Officers' Performance

Ghodbane, and Abuyabes, (2025) studied Artificial Intelligence and the Effectiveness of Territorial E-Governance: An Exploration through the Case of the Amman Region in Jordan. The study sample consists of government ministries in Amman's public sector, which includes 40 governmental entities enforcing AI systems. The methodology covers a five- period from 2018 to 2023, and relies on primary data sources, including sanctioned government reports and stoner satisfaction checks, to dissect the relinquishment and operation of artificial intelligence. The research findings illustrate that the use of E-governance supported by artificial intelligence technologies in Amman's public sector has led to tangible improvements in user satisfaction and service delivery effectiveness.

Ghodbane and Abuyabes (2025) provide a strong analysis of how artificial intelligence enhances the effectiveness of territorial e-governance in the Amman region, but their study is limited by insufficient exploration of ethical concerns and resource constraints in AI implementation.

Torsu, (2024) studied Crime prevention in the digital age: Challenges and technologies for policing in the Aflao border township in Ghana. Methodologically, the data from the study was drawn primarily from interviews with police officers. The study revealed that understaffing, cross-border crime, the proliferation of unapproved routes, lack of a crime scene team, logistics, and lack of cooperation from border residents were core challenges confronting officers. The study concludes that technology deployment in Aflao, although rudimentary, helps mitigate the hard means of dealing with crime.

Ghodbane and Abuyabes (2025) provide a strong analysis of how artificial intelligence enhances the effectiveness of territorial e-governance in the Amman region, but their study is limited by insufficient exploration of ethical concerns and resource constraints in AI implementation.

Theonest, et al., (2024) studied the Status and prospects for mobile phone-enabled diagnostics in Tanzania. Data was collected using a semi-structured questionnaire with closed and open-ended questions, guided in-depth interviews and focus group discussions administered to the participants after informed consent was obtained. A total of 305 participants from six regions of Tanzania were recruited in the study.

Their analysis reveals that only 48.2% of participants demonstrated significant awareness of mobile phone-enabled diagnostics. This awareness varies significantly across age groups, professions and geographical locations. Interestingly, while 97.4% of participants own and can operate a smartphone, 62% have never utilized their smartphones for health services, including disease diagnosis. Regarding prevalent health conditions to focus on when developing mobile phone-enabled diagnostics tools for Tanzania; there was a disparity between medical and veterinary professionals.

A strength of Theonest et al. (2024) is their comprehensive analysis of mobile phone-enabled diagnostics' role in enhancing healthcare accessibility in Tanzania, while a weakness lies in the limited exploration of infrastructural and technological challenges that may hinder implementation and scalability.

2.4.3 The Role of Mobile Phones in Facilitating Coordination in Prison Operations on Prison Officers' Performance

Irtaimeh, (2022) studied Electronic Monitoring as a Measure to Reduce the Use of Pre-trial Detention. This study tackles the legal regulation of electronic monitoring as an alternative measure to pre-trial detention in the Jordanian Criminal Legislation and the problems of its application. The study concludes that the Jordanian Legislator has stipulated the electronic monitoring system as an alternative to pre-trial detention to be limited to misdemeanors excluding repeating the defendant of the crime. Furthermore, the Jordanian Legislator has omitted to stipulate the conditions and operational mechanisms of the electronic monitoring, which has

precluded its application as an alternative measure to pre-trial detention. The study has found the necessary legislative intervention of the Jordanian Legislator and the explicit stipulation of the conditions for applying electronic monitoring as an alternative to pre-trial detention in addition to identifying the operational mechanisms.

The strength of Irtaimeh (2022) lies in its focus on electronic monitoring as a cost-effective and humane alternative to pre-trial detention, while its weakness is the limited discussion on the potential ethical and legal challenges associated with its implementation. In Ghana, Kuo, and Chen, (2020) studied Mobile Phones and Their Role in Prison Operations. Mobile phones are integral to prison operations, serving as tools for coordination among prison officers. They facilitate communication for scheduling, resource allocation, and emergency response coordination. However, the use of mobile phones by prison officers also presents significant challenges, including the risk of contraband smuggling and corruption. Unauthorized mobile phones can be used by inmates to coordinate criminal activities, posing security threats. In summary, while mobile phones are essential for operational coordination among prison officers, their use must be carefully managed to prevent misuse and maintain the integrity of prison operations.

The strength of Kuo and Chen's (2020) study on mobile phones in prison operations in Ghana lies in its exploration of technological integration for improved coordination and efficiency, while its weakness is the limited consideration of security risks and ethical concerns surrounding mobile phone usage in prison

settings. AYO, (2023). Assessment of the Rehabilitation Services in Tanzania Prisons. In this study, a case study research design was utilized and the population of this study was employees at Karanga prison which constituted 135 employees selected using a purposive sampling technique. Data was collected through questionnaires, interviews, and documentary review. Descriptive statistics, facilitated by SPSS version 26, were employed for quantitative data analysis, while content analysis was utilized to analyze the qualitative data obtained from interviews. The study found that a variety of rehabilitation services are available, with strong support for educational programs and vocational training. Also, the Challenges identified include budget limitations and security concerns within the prison. The strength of

Ayo's (2023) study on rehabilitation services in Tanzania prisons lies in its focused examination of local rehabilitation programs, providing context-specific insights, while its weakness is the limited comparative analysis with other countries' rehabilitation practices, which could offer broader perspectives on potential improvements environment.

2.5 Research Gap

The study assessing the Role of Mobile Phones in Enhancing Tanzania Prison Officers' Job Performance: Insight from Dodoma Region encountered several gaps in theory, knowledge, methodology, and context. Theoretical Gap. While existing literature explores mobile phone usage in prison operations, there is limited theoretical development specifically on how mobile phones directly influence the job performance of prison officers in Tanzania (Lusike, Mukhongo, Mwaura, &

Omwoha, 2023). Knowledge Gap; Despite the growing interest in mobile technology's role in security sectors, there is insufficient research on the impact of mobile phone usage on performance outcomes such as efficiency, decision-making, and coordination among Tanzanian prison officers (Mvula, 2024). Methodological Gap; Previous studies primarily rely on qualitative or case-based methods, whereas the proposed study could benefit from a mixed-methods approach to better capture both the statistical correlation and personal experiences of prison officers (Burton, et al., 2024). Contextual Gap: Most research in this area has been conducted in Western or developed countries, with limited focus on Tanzania's unique prison environment and socio-cultural context, which may affect how mobile phones influence job performance (Ferguson, et al., 2022). This research could fill these gaps by contextualizing mobile phone usage within Tanzania's correctional system and its specific challenges.

2.6 Conceptual Framework

A conceptual framework for assessing the role of mobile phones in enhancing Tanzania prison officers' job performance provides a structured approach to understanding the relationship between mobile phone usage and key performance indicators of prison officers. It identifies mobile phones as an independent variable, encompassing aspects such as communication efficiency, access to information, and task coordination. The dependent variable, job performance, includes metrics like operational efficiency, timely decision-making, and improved inmate management. This framework is guided by theories such as the Technology Acceptance Model (TAM), which explains how perceived ease of use and usefulness of technology

influence its adoption and impact (Davis, 1989). Additionally, the framework considers socio-cultural and institutional factors unique to Tanzania, such as resource constraints and regulatory policies, which may moderate this relationship (Nassor & Aziz, 2020). By integrating both qualitative and quantitative elements, the framework offers a holistic lens to evaluate how mobile phones contribute to prison officers' effectiveness, bridging gaps in existing literature focused primarily on developed countries (Mwaura, 2021).

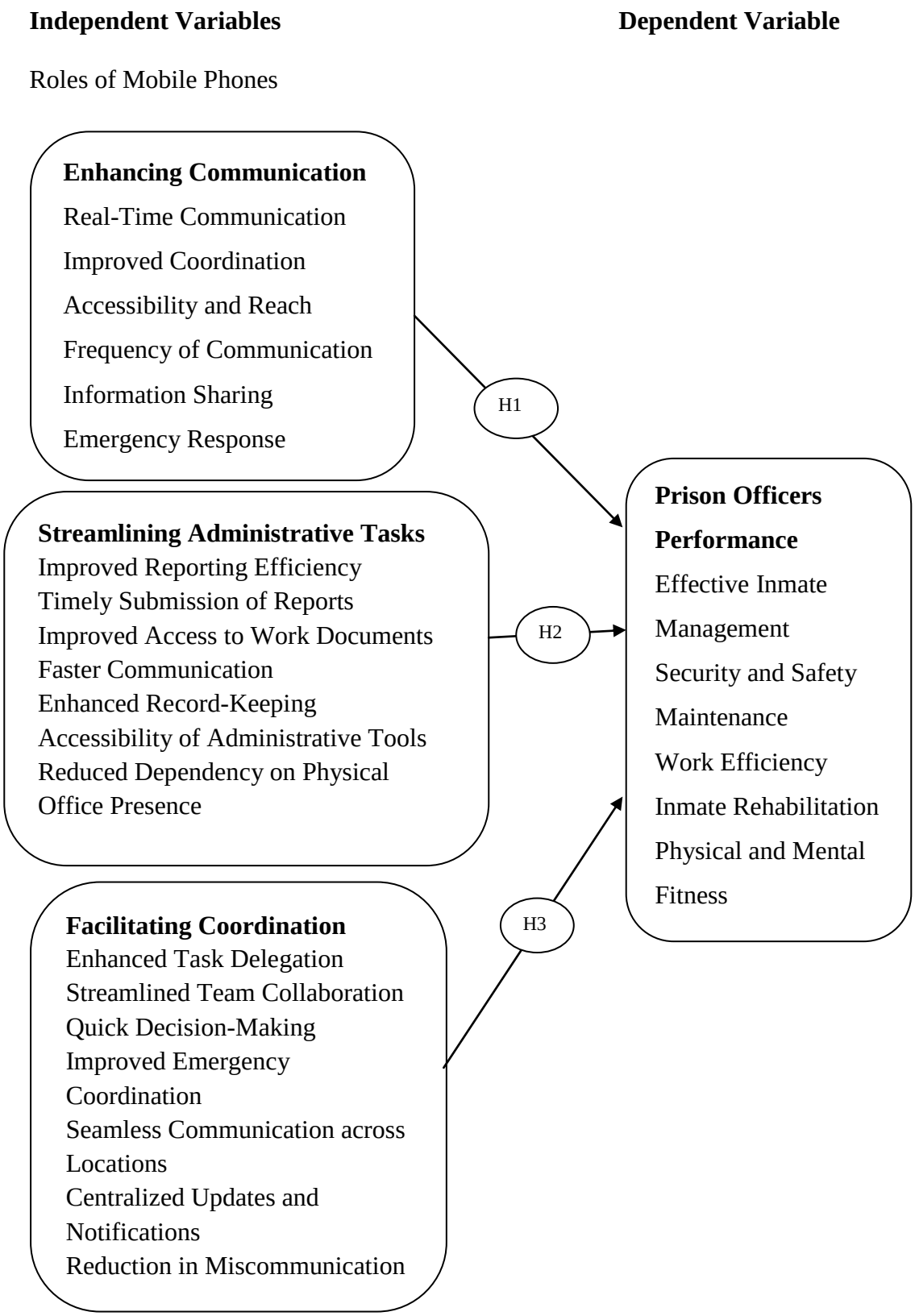

Figure 2.1: Conceptual Framework

Source: Researcher own Construction (2024)

2.7 Hypotheses Development

H_1: Mobile phone has a positive effect in enhancing communication on prison officers' performance

H_2: Mobile phones have a positive effect in streamlining administrative tasks on prison officers' performance

H_3: Mobile phone has a positive effect in facilitating coordination in prison operations on prison officers' performance

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Chapter Overview

This part presents the research structure and design that has been used to guide the study on the methodology and data collection process. It describes the research design that has been used, sample and sampling design, area, scope, and location that was covered in the study, data collection instruments and methods, data analysis methods, and ethical considerations for an effective research process.

3.2 Research Philosophy

The positivist research philosophy, rooted in the idea that knowledge is derived from observable and measurable phenomena, is particularly relevant for assessing the role of mobile phones in enhancing Tanzania prison officers' job performance. This approach emphasizes objectivity and the use of quantitative methods to establish cause-and-effect relationships between mobile phone usage (independent variable) and job performance outcomes (dependent variable) (Ryan, 2018). By employing structured tools like surveys, experiments, and statistical analysis, positivism allows researchers to test hypotheses, such as whether mobile phones improve communication efficiency, task coordination, or decision-making among prison officers.

This philosophy aligns with studies that prioritize generalizability and reliability by focusing on measurable indicators and reducing researcher bias (Collis & Hussey, 2021). In the context of Tanzania, the positivist approach is valuable for producing empirical evidence to inform policies and practices, addressing the gap in research

on how technology impacts public sector performance in developing countries (Mkenda & Komba, 2022).

3.3 Research Approach

This study employed a quantitative research approach. The quantitative research approach is a systematic method used to collect and analyze numerical data to understand relationships between variables, making it ideal for assessing the role of mobile phones in enhancing Tanzania prison officers' job performance (Ahmad, et al., 2019). This approach emphasizes objectivity, measurability, and statistical analysis to test hypotheses, such as whether mobile phone use improves communication, decision-making, or operational efficiency among prison officers.

By employing tools like structured questionnaires, surveys, and statistical techniques, researchers can gather data on the extent of mobile phone usage and its impact on job performance indicators (Creswell & Creswell, 2023). Quantitative research allows for the identification of patterns and correlations, enabling generalizations about the population under study while minimizing researcher bias. In the context of Tanzania, where prison systems face unique socio-economic challenges, the quantitative approach provides empirical evidence to inform policies and interventions to optimize the use of mobile technology in correctional settings (Mkenda & Komba, 2022).

3.4 Research Design

An explanatory research design is employed to investigate causal relationships between variables, making it particularly useful for assessing the role of mobile

phones in enhancing Tanzania prison officers' job performance. This design focuses on identifying and explaining how mobile phone usage (independent variable) influences job performance outcomes, such as improved communication, decision-making, and operational efficiency (dependent variables). By employing both quantitative and qualitative methods, explanatory research delves deeper into not just what but also the why and how behind observed phenomena (Creswell & Creswell, 2023).

For instance, surveys and interviews can be used to measure the extent of mobile phone use and its perceived effectiveness, while statistical tools analyze the strength of these relationships. This design is particularly relevant in the Tanzanian context, where understanding the socio-cultural and institutional factors that moderate this relationship is essential for practical policy recommendations (Saunders et al., 2019). The explanatory approach thus bridges knowledge gaps, providing a comprehensive understanding of the causal mechanisms linking mobile technology and job performance in a developing country context.

3.5 Area of the Study

Msalato Prison in Dodoma was selected for the study "Assessing the Role of Mobile Phones in Enhancing Tanzania Prison Officers' Job Performance: Insight from Dodoma Region" due to its strategic location as a key prison in Tanzania’s capital region, where technological adoption, including mobile phones, is more prevalent compared to rural areas (Mwaura, 2021). As Dodoma is a central administrative hub, it provides an opportunity to assess how mobile phone usage affects prison officers'

coordination, communication, and operational efficiency in a setting with relatively better infrastructure (Omari, 2022). Additionally, the study aims to examine the implementation of national policies on mobile phone use within the Tanzanian prison system in an area that is likely to reflect the government's push toward modernization in correctional facilities (Nassor & Aziz, 2020). This context allows for insights that can be generalized to other urban prison settings in Tanzania, where technological integration plays a significant role in enhancing job performance.

3.6 Population of the Study

The target population of this study was 134 prison officers working in Tanzania prison facilities: 30 from the Msalato prison correctional facility, 50 prison officers from the Isanga prison correctional facility, 15 from the Konda prison correctional facility, 25 in the Mpwapwa prison correctional facility, and 15 in Kongwa prison correctional facility. However, the study used a sample of prison officers from the Dodoma region as a case study, whose data and findings have been generalized to the Tanzanian context.

Table 3.1: Population of the Study

S/N	PRISON	Number of Prison Officers
1	Msalato prison	30
2	Isanga prison	50
3	Konda prison	15
4	Mpwapwa prison	25
5	Kongwa prison	15
Total		**134**

Source: Dodoma Regional Prison Commissioners Office, 2024

3.7 Sampling Technique and Sample Size

3.7.1 Sampling Technique

Random sampling is a probability sampling technique where each member of the population has an equal chance of being selected. In the case of selecting 100 prison officers from a population of 134 in Dodoma, simple random sampling was used to ensure that every officer had an equal chance of being chosen, minimizing selection bias. This method was implemented through techniques like drawing lots, using random number generators, or computerized random sampling tools (Creswell, 2014; Field, 2018). By using random sampling, the sample was representative of the entire population, increasing the generalizability of the research findings. Additionally, random sampling helps ensure the validity and reliability of the results by reducing the risk of researcher bias in the selection process.

3.7.2 Sample Size

The study involved 100 prison officers, both male and female, from different prison facilities in the Dodoma region. The sample size of respondents involved in the study was 100. Representatives from the relevant prisons were selected from the 134 total prison officers from the Dodoma region. The sample size was 100 individuals, out of a total population of 134.

Statistically, the following Taro Yamane's (1967) formula was used to determine the study sample size as shown below: $$n = \frac{N}{1 + Ne^2}$$

Where **n** is the sample size, **N** is the targeted population size and **e** is the margin of

error (0.05). The researcher used a confidence level of 95%, to decide on the sample size to be used in this study. e = 1 – 0.95; Therefore e = 0.05 and N = 134

Therefore n = 100.

3.8 Data collection

In research, primary data are those that are gathered directly from the source by the investigator with a particular goal in mind. It is unique data that hasn't been examined or published before (Ajayi, 2017). Many techniques, including surveys, interviews, experiments, direct measurements, and observations, can be used to collect primary data. Only structured questionnaires were employed in this investigation. Additionally, data collection is defined by Creswell (2014) as the methodical process of obtaining and quantifying information on variables to address research questions, test hypotheses, and assess results. Primary data is gathered straight from the source, devoid of any interpretation or modification by a middleman. Primary data is collected directly from sources by researchers, guaranteeing its validity and applicability to the study question.

3.8.1 Structured Questionnaire

Kothari (2014) stated that Questionnaires are a tool employed to reduce bias and give the respondents convenient time. Structured questionnaires targeting 90 respondents were distributed questionnaires based on rank, allowing for a variety of answers depending on experience and occupation, especially for open-ended questions that need explanation. Structured questionnaires ensure uniformity in data collection. All respondents receive the same set of questions in the same order,

eliminating variability in the way questions are presented. This consistency enhances the reliability of the data. The questions in structured questionnaires are carefully designed and standardized. This means that each respondent interprets and answers the questions in the same way, reducing the chances of misinterpretation or bias in responses. Structured questionnaires are often designed to generate quantifiable data, which can be easily analyzed using statistical methods. This facilitates the identification of patterns, trends, and relationships within the data.

3.9 Data Cleaning and Processing

3.9.1 Pilot Study Results

A pilot study is a preliminary inquiry carried out on a small scale before the main research effort. Testing the viability, validity, and reliability of the research tools, techniques, protocols, and procedures utilized in the bigger study is its main goal (Malmqvist, Hellberg, Möllås, Rose & Shevlin, 2019). A pilot study was necessary to ascertain the respondents' level of familiarity with the scales. A total of ten (10) participants were chosen to participate in the pilot project from the Msalato Prison. They did not, however, take part in the actual study. Every individual was given a questionnaire to fill out. Every filled questionnaire was then reviewed and verified. Data were loaded into SPSS and examined to confirm initial conclusions. Results showed that the instrument is appropriate. The scales underwent verification. After doing the pilot research, any mistakes or abnormalities were fixed.

3.9.2 Error Check

Every piece of data provided by survey participants was checked for accuracy. A second, more knowledgeable person verified the accuracy of the data set and the

questionnaires to make sure all the data was properly collected. Any mistakes found were corrected. Barchard, Freeman, Ochoa, and Stephens (2020) carried out more descriptive statistical error testing to discover items that fall outside of the scale response range.

3.9.3 Missing Data

The SPSS Missing Value Analysis (MVA) was used to identify the missing data. Since the ratings of the independent and dependent variables ought to be less than 5% anything higher shows random missing data Excel was utilized to complete the imputation (Allison, 2009).

3.10 Data Analysis

Multiple regression analysis and descriptive statistics were employed to determine the relationship between the variables. Because of this, regression analysis was used to explain the current relationship between the study variables. Multiple regression analysis is a statistical technique that can be used to examine one dependent variable and several independent variables (Peersman, 2014). Multiple regression analysis combines independent variables with known values to predict the final result of the single dependent value (McLeod, 2013).

3.10.1 Regression Model

Therefore, the model guiding the analysis is illustrated as follows.

$$\mathbf{Y = \beta o + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e}$$

Whereby;

Y = Prison Officers Performance

βo = Constant Factor

β_1 = Communication

β_2 = Streamlining administrative tasks

β_3 = Coordination Prison operations

X_1= Communication

X_2= Streamlining administrative tasks

X_3= Coordination Prison operations

e = Error Term

3.11 Regression Assumptions

The assumptions of ordinary least square (OLS) regression are frequently taken into consideration in a basic regression equation. The key presumptions were looked at to ensure the data met the requirements for analysis and the goals of the regression analysis. The five underlying hypotheses of the Ordinary Least Square were examined (Green, 2008; Park, 2011). Among these are the following: multicollinearity, homoscedasticity, outlier, linearity, and normalcy.

3.11.1 Linearity Assumption

Only when there is a linear relationship between the independent variables can regression occur. For every increment of the predictor, the mean value of the outcome variables exhibits a straight-line trend. Using P-P graphs to display where they lie along the diagonal line, this assumption is verified (Steyerberg, & Steyerberg, 2019).

3.11.2 Normality Assumption

For the linear regression model to function, the regression residuals, or differences between observed and predicted values, must have a normally distributed distribution (Schmidt, & Finan, 2018). To check for normalcy, utilize the histogram. The residuals should be visible as a bell-shaped distribution, displaying a normal distribution with a mean close to 0 and an SD close to 1.

3.11.3 Outlier Assumption

According to André (2022), the regression model is predicated on the idea that residual values outside of histogram 3 are outliers. Tabachnick and Fidell (2007), who claim that any number outside of the range of |3| is an outlier, support this. Generally, estimates for metrics like mean are skewed by outliers. Outliers may manipulate the sum squares to make them appear abnormal. Certain squares are frequently used to compute the standard error. Therefore, the standard error is probably going to be impacted if there is bias in the sum square within the confidence interval. Should a problem be discovered, the case value must be deleted.

3.11.4 Homoscedasticity Assumption

The variance of the error term is assumed to be constant throughout the range of potential values for the independent variable in the regression. Plotting the standardized residuals (also called scatter plots) against the anticipated values revealed whether or not points are uniformly and rectangularly distributed across all independent variable values. The data is homoscedastic. When a cone-shaped pattern appears in the scatter plots, it can mean that the heteroscedasticity is being controlled with a strong standard error.

3.11.5 Multicollinearity Assumption

The underlying presumption of multiple regressions is that there is no substantial correlation between the independent variables and that the data are not multicollinear. To look for multicollinearity, the Variance Inflation Factor (VIF) values were utilized. Using a VIF mean cuff threshold of 5 to eliminate the causes of the multicollinearity danger is one possible remedy (Craney & Surles, 2002).

3.12 Validity

According to Lelissa (2018), a standard definition of validity is the degree to which an instrument measures what it purports to measure. It assesses the degree to which the tool fulfils the purpose for which it was designed. To ensure validity, ten surveys were pre-tested with colleagues, statisticians, and participants. Their feedback was considered, and the instruments were checked to make sure they yielded the intended outcomes.

3.13 Reliability

If a measurement yields consistent results with comparable values, it is considered dependable. It assesses a research study's correctness, consistency, repeatability, and dependability (Chakrabartty, 2013). Using Cronbach's alpha 0.7 cut-off in reliability analysis, the predictor variables' reliability was determined. Cronbach's analysis is a useful technique for evaluating the homogeneity and internal consistency of sets of items in tests and surveys (Sharma, 2016). Cronbach's alpha values can be classified as follows: 0.30 indicates poor reliability, 0.30–0.40 indicates hardly reliable, 0.40–0.50 indicates somewhat reliable, 0.50–0.70 indicates reliable, 0.70–0.90 indicates

very reliable, and >0.90 indicates strongly reliable. As a result, the generally acknowledged lower bound for Cronbach's alpha is 0.70. As a result, only factors having a Cronbach's alpha of 0.7 or more were included.

Table 3.2: Reliability Test Results

S/N	Variable	Number of Items	Cronbach's Alpha
1	Communication	6	.849
2	Streamlining admin tasks	6	.772
3	Coordination	6	.826
4	Prison officers Performance	6	.815

Source: Data Analysis, 20204

3.14 Ethical Considerations

When conducting research, the first ethical consideration was to obtain formal permission from the institution, such as the Open University, to collect data. This involves submitting a detailed research proposal to the university's ethics review board or relevant authority, which outlines the purpose, methodology, potential risks, and benefits of the study. This ensures the university is aware of the research and that it aligns with institutional policies and ethical guidelines. Researchers must also obtain informed consent from participants, ensuring they understand their rights, including confidentiality, the voluntary nature of participation, and the option to withdraw at any time without penalty (Hardicre, 2014).

Furthermore, data collection should respect participants' privacy, avoid harm, and maintain integrity by reporting findings accurately. Ethical considerations also involve safeguarding participants' anonymity or confidentiality, particularly when

handling sensitive or personal information (Diener & Crandall, 1978). Researchers must adhere to ethical standards throughout the data collection and analysis process to uphold trust, transparency, and respect for participants.

CHAPTER FOUR

RESEARCH FINDINGS ANALYSIS AND DISCUSSION

4.1 Chapter Overview

The chapter presents the results and discussions from assessing the role of mobile phones in enhancing Tanzania prison officers' job performance; and insight from the Dodoma region. Demographic distribution whereby age, gender, education level and experience are described. This is followed by descriptive statistics, correlation analysis and multiple regression analysis. Lastly is the discussion of the findings.

4.2 Demographic Characteristics of the Respondents

Demographic characteristics of respondents are crucial in research as they help contextualize findings, ensure representativeness, and analyze subgroup differences, with commonly reported aspects including gender, age, education level, and work experience (Creswell & Creswell, 2018).

4.2.1 Gender Characteristics of the Respondents

The gender characteristics of the respondents reveal that the majority are male, accounting for 65% of the total, while females represent 35%. This indicates a significant gender disparity, with men being nearly twice as represented as women in the sample. Such a distribution suggests a male-dominated workforce or population within the study context, which may reflect historical, cultural, or sector-specific gender imbalances. The underrepresentation of women (35%) highlights the potential need for initiatives to promote gender equity and inclusion in the organization or area under investigation.

Table 4.1: Gender Characteristics of the Respondents

		f	%
Valid	Male	65	65.0
	Female	35	35.0
	Total	100	100.0

Source: Field Data, 2024

4.2.2 Age Characteristics of the Respondents

The age characteristics of the respondents indicate that the majority fall within the 31-40 age group, accounting for 41% of the total sample. This suggests that a significant portion of the respondents are in their prime working years, likely contributing actively to the organization's productivity. The 41-50 age group follows at 26%, representing experienced individuals who may hold senior or managerial positions. The 21-30 age group, comprising 23%, reflects a moderate presence of younger or early-career professionals. Finally, the 51 and above group, at only 10%, suggests a smaller proportion of older, late-career individuals or retirees.

Overall, the data demonstrates a workforce predominantly in their mid-career stages, with fewer younger and older employees, which could have implications for succession planning and long-term organizational sustainability.

Table 4.2: Age Characteristics of the Respondents

		f	%
Valid	21-30	23	23.0
	31-40	41	41.0
	41-50	26	26.0
	51 and above	10	10.0
	Total	100	100.0

Source: Field Data, 2024

4.2.3 Education Characteristics of the Respondents

The education characteristics of the respondents reveal that the majority hold a degree qualification, accounting for 43% of the sample, indicating a workforce that is predominantly well-educated and likely equipped with advanced knowledge and skills relevant to their roles. Those with a diploma constitute 31%, reflecting a significant proportion with mid-level qualifications, while 22% hold a certificate, representing individuals with foundational education levels. Respondents with a master's degree make up only 4%, highlighting the limited representation of highly specialized or advanced academic qualifications. Overall, the data suggests a workforce with diverse educational backgrounds, dominated by degree holders, which could imply a strong capacity for professional performance while indicating potential for improvement in advanced education opportunities within the organization.

Table 4.3: Education Characteristics of the Respondents

		f	%
Valid	Certificate	22	22.0
	Diploma	31	31.0
	Degree	43	43.0
	master	4	4.0
	Total	100	100.0

Source: Field Data, 2024

4.2.4 Experience with Prison

The interpretation and analysis of the education characteristics of the respondents highlight the distribution of qualifications within the workforce, providing insight into their educational background and potential skill levels. The majority of

respondents (43%) hold a degree, suggesting that the workforce is generally well-educated and capable of handling professional and technical tasks. A significant portion (31%) possesses a diploma, indicating mid-level qualifications, likely suited for technical or supervisory roles. Those with a certificate (22%) represent employees with foundational qualifications, possibly occupying entry-level or operational positions. The smallest group (4%) comprises respondents with a master's degree, reflecting limited advanced specialization, which may be important for leadership or strategic roles. This distribution underscores the need for capacity-building programs, such as encouraging employees to pursue higher education, enhance skills and prepare for organizational growth and leadership needs.

Table 4.4: Experience with Prison

		f	%
Valid	1-5yrs	13	13.0
	6-10yrs	26	26.0
	11-15yrs	37	37.0
	16 and above	24	24.0
	Total	100	100.0

Source: Field Data, 2024

4.3 Descriptive Statistics for the Variables

Descriptive statistics are essential in research as they summarize and present key characteristics of variables clearly and concisely, providing insights into data patterns, trends, and variability that support further analysis (Trochim et al., 2021). In this case, the independent variables were the Role of Mobile Phones in Enhancing Communication, the Role of Mobile Phones in Streamlining Administrative Tasks and the Role of Mobile Phones in Facilitating the Coordination of Prison Operations while the dependent variable was Prison Officers' Performance

4.3.1 Role of Mobile Phone in Enhancing Communication

Table 4.5 presents the descriptive statistics results for mobile phones enhancing communication. Mobile phones provide an efficient means to stay connected even in emergencies and received the highest score (M = 4.28, SD = .965) followed by Mobile phones have increased the frequency of communication among staff members (M = 4.16, SD = .992). On the other hand, Mobile phones provide an efficient means to stay connected even in emergencies received the lowest score (M = 3.72, SD = 1.264) followed by Mobile phones have improved the efficiency of communication by offering various methods of communication (e.g., text, voice, video) (M = 4.05, SD= .968).

The analysis of the role of mobile phones in enhancing communication reveals generally high levels of agreement among respondents regarding the effectiveness of mobile phones in improving communication. The item with the highest mean score (4.28) indicates that mobile phones are perceived as highly efficient in ensuring connectivity during emergencies, suggesting that staff members rely on mobile phones for urgent communication. The second-highest mean (4.16) reflects that mobile phones have increased the frequency of communication among staff, implying a stronger communication flow within the organization. Similarly, mobile phones improving decision-making time and offering various communication methods (text, voice, video) both have strong positive ratings (4.12 and 4.05, respectively), showing that these devices enhance both the speed and variety of communication methods. Additionally, teamwork and collaboration are also positively impacted by the ability to share documents and updates via mobile phones

(4.13). The lowest mean (3.72) is for the statement regarding mobile phones enabling emergency communication, indicating that while this is still viewed positively, there is slightly less agreement compared to other aspects. The standard deviations across all items range from .965 to 1.264, showing relatively low variability in responses, which suggests that the majority of respondents share similar views on the role of mobile phones in enhancing communication within the organization.

Table 4.5: Role of Mobile Phones in Enhancing Communication

	Min	Max	Mean	Std. Dev
Mobile phones have increased the frequency of communication among staff members.	1	5	4.16	.992
Communication through mobile phones reduces the time needed to resolve issues or make decisions.	1	5	4.12	1.047
Mobile phones have improved the efficiency of communication by offering various methods of communication (e.g., text, voice, video).	1	5	4.05	.968
Mobile phones provide an efficient means to stay connected even in emergencies.	1	5	3.72	1.264
Sharing documents, files, and updates through mobile phones has improved teamwork and collaboration.	1	5	4.13	.991
Mobile phones provide an efficient means to stay connected even in emergencies.	1	5	4.28	.965

Source: Data Analysis, 2024

4.3.2 Role of Mobile Phone in Streamlining Administrative Tasks

Table 4.6 presents descriptive statistics for the role of mobile phones in streamlining administrative tasks. I use mobile phones for mobile payments and financial transactions, which streamlines administrative financial tasks and received the highest score (M = 3.95, SD = 1.019) followed by Using mobile phones for

administrative communication has reduced my reliance on physical paperwork (M = 3.93, SD = 1.037). On the east side, Mobile phones have helped reduce the time spent on manual document approval and signing processes received the lowest score (M = 3.82, SD = 1.1315) followed by I find mobile phones useful for scheduling appointments and meetings related to administrative tasks (M = 3.84, SD = 1.220).

The interpretation and analysis of the role of mobile phones in streamlining administrative tasks show a generally positive perception of their effectiveness, with mean scores ranging between 3.82 and 3.95, indicating agreement among respondents. The highest mean (3.95) suggests that mobile phones are viewed as particularly useful for streamlining financial tasks, such as mobile payments and transactions, which enhance efficiency in administrative processes. Similarly, the ability to reduce reliance on physical paperwork through mobile phone communication is rated highly (3.93), reflecting their role in digitizing and simplifying workflows. The ability to track performance and task completion (3.91) and to access operational data quickly (3.87) are also perceived as beneficial, highlighting the role of mobile phones in improving oversight and task management.

The usefulness of mobile phones in scheduling appointments and meetings (3.84) and in reducing time spent on manual document approvals (3.82) demonstrates their role in optimizing time management and efficiency. The standard deviations, ranging from 1.016 to 1.220, show moderate variability in responses, indicating that while most respondents share similar views, there are some differing opinions about the extent to which mobile phones streamline administrative tasks. Overall, the data

highlights the positive impact of mobile phones in making administrative processes faster and more efficient, though there is room for further integration and optimization.

Table 4.6: Role of Mobile Phones in Streamlining Administrative Tasks

	Min	Max	Mean	Std. Dev
I find mobile phones useful for scheduling appointments and meetings related to administrative tasks.	1	5	3.84	1.220
Mobile phones have helped reduce the time spent on manual document approval and signing processes.	1.0	5.0	3.82	1.1315
Using mobile phones for administrative communication has reduced my reliance on physical paperwork.	1	5	3.93	1.037
Mobile phones allow me to access operational data quickly, saving time on administrative tasks.	1	5	3.87	1.152
I can easily track performance and task completion through mobile phones, improving administrative oversight.	1	5	3.91	1.016
I use mobile phones for mobile payments and financial transactions, which streamlines administrative financial tasks.	1	5	3.95	1.019

Source: Data Analysis, 2024

4.3.3 Role of Mobile Phones in Facilitating Coordination of Prison Operations

Table 4.7 presents descriptive statistics for the Role of Mobile Phones in Facilitating the Coordination of Prison Operations variable. The use of mobile phones enables effective coordination between staff members during crises and received the highest score (M = 3.98, SD = 1.146) followed by Mobile phones allowing for real-time communication that helps resolve operational problems quickly (M = 3.88, SD = 1.208). While on the lowest scores, Mobile phones assist in reducing communication barriers between staff, ensuring clearer and more efficient communication received

the lowest score (M = 3.64, SD = 1.314). This is followed by Mobile phones helping monitor staff and prisoner movements, ensuring security protocols are followed effectively (M =3.77, SD = 1.109).

The interpretation and analysis of the role of mobile phones in facilitating the coordination of prison operations reveal a generally positive perception of their effectiveness, with mean scores ranging from 3.64 to 3.98. The highest-rated aspect (3.98) emphasizes that mobile phones are perceived as crucial in enabling effective coordination during crises, indicating their importance in maintaining operational efficiency and security during emergencies. Real-time communication, rated at 3.88, highlights the ability of mobile phones to resolve operational problems quickly, while the role of mobile phones in monitoring task progress and ensuring timely completion is also rated highly (3.87), reflecting their utility in improving task management.

The timely sharing of updates across departments (3.82) and the ability to monitor staff and prisoner movements (3.77) further emphasize the role of mobile phones in enhancing coordination and security protocols. However, the lowest-rated item (3.64) relates to reducing communication barriers, suggesting that while mobile phones help, there may still be challenges in achieving seamless communication among staff. The standard deviations, ranging from 1.070 to 1.314, indicate moderate variability in responses, suggesting that while most respondents agree on the positive role of mobile phones, some hold differing opinions on their effectiveness in certain areas. Overall, the data highlights that mobile phones

significantly contribute to improved coordination, communication, and security in prison operations, with the potential for further optimization in reducing communication barriers.

Table 4.7: Role of Mobile Phones in Facilitating Coordination of Prison Operations

	Min	Max	Mean	Std. Dev
Mobile phones assist in reducing communication barriers between staff, ensuring clearer and more efficient communication.	1	5	3.64	1.314
The use of mobile phones allows for the timely sharing of updates across departments, enhancing operational coordination.	1	5	3.82	1.250
Mobile phones allow for real-time communication that helps resolve operational problems quickly.	1	5	3.88	1.208
Mobile phones help in monitoring the progress of ongoing tasks and ensuring they are completed on time.	1	5	3.87	1.070
The use of mobile phones enables effective coordination between staff members during crises.	1	5	3.98	1.146
Mobile phones help monitor staff and prisoner movements, ensuring security protocols are followed effectively.	1	5	3.77	1.109

Source: Data Analysis, 2024

4.3.4 Prison Officers' Performance

Table 4.8 presents the descriptive statistics results for the dependent variable prison officers' performance. The use of mobile phones reduces the possibility of human error by automatically recording movement data received the highest score (M = 4.12, SD = 1.018) followed by Mobile phones to be integrated with the prison's surveillance systems (e.g., CCTV), allowing staff to receive real-time alerts and monitor security (M = 3.84, SD = 1.237). Mobile phones help ensure smooth coordination during shift changes, enhancing continuous monitoring of staff and

prisoner movements received the lowest score (M = 3.58, SD = 1.379) followed by Mobile phones automatically alert me when security protocols, such as restricted area access, are breached by staff or prisoners (M = 3.66, SD = 1.191).

The interpretation and analysis of prison officers' performance, as facilitated by mobile phones, show a positive perception of their utility in enhancing operational efficiency and security. The highest-rated statement (Mean = 4.12) highlights that mobile phones are highly effective in reducing human error by automatically recording movement data, indicating their reliability in ensuring accurate monitoring and record-keeping. Additionally, the integration of mobile phones with surveillance systems, such as CCTV (Mean = 3.84), and their role in preventing unauthorized movements through constant monitoring (Mean = 3.81) underscore their importance in security enforcement within prison operations.

Real-time tracking of staff and prisoner movements (Mean = 3.67) and automatic alerts for security breaches (Mean = 3.66) also emphasize the role of mobile phones in ensuring compliance with security protocols. However, the lowest-rated item (Mean = 3.58) relates to ensuring smooth coordination during shift changes, suggesting that while mobile phones help, there may still be challenges in achieving seamless transition and monitoring during staff handovers.

The standard deviations range from 1.018 to 1.379, indicating moderate variability in responses, with some respondents perceiving certain features as more effective than others. Overall, the data highlights that mobile phones significantly enhance prison

officers' performance by improving monitoring, reducing errors, and strengthening security protocols, with opportunities for further optimization in areas like shift coordination.

Table 4.8: Prison Officers' Performance

	Min	Max	Mean	Std.Dev
Mobile phones enable real-time tracking of staff and prisoner movements within the prison, ensuring they are in the designated areas.	1	5	3.67	1.245
Mobile phones automatically alert me when security protocols, such as restricted area access, are breached by staff or prisoners.	1	5	3.66	1.191
Mobile phones help ensure smooth coordination during shift changes, enhancing continuous monitoring of staff and prisoner movements.	1	5	3.58	1.379
Mobile phones are integrated with the prison's surveillance systems (e.g., CCTV), allowing staff to receive real-time alerts and monitor security.	1	5	3.84	1.237
The use of mobile phones helps prevent unauthorized movements, as they allow for constant monitoring and enforcement of schedules.	1	5	3.81	1.220
The use of mobile phones reduces the possibility of human error by automatically recording movement data.	1	5	4.12	1.018

Source: Data Analysis, 2024

4.4 Regression Assumptions Analysis Results

Regression analysis relies on key assumptions, including linearity, independence of errors, homoscedasticity, normality of residuals, and absence of multicollinearity, all of which must be tested to ensure the validity and reliability of the model's results (Field, 2018; Hair et al., 2019).

4.4.1 Normality Test Results

Figure 4.1 displays the outcomes of the normality assumption. The form of the histogram might reveal details about the distribution of the data. For example, a normal distribution is indicated by a symmetrical bell-shaped curve. A normality test can assist you in determining whether your data has a normal distribution or is bell-shaped. For many statistical tests to be deemed valid, they must satisfy this normality assumption. The histogram's bell-shaped curve (figure 4.1) displays the residuals' distribution. The residuals' closeness to zero in both mean and standard deviation indicates a normal distribution. There are no outliers, as shown by the histogram (Figure 4.1), which shows that all residual values fall under the three borders. Tabachnick and Fidell (2007) state that a result that does not meet the |3| criterion is considered abnormal.

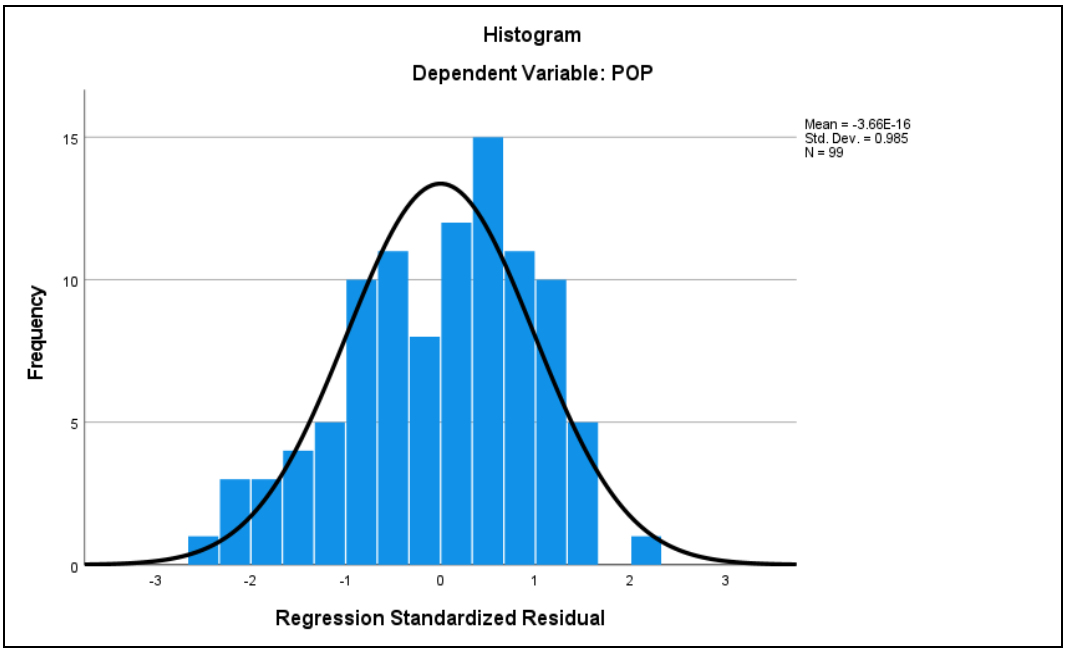

Figure 4.1: Histogram

Source: Data Analysis, 2024

4.4.2 Linearity Test Results

The results of linearity assumptions are shown in Figure 4.2. A statistical test called the linearity test is used to determine if two variables in a regression study have a linear connection. Put more simply, it determines whether the independent variable (predictor) affects the dependent variable (outcome) in a linear fashion. The P-P plot aligns on the diagonal x-axis in this illustration. As a result, the data is linear, indicating the need for data analysis.

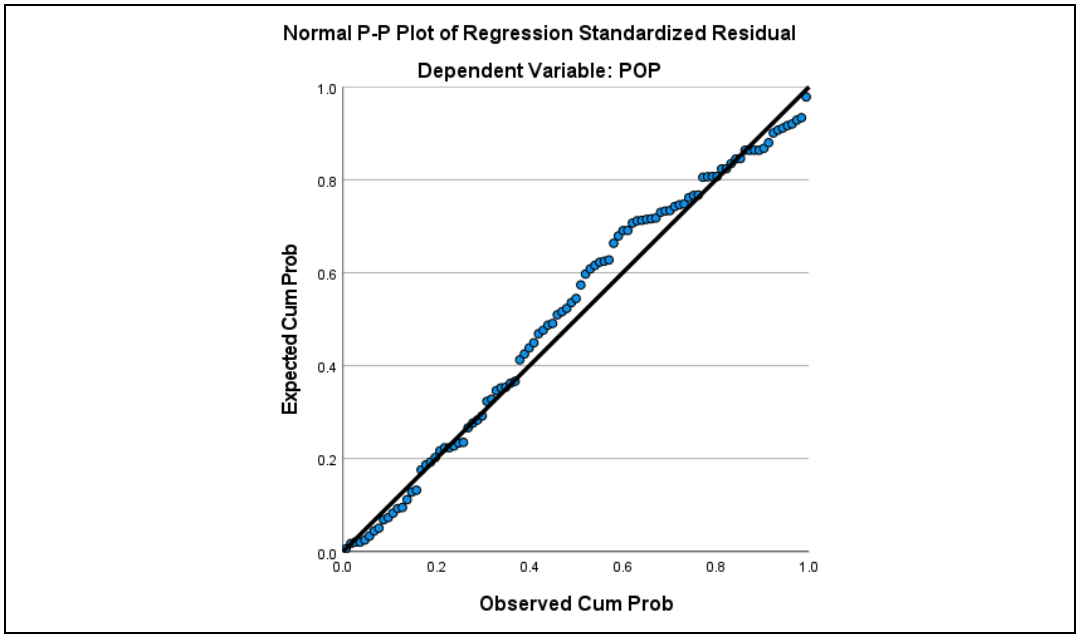

Figure 4.2: P- P – Plot for Unstandardized Residuals

Source: Data Analysis, 2024

4.4.3 Homoscedasticity Results

The case residual dots, scattered in a rectangle around zero (0) in Figure 4.3, seem to be homoscedastic (equality of variance). Therefore, the heteroscedasticity (unequal variation) of the data is not a cause for concern.

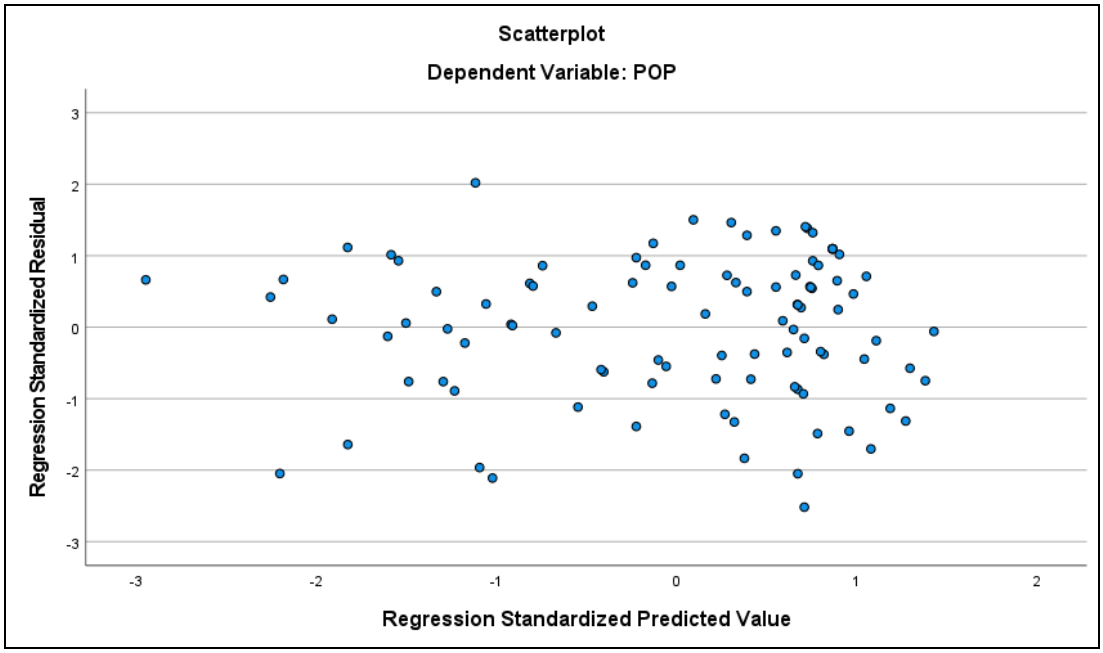

Figure 4.3: Scatter Plot for the unstandardized Residuals

Source: Data Analysis, 2024

4.4.4 Multicollinearity Test Results

(VIF) values indicate that there is no significant multicollinearity among the variables in the model. A Tolerance value below 0.10 and a VIF value above 10 are commonly considered thresholds for multicollinearity concerns (Hair et al., 2019). In this model, all VIF values range between 1.715 and 2.410, and Tolerance values range from 0.415 to 0.583, both of which are within acceptable limits. Specifically, MPEC has a VIF of 1.801, MPSAT has a slightly higher VIF of 2.410, and MPCO has the lowest VIF at 1.715, suggesting that none of these variables are highly correlated with one another. These results confirm the independence of predictor variables, ensuring that the regression coefficients are reliable and not inflated due to multicollinearity.

Table 4.9: Multicollinearity Test Results

Model		Collinearity Statistics	
		Tolerance	**VIF**
	MPEC	.555	1.801
	MPSAT	.415	2.410
	MPCO	.583	1.715

Note: MPCO = Mobile Phone in Coordination, MPEC = Mobile Phone in Enhancing Communication, MPSAT = Mobile Phone in Streamlining Administrative Tasks, POP = Prison Officers' Performance

Source: Data Analysis, 2024

4.5 Multiple Regression Analysis Results

Multiple regression analysis evaluated how various roles of mobile phones, such as enhancing communication, streamlining administrative tasks, and improving coordination, collectively and individually contribute to explaining variations in prison officers' performance.

4.5.1 Model Summary Results

The model summary results indicate that the predictors MPCO (Mobile Phones in Coordinating Operations), MPEC (Mobile Phones Enhancing Communication), and MPSAT (Mobile Phones Streamlining Administrative Tasks) collectively have a strong positive relationship with the dependent variable, POP (Prison Officers' Performance), as shown by the R-value of 0.902. The R Square (0.813) indicates that 81.3% of the variation in prison officers' performance is explained by the model, which reflects a high level of predictive power. The Adjusted R Square (0.807), which adjusts for the number of predictors, confirms the model's robustness, with

minimal reduction in explanatory power. The Standard Error of the Estimate (0.42346) shows the average distance between the observed and predicted values, indicating a good model fit with relatively low error. These results highlight the significant contribution of mobile phones in improving prison officers' performance.

Table 4.10: Model Summary Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.902[a]	.813	.807	.42346
a. Predictors: (Constant), MPCO, MPEC, MPSAT				
b. Dependent Variable: POP				

Note: MPCO = Mobile Phone in Coordination, MPEC = Mobile Phone in Enhancing Communication, MPSAT = Mobile Phone in Streamlining Administrative Tasks, POP = Prison Officers' Performance

Source: Data Analysis, 2024

4.5.2 ANOVA Results

The ANOVA results demonstrate that the regression model is statistically significant in explaining variations in Prison Officers' Performance (POP), as indicated by the F-statistic (137.872) and a p-value of .000 ($p < 0.05$). This suggests that the independent variables MPCO (Mobile Phones in Coordinating Operations), MPEC (Mobile Phones Enhancing Communication), and MPSAT (Mobile Phones Streamlining Administrative Tasks) significantly contribute to predicting the dependent variable. The Sum of Squares for Regression (74.168) indicates the proportion of variance explained by the predictors, while the Residual Sum of Squares (17.035) reflects the unexplained variance. The Mean Square values further

reinforce the relative strength of the predictors, with the regression mean square (24.723) being significantly higher than the residual mean square (0.179), confirming the model's effectiveness in capturing the relationship between mobile phone use and prison officers' performance.

Table 4.11: ANOVA Results

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	74.168	3	24.723	137.872	.000[b]
	Residual	17.035	95	.179		
	Total	91.203	98			
a. Dependent Variable: POP						
b. Predictors: (Constant), MPCO, MPEC, MPSAT						

Note: MPCO = Mobile Phone in Coordination, MPEC = Mobile Phone in Enhancing Communication, MPSAT = Mobile Phone in Streamlining Administrative Tasks, POP = Prison Officers' Performance

Source: Data Analysis, 2024

4.5.3 Regression Coefficients Results

The regression coefficient results provide insights into the contribution of each predictor variable to the dependent variable, Prison Officers' Performance (POP). The constant (B = 0.494) indicates the baseline level of POP when all predictors are zero. Among the predictors, MPCO (Mobile Phones in Coordinating Operations) has the highest standardized coefficient (Beta = 0.617) and a highly significant t-value (t = 10.624, $p < 0.05$), suggesting it is the strongest predictor of POP. MPSAT (Mobile Phones Streamlining Administrative Tasks) also shows a significant positive contribution (Beta = 0.294, t = 4.275, $p < 0.05$), indicating its moderate influence on

performance. MPEC (Mobile Phones Enhancing Communication), while statistically significant ($t = 1.762$, $p < 0.05$), has the smallest contribution (Beta = 0.105), suggesting a weaker effect compared to the other predictors. Overall, the results highlight that all three mobile phone functions positively and significantly contribute to enhancing prison officers' performance, with coordination being the most impactful.

Table 4.12: Regression Coefficient Results

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.494	.239		2.071	.041
	MPEC	.125	.071	.105	1.762	.000
	MPSAT	.346	.081	.294	4.275	.000
	MPCO	.633	.060	.617	10.624	.000
a. Dependent Variable: POP						

Note: MPCO = Mobile Phone in Coordination, MPEC = Mobile Phone in Enhancing Communication, MPSAT = Mobile Phone in Streamlining Administrative Tasks, POP = Prison Officers' Performance

Source: Data Analysis, 2024

4.6 Discussion of the Findings

The discussion of the findings in a study assessing the role of mobile phones in enhancing Tanzania prison officers' job performance, particularly from the Dodoma region, is crucial for interpreting the data in the context of the research objectives and comparing the results with existing literature. The discussion allows for an in-depth analysis of how mobile phones have influenced different aspects of job performance, including communication, coordination, administrative tasks, and

monitoring. This process helps to explain how the identified benefits such as real-time communication, task monitoring, and reduced reliance on physical paperwork contribute to improved efficiency and security within the prison system (Anderson & Rainie, 2018). Furthermore, the discussion should reflect on the significance of the findings, how they align with or challenge previous research, and any unexpected results, providing insights for policymakers and prison management on the potential of mobile phones to enhance operational effectiveness. Additionally, by examining the limitations of the study, such as the regional focus and sample size, the discussion helps contextualize the findings within broader national and international perspectives on technology's role in enhancing job performance in correctional facilities.

4.6.1 The Role of Mobile Phones in Enhancing Communication on Prison Officers Performance

The discussion on the role of mobile phones in enhancing communication on prison officers' performance in Dodoma region prisons focuses on how mobile technology has influenced various aspects of prison management, communication, and overall job performance. Mobile phones have proven to be an effective tool for improving communication between prison officers and their supervisors, facilitating timely updates, and ensuring the smooth flow of information within the prison system. This, in turn, can lead to more efficient decision-making, quicker resolution of operational issues, and a greater sense of coordination between staff members. This study found that the usage of mobile phones in enhancing communication was positive and significantly related to prison officers’ performance. Similar findings were from

Khasawneh, et al., (2024) whose findings indicated that the integration of smartphone applications in educational management is influenced by various factors, including managing the teaching process, the evaluation process, student affairs, and employee affairs. Moreover, Akinsanya, Adeniyi and Okunola, (2020) also found that the relationship between mobile phone usage and communication shows that the independent variable has a positive influence on skill dependence and organizational competence. Not only that but also, Quandt, et al., (2020) found that there are opportunities to target policy interventions at increasing phone use for agricultural communication activities in ways that facilitate access to timely, actionable information to support farmer decision-making.

Therefore, in the context of Dodoma, mobile phones likely enhance officers' ability to stay connected, even in remote or isolated areas of the prison, thereby improving their access to critical information and support. As communication becomes faster and more reliable, prison officers can perform their duties more effectively, whether it's monitoring inmate behaviour, responding to security concerns, or managing emergencies. Furthermore, mobile phones enable officers to collaborate more efficiently, share important documents and updates, and coordinate tasks without the delay associated with traditional methods of communication.

However, while mobile phones can enhance communication, their use in the workplace has been associated with negative impacts on employee performance. Studies indicate that increased smartphone usage can lead to decreased productivity, heightened stress levels, and blurred boundaries between work and personal life

(Marsh, Vallejos & Spence, 2022). For instance, research published in the International Journal of Information Systems highlights that smartphone usage negatively affects attention, as employees may focus on chatting or listening to music instead of work-related tasks (Pluut, & Wonders, 2020; Yang, & Feng, 2024).

4.6.2 The Role of Mobile Phones in Streamlining Administrative Tasks on Prison Officers Performance

The role of mobile phones in streamlining administrative tasks has a significant impact on prison officers' performance, especially in enhancing efficiency and reducing the time spent on manual processes. Mobile phones enable prison officers to access operational data quickly, which is crucial for making timely decisions and ensuring that tasks are completed without unnecessary delays. For example, scheduling appointments and meetings related to administrative tasks becomes easier through mobile phone applications, reducing the need for physical paperwork and face-to-face coordination. Additionally, mobile phones assist in reducing the time spent on manual document approval and signing processes, which often leads to delays in decision-making and operations. By enabling real-time communication and access to information, mobile phones reduce reliance on physical paperwork and facilitate smoother administrative processes, thus enhancing the overall efficiency of prison officers' work (Haleem, et al., 2023).

This study found that the usage of mobile phones in streamlining administrative tasks was positive and significantly related to prison officers' performance. Similarly, Ghodbane, and Abuyabes, (2025) found that the use of E-governance

supported by artificial intelligence technologies in Amman's public sector has led to tangible improvements in user satisfaction and service delivery effectiveness. Also, Torsu, (2024) found that understaffing, cross-border crime, the proliferation of unapproved routes, lack of a crime scene team, logistics, and lack of cooperation from border residents were corrected by using mobile phones to streamline administrative tasks like routine activities involved in managing and organizing operations, including scheduling, communication, documentation, decision-making, and overseeing the implementation of policies and procedures within an organization. Moreover, Theonest, et al., (2024) also, found that participants demonstrated significant awareness of mobile phone-enabled diagnostics.

However, while mobile phones can enhance communication and streamline administrative tasks, their use in the workplace has been associated with negative impacts on employee performance (Shakir, et al., 2024). Studies indicate that increased smartphone usage can lead to decreased productivity, heightened stress levels, and blurred boundaries between work and personal life (Marsh, Vallejos, & Spence, 2022). For instance, research published in the International Journal of Information Systems highlights that smartphone usage negatively affects attention, as employees may focus on chatting or listening to music instead of work-related tasks (Yang, & Feng, 2024).

4.6.3 The Role of Mobile Phones in Coordination of Prison Operations on Prison Officers' Performance

The role of mobile phones in coordinating prison operations significantly impacts prison officers' performance in the Dodoma region. Mobile phones facilitate real-

time communication, enabling timely updates and enhancing coordination across departments, which is crucial for effective prison management. Through mobile devices, prison officers can quickly share critical information, track ongoing tasks, and respond to emergencies promptly.

This study found that mobile phone usage in coordination was positive and significantly related to prison officers' performance. Similarly, Irtaimeh, (2022) found that the necessary legislative intervention of the Jordanian Legislator and the explicit stipulation of the conditions for applying electronic monitoring as an alternative to pre-trial detention in addition to identifying the operational mechanisms. Also, Kuo, and Chen, (2020) found that mobile phones can coordinate and access information. Hence becomes positive and significantly related to employees performance. Moreover, AYO, (2023) also found that a variety of rehabilitation services are available, with strong support for educational programs and vocational training coordination through mobile phone usage.

These devices also aid in monitoring staff and prisoner movements, ensuring that security protocols are followed, and reducing human errors in the management of prison operations. Additionally, mobile phones allow for faster problem resolution, which is essential in maintaining smooth prison operations. This level of coordination enhances operational efficiency and boosts performance by ensuring that officers are well-informed, prepared, and can act swiftly when necessary. However, challenges such as over-reliance on mobile phones, potential distractions, or misuse can affect overall performance if not managed properly. Studies indicate

that mobile phones, when used correctly, improve operational coordination, leading to better staff performance and overall security within the prison (Kuo & Chen, 2020; Gunasekaran et al., 2017).

However, while mobile phones can enhance coordination in various settings, studies have indicated a negative relationship between mobile usage and employee performance, particularly in coordination tasks. Research published in the Journal of Organizational Behavior suggests that excessive mobile phone use can lead to increased distractions and multitasking, which negatively affects task performance and productivity (Orhan, Castellano, Khelladi, Marinelli, & Monge, 2021). Employees may become less focused on their primary responsibilities, leading to mistakes or delays in completing tasks (O'Neill et al., 2014).

Additionally, a study in Computers in Human Behavior reveals that constant interruptions from mobile phones can reduce the quality of decision-making and problem-solving skills, particularly in roles that require high levels of concentration and coordination (Tremblay et al., 2021). Moreover, findings from Telecommunications Policy indicate that while mobile phones can aid in coordination, they can also blur the lines between work and personal life, contributing to work-life imbalance and stress, which may ultimately lower performance (McKinley & Hargittai, 2020). These studies suggest that mobile phone usage, if not carefully managed, can undermine the very coordination it is intended to improve.

CHAPTER FIVE

SUMMARY OF THE FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Chapter Review

This chapter covered the summary, conclusion, implications and recommendations of the study based on An Assessment of the Impacts of the Use of Mobile Phones on Tanzanian Prison Officers' Job Performance.

5.2 Summary of the Findings

The findings on the role of mobile phones in enhancing communication on prison officers' performance in the Dodoma region prisons reveal that mobile phones significantly contribute to improving communication efficiency among officers. The data suggest that mobile phones have increased the frequency and speed of communication, allowing officers to share updates and resolve issues more promptly. This has led to better coordination and smoother operational flow. Additionally, mobile phones have enhanced teamwork by facilitating instant messaging, calls, and file sharing, which is essential in a high-stakes environment like a prison. However, despite these advantages, some concerns were raised about the distractions mobile phones may cause, potentially affecting concentration and focus on critical tasks.

Overall, mobile phones have proven to be a vital tool in streamlining communication processes, enhancing coordination, and improving prison officers' job performance in the Dodoma region. Based on the second objective, the findings on the role of mobile phones in streamlining administrative tasks for prison officers in the Dodoma

region indicate that mobile phones have significantly contributed to enhancing administrative efficiency. They have helped officers schedule appointments, communicate important administrative matters, and access operational data quickly, reducing the time spent on manual processes. Mobile phones also allow for better tracking of performance and task completion, ensuring that administrative tasks are carried out effectively. Furthermore, mobile phones have reduced reliance on physical paperwork, allowing for faster document approvals and enhancing overall administrative oversight. However, while the findings highlight these benefits, there are some concerns about over-reliance on mobile phones potentially creating distractions, which could negatively impact the focus required for other essential duties. Nonetheless, mobile phones have proven to be an essential tool for enhancing the administrative operations of prison officers in the Dodoma region.

Regarding the third objective, the findings on the role of mobile phones in coordinating prison operations in Dodoma region prisons demonstrate that mobile phones are crucial in improving communication and coordination among prison officers. Mobile phones facilitate real-time communication, enabling staff to share updates and resolve operational issues promptly, which enhances the overall efficiency of prison operations. They also play a vital role in monitoring the progress of ongoing tasks, ensuring they are completed on time, and improving crisis management by enabling immediate coordination between staff members during emergencies. Additionally, mobile phones help in tracking staff and prisoner movements, ensuring security protocols are adhered to effectively. While mobile phones contribute positively to operational coordination, there are concerns that

excessive use could lead to distractions, which may affect concentration on critical tasks. Overall, mobile phones have proven to be an essential tool in enhancing coordination and performance in Dodoma region prisons.

5.3 Conclusion

In conclusion, the assessment of the role of mobile phones in enhancing Tanzania prison officers' job performance in the Dodoma region reveals that mobile phones are instrumental in improving communication, administrative efficiency, and the coordination of prison operations. They facilitate real-time communication, streamline administrative tasks, enhance operational coordination, and contribute to effective monitoring and security protocols. Despite these positive impacts, concerns about potential distractions and over-reliance on mobile phones were also noted. However, the overall findings suggest that mobile phones play a significant role in boosting prison officers' performance by enabling quicker decision-making, improving teamwork, and enhancing crisis management. The integration of mobile phones into prison operations has thus proven to be a valuable tool, although their usage needs to be managed carefully to minimize possible drawbacks.

5.4 Implications

5.4.1 Implication for Policymakers

The findings from this study on the role of mobile phones in enhancing prison officers' job performance in the Dodoma region provide valuable insights for policymakers. Policymakers should recognize the importance of incorporating mobile phone technology as part of their strategic initiatives to improve operational

efficiency within prisons. Given the positive impact mobile phones have on communication, administrative tasks, and coordination during operations, policymakers could consider implementing policies that integrate mobile phone usage into daily prison operations, ensuring that they are used appropriately. However, policies should also include guidelines to address potential negative consequences, such as over-reliance or distractions, to ensure mobile phones are used effectively without undermining the focus and discipline required in prison environments.

5.4.2 Implication for the Industry

For the prison system and the broader correctional industry, the study underscores the significance of mobile phone technology in enhancing the performance of prison officers. The results suggest that mobile phones can help streamline administrative tasks, improve coordination during operations, and foster effective communication among officers, which is critical for efficient prison management. Industry leaders should invest in mobile technology and provide staff training to maximize its utility in enhancing performance. Additionally, the industry should consider adopting mobile phone usage policies that promote operational efficiency while minimizing any potential misuse or distractions. This would ensure that the technology continues to support the goals of improving prison security and operations.

5.4.3 Implication for Academia

From an academic perspective, the study contributes to the body of knowledge on the intersection of technology and organizational performance, particularly in the

context of correctional facilities. The findings can inform future research on how mobile phones, and similar technologies, influence job performance in highly structured and secure environments like prisons. Academics could explore the long-term effects of mobile phone usage on prison officers' performance and conduct comparative studies across different regions or countries. Furthermore, the study highlights the importance of understanding both the positive and negative implications of technology in the workplace, offering a nuanced perspective that could serve as a foundation for future research on technology adoption in public sector institutions.

5.5 Recommendations

5.5.1 The Role of Mobile Phones in Enhancing Communication on Prison Officers' Performance

Based on the findings regarding the role of mobile phones in enhancing communication on prison officers' performance, it is recommended that prison authorities integrate mobile phone usage more effectively into daily operations to improve communication efficiency. This could involve providing officers with smartphones equipped with secure communication apps to facilitate faster information sharing, coordination, and decision-making. Additionally, training programs should be introduced to ensure officers use mobile phones for work-related tasks, minimizing distractions and optimizing their role in communication. To mitigate any potential negative effects, such as overuse or distractions, clear guidelines and policies should be established to balance mobile phone usage with the need for focus and security within the prison environment. Regular monitoring and

evaluation of the impact of mobile phone usage on performance should also be conducted to make necessary adjustments to the approach.

5.5.2 The Role of Mobile Phones in Streamlining Administrative Tasks on Prison Officers' Performance

Based on the findings regarding the role of mobile phones in streamlining administrative tasks on prison officers' performance, it is recommended that prison management further incorporate mobile technology to optimize administrative processes, such as scheduling, document management, and performance tracking. Prison authorities should provide officers with mobile devices or ensure the use of mobile applications that simplify task management, reduce paperwork, and enable quicker decision-making. Additionally, training programs should be implemented to help officers maximize the efficiency of mobile phones in administrative tasks, ensuring they are used effectively without causing unnecessary distractions. To support this, policies should be developed to outline appropriate mobile usage for administrative functions, ensuring that the use of mobile phones enhances, rather than hinders, overall productivity and task management in the prison environment.

5.5.3 The Role of Mobile Phones in Coordination of Prison Operations on Prison Officers' Performance

Based on the findings regarding the role of mobile phones in the coordination of prison operations on prison officers' performance, it is recommended that prison authorities enhance communication infrastructure by equipping officers with smartphones or devices that support real-time updates and coordination across

departments. Mobile phones should be integrated with the prison's internal communication systems, enabling faster responses to operational issues and improving overall coordination during shift changes, emergencies, and routine operations. Additionally, regular training sessions should be conducted to familiarize officers with mobile phone features that aid in monitoring staff and prisoner movements, ensuring compliance with security protocols. Clear guidelines should be established to govern mobile phone usage during operational tasks, optimizing their potential to improve prison management efficiency while minimizing distractions.

5.6 Limitations

One limitation of the study on assessing the role of mobile phones in enhancing Tanzania prison officers' job performance is the reliance on self-reported data, which may introduce bias or inaccuracies in the responses provided by the officers. Additionally, the study is focused solely on the Dodoma region, limiting the generalizability of the findings to other regions with potentially different operational contexts or technological infrastructure. Lastly, the research does not account for external factors, such as policy changes or socio-economic conditions, that might also influence the effectiveness of mobile phones in enhancing job performance.

5.7 Recommendations for Further Studies

Future studies could expand the sample size to include multiple regions across Tanzania to compare the effectiveness of mobile phones in enhancing prison officers' performance in different operational environments. Additionally, further research could explore the impact of specific mobile phone features, such as security

applications or communication tools, on the overall efficiency and job satisfaction of prison officers.

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APPENDICES

1.1 Appendix I: Questionnaire Questions

AN ASSESSMENT OF THE IMPACTS OF THE USE OF MOBILE PHONES ON TANZANIAN PRISON OFFICER'S JOBPERFORMANCE

This Questionnaire is for the Tanzanian Prison Officers.

This study is deliberately for academic endeavors. Its fundamental purpose is to provide a thorough analysis of how mobile phone use affects prison officers' day-to-day operations, safety concerns, and overall effectiveness in maintaining security and order in the facilities. The researcher is highly considerably treating the privacy of everyone's details and responses with complete anonymity. The feedback you will provide will be meaningful information that is necessary for this study, to the researcher, policymakers, prison officers in Tanzania as well as the governance of Tanzania and other stakeholders to act on relevant measures in optimizing the use of mobile phones in prison facilities in Tanzania. All responses will be analyzed and presented in aggregated forms and will not be identifiable by other individuals. The researcher expects that you will provide your full cooperation in this effort by responding to every question in this short questionnaire that takes no more than 15 minutes.

Part A: Preliminary Information

1. Gender

Mark only one oval.

Male ◯

Female ◯

2. Age

Mark only one oval.

20 - 30 years

30 - 40 years

40 - 50 years

50 - 60 years

3. Highest level of education achieved.

Mark only one oval.

Primary Education

Ordinary Level Secondary EducationCertificate Level from College

Diploma Level from College Bachelor Degree

Mastes DegreePhD Degree

4. Years of working experience.

Mark only one oval.

0 - 10 years

10 - 20 years

20 - 30 years

30 - 40 years

Part B: ROLE OF MOBILE PHONES ON PRISON OFFICERS PERFORMANCE

The following tables has statement about role of mobile phones on prison officers' performance. Rate with each of the statements by ticking the appropriate answer using the scale provided in the tab le below Rank; 1 = SD; Strongly Disagree 2= D: Disagree, 3= Neutral, 4= A: Agree, 5= SA: Strongly Agree

CODE	**Role of Mobile phone in enhancing communication**	**1**	**2**	**3**	**4**	**5**
MPEC1	Mobile phones have increased the frequency of communication among staff members.	1	2	3	4	5
MPEC 2	Communication through mobile phones reduces the time needed to resolve issues or make decisions.	1	2	3	4	5
MPEC 3	Mobile phones have improved the efficiency of communication by offering various methods of communication (e.g., text, voice, video).	1	2	3	4	5
MPEC 4	Mobile phones provide an efficient means to stay connected even in emergency situations.	1	2	3	4	5
MPEC 5	Sharing documents, files, and updates through mobile phones has improved teamwork and collaboration.	1	2	3	4	5
MPEC 6	Mobile phones provide an efficient means to stay connected even in emergency situations.	1	2	3	4	5

CODE	**Role of Mobile phone in streamlining administrative tasks administrative tasks**	**1**	**2**	**3**	**4**	**5**
MPSAT1	I find mobile phones useful for scheduling appointments and meetings related to administrative tasks.	1	2	3	4	5
MPSAT2	Mobile phones have helped reduce the time spent on manual document approval and signing processes.	1	2	3	4	5
MPSAT3	Using mobile phones for administrative communication has reduced my reliance on physical paperwork.	1	2	3	4	5
MPSAT4	Mobile phones allow me to access operational data quickly, saving time on administrative tasks.	1	2	3	4	5
MPSAT5	I can easily track performance and task completion through mobile phones, improving administrative	1	2	3	4	5

	oversight.					
MPSAT6	I use mobile phones for mobile payments and financial transactions, which streamlines administrative financial tasks.	1	2	3	4	5
CODE	**Role of Mobile phone in facilitating coordination Prison operations**	**1**	**2**	**3**	**4**	**5**
MPCO1	Mobile phones assist in reducing communication barriers between staff, ensuring clearer and more efficient communication.	1	2	3	4	5
MPCO2	The use of mobile phones allows for timely sharing of updates across departments, enhancing operational coordination.	1	2	3	4	5
MPCO3	Mobile phones allow for real-time communication that helps resolve operational problems quickly.	1	2	3	4	5
MPCO4	Mobile phones help in monitoring the progress of ongoing tasks and ensuring they are completed on time.	1	2	3	4	5
MPCO5	The use of mobile phones enables effective coordination between staff members during crises.	1	2	3	4	5
MPCO6	Mobile phones help monitor staff and prisoner movements, ensuring security protocols are followed effectively.	1	2	3	4	5

CODE	**Prison Officers' Performance**	**1**	**2**	**3**	**4**	**5**
POP1	Mobile phones enable real-time tracking of staff and prisoner movements within the prison, ensuring they are in the designated areas.	1	2	3	4	5
POP2	Mobile phones automatically alert me when security protocols, such as restricted area access, are breached by staff or prisoners.	1	2	3	4	5
POP3	Mobile phones help ensure smooth coordination during shift changes, enhancing continuous monitoring of staff and prisoner movements.	1	2	3	4	5
POP4	Mobile phones are integrated with the prison's surveillance systems (e.g., CCTV), allowing staff to receive real-time alerts and monitor security.	1	2	3	4	5
POP5	The use of mobile phones helps prevent unauthorized movements, as they allow for constant monitoring and enforcement of schedules.	1	2	3	4	5
POP6	The use of mobile phones reduces the possibility of human error by automatically recording movement data.	1	2	3	4	5

APPENDIX II: RESEARCH CLEARANCE LETTER

THE UNITED REPUBLIC OF TANZANIA

MINISTRY OF EDUCATION, SCIENCE AND TECHNOLOGY

THE OPEN UNIVERSITY OF TANZANIA

Ref. No OUT/PG202100529 **10th June, 2024**

Regional Prisons Officer (R.P.O),

Dodoma Regional Prisons,

P.O.Box 776,

DODOMA.

Dear Officer,

RE: RESEARCH CLEARANCE FOR MR.NUHU MUSSA NKANYANGWA, REG NO: PG202100529

2. The Open University of Tanzania was established by an Act of Parliament No. 17 of 1992, which became operational on the 1st March 1993 by public notice No.55 in the official Gazette. The Act was however replaced by the Open University of Tanzania Charter of 2005, which became operational on 1st January 2007.In line with the Charter, the Open University of Tanzania mission is to generate and apply knowledge through research.

3. To facilitate and to simplify research process therefore, the act empowers the Vice Chancellor of the Open University of Tanzania to issue research clearance, on behalf of the Government of Tanzania and Tanzania Commission for Science and Technology, to both its staff and students who are doing research in Tanzania. With this brief

background, the purpose of this letter is to introduce to you **Mr. Nuhu Mussa Nkayanghwa Reg.No: PG202100529),** pursuing **Master of Human Resource Management** (**MHRM).** We here by grant this clearance to conduct a research titled **"An Assessment of the Impacts of the Use of Mobile Phones on Tanzanian Prison Officers Job Performance: A Case of Dodoma Region**. He will collect his data at your office from 11th June to 30th July 2024.

4. In case you need any further information, kindly do not hesitate to contact the Deputy Vice Chancellor (Academic) of the Open University of Tanzania, P.O.Box 23409, Dar es Salaam. Tel: 022-2-2668820.We lastly thank you in advance for your assumed cooperation and facilitation of this research academic activity.

Yours sincerely,

THE OPEN UNIVERSITY OF TANZANIA

Prof.Gwahula Raphael Kimamala

For*:* VICE CHANCELLOR

JAMHURI YA MUUNGANO WA TANZANIA

WIZARA YA MAMBO YA NDANI YA NCHI

(Jeshi la magereza)

Unapojibu tafadhali taja;

Kumb. Na.30/DO/1/VI 12/06/2024

Nuhu mussa nkayaghwa

Chuo kikuu Huria

S.L.P. 1944

DODOMA.

YAH; KIBALI CHA KUFANYA UTAFITI.

Husika na somo tajwa hapo juu.

Napenda kuwajulisha kuwa kibali kimetolewa cha kuruhusiwa kufanya utafiti katika vituo vifuatavyo; gereza isanga, gereza msalato, gereza kondoa, gereza kongwa na gereza mpwapwa yaliyopo mkoa wa Dodoma.

Hivyo basi kwa barua hii mnapaswa kumpokea mtafiti huyo na kumpa ushirikiano mpaka atakapomaliza utafiti wake.

Nawatakia utekelezaji mwema.

KNY MKUU WA MAGEREZA MKOA WA DODOMA (1)

J.M. NYONYI-SSP

Kny; MKUU WA MAGEREZA MKOA WA DODOMA.