UNIVERSITY FOR DEVELOPMENT STUDIES, TAMALE

USING SIMULATION-BASED TRAINING APPROACH TO IMPROVE THE MARKSMANSHIP SKILLS OF RECRUITS AT THE PRISONS OFFICERS' TRAINING SCHOOL IN ACCRA

EDMUND OHENE



2018

UNIVERSITY FOR DEVELOPMENT STUDIES, TAMALE

USING SIMULATION-BASED TRAINING APPROACH TO IMPROVE THE MARKSMANSHIP SKILLS OF RECRUITS AT THE PRISONS OFFICERS' TRAINING SCHOOL IN ACCRA

BY

NAME: EDMUND OHENE [UDS/MTD/0077/15]

DISSERTATION SUBMITTED TO THE DEPARTMENT OF EDUCATIONAL FOUNDATIONS, FACULTY OF EDUCATION, UNIVERSITY FOR DEVELOPMENT STUDIES, IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTER OF EDUCATION IN TRAINING AND DEVELOPMENT

OCTOBER, 2018



DECLARATION

Student's Declaration

I hereby declare that, this thesis is the result of my own original work, except for references to the work of others which have been duly acknowledged; and that no part of the work has been presented for another degree in this university or elsewhere.

.....

.....

DATE

EDMUND OHENE

UDS/MTD/0077/15

(Student)

Supervisors' Declaration

I hereby as the principal supervisor declare that, the preparation of this thesis was supervised in accordance with the guideline for the supervision of thesis laid down by the University for Development Studies.

.....

.....

DR. ANTHONY DONKOR

(Supervisor)



ABSTRACT

This research is on the theme "using simulation-based training approach to improve the marksmanship skills of recruits at the Prisons officers Training School". Thirty (30) general duties officers and twenty (20) tradesmen formed the study sample. The study employed action research design. Simple random sampling and purposive sampling techniques were used. Data obtained through questionnaire, were analysed with the help the IBM SPSS version 20 of using descriptive statistics (average score). Data obtained through interviews were recorded and transcribed to support related ideas.

The findings of the research revealed that, most of the recruits could not demonstrate the required marksmanship skills before the intervention. After the intervention it was found out that simulation-based training approach seem to be a better strategy for training marksmanship skills.

It was concluded that, simulation-based training approach is an effective professional development exercise since it improved significantly the marksmanship skills of the officers. Finally, it was recommended that, the Prisons Service authorities should provide the Training School with logistics needed for effective simulation-based training.



<u>www.udsspace.uds.edu.gh</u> ACKNOWLEDEMENT

I give thanks to the Almighty God, who gave me the ingenuity, determination, veracity, courage, strength and above all the knowledge required for the study. Without the Almighty God, I would not have been able to come this far.

I wish to express my sincere gratitude to my dear supervisor, Dr. Anthony Donkor for his patience, encouragement, priceless suggestions and guidance. I am also very appreciative of the guidance provided by the university authorities through thesis seminars. I wish to further thank the authorities of the Prison Officers' Training School (POTS), Accra.



DEDICATION

This dissertation is dedicated to my mother Mrs. Caroline Ohene.



TABLE OF CONTENTS

Contents

DECLARATIONi
ABSTRACTii
ACKNOWLEDEMENTiii
DEDICATION iv
TABLE OF CONTENTSv
LIST OF TABLES viii
LIST OF FIGURES ix
CHAPTER ONE1
INTRODUCTION1
1.0 Overview1
1.1 Background1
1.2 Statement of the Problem
1.3 Objectives of the Study
1.4 Research Questions
1.5 Rationale of the study Error! Bookmark not defined.
1.6 Significance of the study5
1.6 Significance of the study
1.7 Limitations6
1.7 Limitations 6 1.8 Delimitations 6
1.7 Limitations 6 1.8 Delimitations 6 1.9 Definition of Operational terms 7
1.7 Limitations61.8 Delimitations61.9 Definition of Operational terms71.10 Organization of the study8
1.7 Limitations61.8 Delimitations61.9 Definition of Operational terms71.10 Organization of the study8CHAPTER TWO10
1.7 Limitations61.8 Delimitations61.9 Definition of Operational terms71.10 Organization of the study8CHAPTER TWO10LITERATURE REVIEW10
1.7 Limitations61.8 Delimitations61.9 Definition of Operational terms71.10 Organization of the study8CHAPTER TWO10LITERATURE REVIEW102.0 Introduction10
1.7 Limitations61.8 Delimitations61.9 Definition of Operational terms71.10 Organization of the study8CHAPTER TWO10LITERATURE REVIEW102.0 Introduction102.1 The Concept of Simulation-based Training102.2 Underlying principles of simulation-based training and their relation to Prison Officers' training17
1.7 Limitations61.8 Delimitations61.9 Definition of Operational terms71.10 Organization of the study8CHAPTER TWO10LITERATURE REVIEW102.0 Introduction102.1 The Concept of Simulation-based Training102.2 Underlying principles of simulation-based training and their relation to Prison Officers' training172.2.1 Practice17
1.7 Limitations61.8 Delimitations61.9 Definition of Operational terms71.10 Organization of the study8CHAPTER TWO10LITERATURE REVIEW102.0 Introduction102.1 The Concept of Simulation-based Training102.2 Underlying principles of simulation-based training and their relation to Prison Officers' training172.2.1 Practice172.2.2 Retraining needs19
1.7 Limitations61.8 Delimitations61.9 Definition of Operational terms71.10 Organization of the study8CHAPTER TWO10LITERATURE REVIEW102.0 Introduction102.1 The Concept of Simulation-based Training102.2 Underlying principles of simulation-based training and their relation to Prison Officers' training172.2.1 Practice17



2.2.5 A review of the impact of simulation-based training to train Prison Officers
2.2.5.1 Strally, (2005)
2.2.5.2 Scharr, (2002)
2.2.5.3 Helsen & Starkes, (1999)24
2.2.5.4 White, Carson, & Wilbourn, (1991)
2.3 Benefits of using simulation-based training to train Prison Officers
2.4 Challenges of using simulation-based training approach to train Prison Officers
2.5 Marksmanship
2.5.1 Four Fundamentals of Marksmanship
2.6 The Prison Officers' Training School (POTS)
2.7 Conclusion
CHAPTER THREE43
METHODOLOGY433
3.0 Introduction
3.1 Profile of the Study Area
3.2 The Research Design
3.3 Population of the Study45
3.4 Sample and sampling techniques45
3.5 Data Collection Instruments46
3.5.1 Questionnaires
3.5.2 Interviews
3.5.3 Observation
3.6 Instrument Validity47
3.6.1 Pre-Testing of Instruments (Pilot Study)48
3.7 Reliability of Instruments
3.8 Data Collection Procedure
3.8.1. Situational Analysis (pre-intervention)
3.9 Data Analysis Error! Bookmark not defined.
3.10 Ethical Issues
3.10.1 Permission to collect data53
3.10.2 Informed consent
3.10.3 Anonymity
3.10.4 Confidentiality



CHAPTER FOUR	55
PRESENTATION, ANALYSIS AND DISCUSSIONS OF RESUL	TS55
4.0 Chapter overview	55
4.1 Demographic Characteristics of Respondents	55
4.2 Level of marksmanship skills possessed by officers	57
4.3 Discussion of Pre & Post- Intervention Results	58
4.3.1 Pre-Intervention (Situation Analysis)	58
4.3.2 Intervention (Simuation Exercises)	63
4.3.3 Post-Intervention	63
4.3.4 Post-Intervention Analysis and Discussions	64
4.4 Challenges involved in training officers using simulation-based to	aining67
CHAPTER FIVE	69
SUMMARY, FINDINGS, CONCLUSION AND RECOMMEND	
SUMMARY, FINDINGS, CONCLUSION AND RECOMMEND 5.0 Introduction	ATIONS69
	ATIONS69
5.0 Introduction	ATIONS69 69 69
5.0 Introduction5.1 Summary	ATIONS69
5.0 Introduction5.1 Summary5.2 Major Findings of the Study	ATIONS
 5.0 Introduction 5.1 Summary 5.2 Major Findings of the Study 5.3 Conclusion 	ATIONS
 5.0 Introduction 5.1 Summary 5.2 Major Findings of the Study 5.3 Conclusion 5.4 Recommendations 	ATIONS69
 5.0 Introduction 5.1 Summary 5.2 Major Findings of the Study 5.3 Conclusion 5.4 Recommendations REFERENCES 	ATIONS
 5.0 Introduction 5.1 Summary 5.2 Major Findings of the Study 5.3 Conclusion 5.4 Recommendations REFERENCES APPENDICES 	ATIONS





LIST OF TABLES

Table 4.1:	Marksmanship	ability	of	the	recruits	(trainees)	before	simulation-based
training				•••••				60
Table 4.2	Marksmanship	Ability	of	the	Officers	(Trainees)	After	Simulation-based
training								63



LIST OF FIGURES

Fig. 1.1: Average scores obtained by five (5) syndicates at a live-firing range before
practical marksmanship skills training (simulation exercises)3
Fig. 2.1: A simple feedback-response chain
Fig. 3.1: Experience with the Heckler and Koch (G3) Assault Rifle by recruits at the prison
officers' training school (pre-intervention)
Fig. 4.1: Age distribution of participants55
Fig. 4.2: Sex distribution of participants
Fig.4.3: Category of participants (Recruits)
Fig. 4.4: Experience with the G3 rifle by recruit officers in the Prison Officers' Training
School (pre-intervention)
Fig.4.5: Average scores obtained by five (5) syndicates at a live-firing range before
practical marksmanship skills training (simulation exercises
Fig.4.6: Average scores obtained by five (5) syndicates during live-firing range after
receiving marksmanship skill through simulation (Role-play and Imitation)64
Fig. 4.7: Pre-intervention and post-intervention comparison



CHAPTER ONE

INTRODUCTION

1.0 Overview

This part of the study examines the background to the study, perceived problem, Diagnosis, the problem statement, the purpose of the study, the research questions, rationale of the study, the significance of the study, the limitations and delimitations, definition of operational terms, organisation of the study and the conclusion.

1.1 Background

The Ghana Prisons Service is an institution of government mandated by the Prisons Service Decree 1972, NRCD 46 to ensure the safe custody of convicted persons and continued in existence by article 205 of the 1992 Constitution. It was previously a Unit under the Police Administration known as the Prisons Department and has its historical beginning in 1841 when a form of prison was established in the Cape Coast Castle for debtors who were incarcerated by the British.

In 1920, however, as a result of the increased number of prison establishments and staff, the Police and the Prisons Department were separated, and the Prisons Department placed under an Inspector-General of Prisons. On 1st January, 1964, the Prisons Department became autonomous and ceased to be part of the Civil Service and renamed Ghana Prisons Service (Ghana Prisons Service, 2017).



The Ghana Prisons Service has, since its inception been in the frontline of the criminal justice system of Ghana by maintaining an efficient, humane and safe reformatory penal system operated within the laws of Ghana. Sustaining this mandate implies using the right methods of training to train personnel. Safe custody of convicted persons requires that the Prisons Service develop and maintain personnel capable of rapid and efficacious response to threats pose by inmates. Humane and reformatory penal system requires that the Prisons Service develop and maintain personnel, capable of using democratic and internationally accepted practices to reform the inmates. Consequently, this will enable the inmates to properly re-integrate into society upon completion of their sentences.

Therefore, training is an indispensable component of maintaining a disciplined, efficient and a well motivated staff. Simulation exercises training have been identified (White et al., 1991, Summers, 2004, Bell, Kanar, & Kozlowski, 2008, etc.) as the best form of training for law enforcement agencies such as the Ghana Prisons Service.

While the concept of the impact of using simulation-based exercises to train recruits of the Ghana Prison Service may be intuitively appealing, there seem to be sparse empirical research conducted to date to examine its impact. Furthermore, the investigations that do exist are scattered across numerous published and unpublished sources, many of which are difficult to locate and access. Some of these researches were conducted in the law enforcement domain and, therefore, they relate directly to this topic. Other researches were performed in military and police contexts and relate to the use of simulation-based training in an indirect manner. However, these bodies of research considered together, in addition to the findings of this research will serve to address the professional needs of trainees in the Prison Officers' Training School.



1.2 Statement of the Problem

Majority of officers in the Ghana Prisons Service have demonstrated poor marksmanship skills over the years. The problem has been topical in a number of meetings held by staff since good marksmanship skills is the cornerstone to security in and outside Ghana's prison facilities

Apart from personal observations, report on needs assessment carried out by the research department of the Ghana Prisons Service also identified poor marksmanship skills of officers as a hitch to their professional growth. Again pre-interview results further indicated that, the marksmanship skills of the officers were indeed below expectation.



Figure 1.1: Average scores obtained by five (5) syndicates at a live-firing range before practical marksmanship skills training (simulation exercises)

Source: Authors Field work, 2017

Each syndicate was expected to record at least an average score of 3.0. However, from figure 1.1, syndicate 1 obtained the lowest average score of 0.6 while syndicate 3 and syndicate 4 jointly obtained the highest average score of 1.2. The low average scores (0.6, 0.8, 1.2, 1.2 and 0.8) of the various syndicates as shown in figure 1.1 is an evidence that, the officers indeed lacked the marksmanship skills.

Even though exhibition of excellent marksmanship skills is an essential professional ingredient in the Ghana Prisons Service, majority of the officers exhibit poor marksmanship skills. The goal of this study is to improve the marksmanship skills of officers and this in the long run will help to improve security in and outside the prisons.

1.3 Objectives of the study

The main objective of the study is to enhance the marksmanship skills of officers in the Ghana Prisons Service using simulation-based training approach.

Specifically, the study seeks to:

- 1. Find out the level of marksmanship skills possessed by recruit officers in the Prison Officers' Training School (POTS).
- 2. Investigate the cause of the high/moderate/low level of marksmanship skills of recruit officers in the Prison Officers' Training School (POTS).

3. Assess the effect of simulation-based training on the marksmanship skills of recruits in the Prison Officers' Training School (POTS).



1.4 Research Questions

The study was conducted under a general research question "how can simulation-based training approach be used to improve the marksmanship skills of recruits in the Prisons Service?

The general research question sought directions through the following specific research questions:

- What level of marksmanship skills do recruit officers in the Prison Officers' Training School possess?
- 2. What is the cause of the high/moderate/low level of marksmanship skills of officers in the Prisons Officers' Training School (POTS)?
- 3. What is the effect of simulation-based training on the marksmanship skills of recruit officers in the Prison Officers' Training School (POTS)?

1.5 Rationale of the study

The findings of Johnson, (2013), clearly identified the lack of simulations in training as the reason for the poor marksmanship skills of officers, hence recommended that simulation exercises be incorporated in training.

1.6 Significance of the study

The authorities and Personnel of the Prisons Officers' Training School (POTS) will appreciate the need to incorporate simulations in marksmanship skills training.



Also, the findings of this study will help improve training at the school, thus address the problem of poor marksmanship skills of officers.

1.7 Limitations

There were challenges in getting the cooperation of authorities of the Prison Officers' Training School (POTS). The institution is a security training school therefore; the Commandant has to grant the permission for the data to be collected.

Secondly, questionnaires sent to some respondents were not returned early therefore affecting the time of completion of the study.

Also, the research incurred a lot of cost. Travelling to the Training School to meet respondents resulted in cost. Furthermore, some respondents demanded financial rewards before granting interviews or before answering the questionnaires.

In addition, some of the views by respondents did not reflect reality on the ground. Some officers did not admit to the challenges they faced due to fear of intimidation by authorities and also due to fear of breaking the Oath of Secrecy which every officer has sworn to abide.

1.8 Delimitations

This research only targeted the Prisons Service but can be applicable to other law enforcement agencies such as the Police and the Military. However, the findings of this study may not be applicable to areas such as education and health.



<u>www.udsspace.uds.edu.gh</u>

1.9 Definition of Operational terms

This heading explains key terms used in the study and these include:

Marksmanship

Marksmanship is the ability of a person to shoot with precision at a target, usually with a rifle at long range targets. In popular usage, "sharpshooter", "marksman" and sniper are considered synonyms (Dabuoh, 2017).

Recruit officer

A recruit officer is a recently enlisted member of a military or a paramilitary corps, still in training. In most paramilitary setup such as the Police service and Prison service, a recruit is usually without rank or grade during the basic training (Prison Officers' Training Manual, 2017).

Penal system

The penal system refers to the processes put in place by which people are punished for violating the law. In Ghana the penal system begins with the Police Service that initiates the prosecution of crimes. It continues at the judiciary (courts) where offenders are adjudicated or judged and sentenced either by incarceration into the prison or a fine imposed on the offender (Prison Officers' Training Manual, 2017).

Heckler and Koch (G3) rifle

It is the main rifle (gun) used by officers of the Ghana Prisons Service and the Ghana Armed forces. It is commonly referred to as the G3 rifle (Dabuoh, 2017).



Simulation-Based Training Approach

It is defined as a "method of instruction whereby an artificial or hypothetical experience that engages the learner in an activity reflecting real-life conditions but without the risktaking consequences of an actual situation is created" (Bastable, 2008).

G3 rifle simulator

A G3 rifle simulator provide an immersive training environment through the use of interactive video scenarios, allowing trainees to experience stress, fear and threats from shooting at a virtual image on a screen (Prison Officers Training Manual, 2017).

1.10 Organization of the study

This study is organised into five (5) chapters. The first chapter presented background to the study, perceived problem, Diagnosis, the problem statement, the purpose of the study, the research questions, rationale of the study, the significance of the study, the limitations and delimitations, organisation of the study.

The second chapter of the study discussed literature in the context of Ghana and other parts of the world relevant to this study.





The fourth chapter presented the demographical background of the participants, preintervention (situational analysis), intervention, post-intervention and post intervention analysis/discussions.

The final chapter looked at the summary, major findings of the study, conclusion and the recommendations.



CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter reviews related work on improving the marksmanship skills of recruits at the Prison Officers' Training School in Accra, using simulation-based training approach.

Issues such as, the concept of simulation exercise training, underlying principles of simulation exercises training and their relation to Prison officers', benefits of using simulation exercises to train prison officers'. Also, topics discussed in this chapter are challenges of using simulation exercises to train prison officers', marksmanship skills, and finally, the Prison Officers' Training School (POTS).

This chapter is relevant to the explanation of basic concepts about the topic being investigated and it provides a basis for comparison for the findings of this study.

2.1 The Concept of Simulation-based Training



The word simulation is derived from the Latin word "simulatus" which is the past participle of "simulare" meaning to make like, imitate or copy. Also, it means to use a model to imitate certain conditions for purposes of study or training (Online etymology dictionary, 2017)

The use of simulation-based training as an instructional learning tool began with the Chinese game of Wei-Hai in 3000 BC as a method of teaching military strategy (Lalonde,

2004). Subsequently, simulations have been used to train police officers, military officers, prison officers, etc.

Thus, simulation exercise is defined as acting out or mimicking an actual or probable real life condition, event, or situation to find a cause of a past occurrence (such as an accident), or to forecast future effects (outcomes) of assumed circumstances or factors (Business Dictionary, 2016). It is also defined as a method of instruction whereby an artificial or hypothetical experience that engages the learner in an activity reflecting real-life conditions but without the risk-taking consequences of an actual situation is created (Bastable, 2008). Furthermore, it is a training technique that amplifies real experiences with guided ones, often exceptionally deep in nature, that evoke or replicate substantial aspects of the real world in a fully interactive fashion. Simulation exercises augment, replace, create, and/or manage a learner's actual experience with the world by providing realistic content and embedded instructional features (Cannon-Bowers and Bowers, 2009). Rather than conducting training in the conventional manner, simulation exercise training uses generated virtual environments to augment or replace portions of the real environment. As a result, it reduces or limits risk to the participants and the environment while reducing overall costs (Summers, 2004).

The essence of a team is the shared goals and commitment. It represents a powerful unit of collective performance, which can be done as an individual or mutually. These must eventually translate common purpose into specific performance goals. One of the important ingredients of teams with good outcomes is the basic discipline of the team. Simulation training and practice affords the essentials for creating an effective team with a sense of group identity, group efficacy, and trust among members. Team members' work



together well when there is true engagement and understanding. Example can be seen in the incredible teamwork and excellent team dynamics that can exist during inmates' riot control. Members who have had sufficient training and knowledge can be flexible enough to adapt to new situation and break out of their rooted routines and they become more proficient with time. Each member of the inmates' riot control team can carry out another team member's job, which reflects their interdependence. A learning team will have some degree of substitution, defined roles and responsibilities, flexibility, good process flow, and an awareness of common goals. Conflict resolution is another aspect of teamwork that can be practiced during simulations (Lateef, 2009).

Simulation exercises generally come in three styles or may be a combination of two or more styles: Live simulations, virtual simulations and constructive simulations. Live simulations typically involve humans and/or equipment and activity in a setting where they would operate for real. An example is war games with soldiers out in the field or manning command posts. Time is continuous, as in the real world. Another example of live simulation is testing a car battery using an electrical tester. Virtual simulations typically involve humans and/or equipment in a computer-controlled setting. Time is in discrete steps, allowing users to concentrate on the important thing. An example is a flight simulator. Constructive simulations typically do not involve humans or equipment as participants. Rather than by time, they are driven more by the proper sequencing of events. The anticipated path of a hurricane may be constructed through application of temperatures, pressures, wind currents and other weather factors. Science-based simulations are typically constructive in nature (Institute for Simulation and Training, 2014).



Characteristically, Simulation exercise training is participatory in nature. Rather than having learners sitting in a lecture room listening to a lecturer, learners are able to participate in their learning process. It has high learner involvement and may have a competitive element in learners wanting to beat the simulator. Although, this is not the primary objective of the training, it helps to keep the learners engaged (Clark, 2013).

Also, simulation exercise training is an area in which specific communication skills are developed or educational processes are carried on in artificially created situations. Imitation is done or some role in play with the role of various teachers.

As with many learning experiences, providing feedback is another important feature of simulation exercise training for both the learner and the trainer. Bennell and Jones, (2005), define feedback as a frame of reference for the quality of one's current performance. Feedback is instantaneous from video analysis, peer and tutor feedback and also allows self-assessment and reflection. With video and computer analysis, data may be taken away by the learner for review and reflection at a later time or when revisiting the skill(s). Without feedback facilities, learners will often perpetuate poor practice.



Furthermore, Klugiewicz, (2010) identifies ten (10) key steps for safe, effective simulation training. The first step is Needs Assessment. Trainers must begin the development of a simulation-training program with a needs assessment. On what do their officers need to spend their simulation training time? Although shootouts with rioting inmates need to be addressed, officers must train for all use-of-force levels.

The second step is the Levels of Simulation. Often, instructors are too fast, too soon in their simulation training. It is impossible to teach prison officers new skills and then, with little or no practice, expect them to do well in high-level, high-stress, decision-making scenarios. After introducing the new skills, trainers should use the seven levels of simulation to prepare their officers for high-level, decision-making simulations. These levels include: Shadow training, Prop training, Partner training, Dynamic Movement Training, Relative positioning training, Environmental-factors training and High-level simulations.

Step three involves Creating the Simulation Format. A trainer must work from a written simulation worksheet to provide the necessary documentation of what prison officers were trained to do. Besides the individual officer-evaluation form, these simulation worksheets should consist of a title page listing scenario type, objectives, overview and equipment; a page for trainee instructions; a page for role player instructions; and a page with a diagram of the scenario. These worksheets are essential for documenting training and help defend against failure-to-train allegations.

Next is designing the simulation. After the needs assessment, the instructor will begin designing the simulation, which consists of: Developing the simulation, choreographing the simulation, rehearsing the simulation, implementing the simulation, debriefing the simulation, evaluating the simulation. These activities need to be carefully executed to prevent training injuries, the adoption of poor tactics and liability exposure.

Furthermore, for safe and effective simulation training, there is the need to Train and Control Demonstrators. The most important component of successful, meaningful simulation training remains the development of well-trained, fully controlled demonstrators. Trainers must assign these demonstrators roles that are specific, limited and



carefully supervised to prevent a deviation-from-role that can lead to poor training and injuries. Demonstrators should be told specifically and in writing what they can do and, equally important, what they cannot do. It is important to note that using officers for role play is risky because most officers want to win. It is therefore difficult for an untrained, unsupervised role player to remember that the ultimate goal of the demonstrator is eventually to lose (i.e., be controlled by the officer in the simulation). It is constructive to acknowledge that demonstrators need to be challenging and realistic, but if the trainee performs effective tactics, the demonstrator should give realistic responses and allow the technique to succeed.

Also, once the simulation is designed and practiced with demonstrators who understand their roles, the instructor can begin the simulation training by following the checklist: Conduct an initial wellness check, explain the training safety rules, conduct a physical warm-up, explain the simulation drill's format, conduct the simulation drill, conduct a debriefing session, and conduct a current wellness check. Furthermore, trainers should make their training a positive learning experience. Properly explain what is expected of the trainees, conduct a fair, winnable scenario and properly debrief them.



The seventh step involves Equipment and Safety Procedures. Although simulation training helps prepare the prison officer to survive and win encounters with inmates, it must be conducted safely — there are no acceptable casualties in prisons, especially in prison scenario training. Wellness checks, training safety rules and safety procedures ensure that there are no casualties. Simulation safety begins with the development of appropriate safety procedures, the development and use of safety officers, and the enforcement of stringent safety procedures.

Also, creating Multi-dimensional Scenarios is another way of generating safe and effective simulation training for officers. One of the most critical issues facing instructors training prison officers' is the difficulty in finding the time to focus on multi-dimensional scenarios that allow officers to learn the full range of prison responses. Most simulations focus on using one of the use-of-force options (i.e. verbal, empty hand control, intermediate weapons or firearms). This creates two challenges: Training officers to respond effectively to the approach, intervention and follow-through phases of any encounter, and preventing officers from getting caught in a single force option cycle, unable to move up or down the available force options. To address the first issue, instruct officers to finish their simulation training with at least one full-length scenario that takes them from initial contact to debriefing the subject at the end of the incident. The second issue is addressed by teaching the officers transition drills that take them from verbal to empty hand tactics, empty hand to aerosol spray, baton to firearm, etc. (Klugiewicz, 2010). These multi-dimensional scenarios will assist officers in preventing the holdup that often occurs when facing stressful situations because no bridges have been built between the multiple techniques and tactics officers are trained to use.

Subsequently, trainers should create Multiple-Use Scenarios for their trainees. Another challenge facing trainers is officers get acquainted to their scenarios allowing other officers know the scenario prior to taking the class.

The final step consists of debriefing the officer's responses in these decision- making, scenario-based simulations. Debriefing is a critical tool in changing and improving a prison officer's future performance.

2.2 Underlying principles of simulation-based training and their relation to Prison Officers' training

There are several key principles empirically demonstrated to inspire effective training with respect to a variety of motor and cognitive skills. These principles are useful in explaining the impact that simulation exercises have on the training of prison officers.

2.2.1 Practice

The first of this principle is practice. It has been demonstrated that learning in general is more effective in contexts where the student is an active participant rather than a passive observer (Tailby & Haslam, 2003). Also, Military research has found that, while students typically retain only 50% of instructional content based on simple handouts and visual aids, engaging trainees in realistic practice of required skills has the potential to increase retention rates to 90% (Bennell & Jones, 2005).

As applied to use of force scenarios, it is critical that prisons training not only optimize retention rates for individual skills, but also permit practice in the co-ordination of multiple skill sets. For instance, one must learn to accurately manipulate weaponry while concurrently surveying one's environment for signals to moderate appropriate levels of force. When several tasks must be performed simultaneously, it is recommended that part-task training (i.e. practice of individual skills) be alternated with whole-task training (i.e., practice of multiple skills concurrently) (Bennell & Jones, 2005). While both forms of rehearsal are integral, it has been demonstrated that incorporating whole-task training into training programs facilitates the transfer of skills from the learning context to the natural



environment by enabling the student to form stronger relationships between each component of the wider task (Bennell & Jones, 2005).

Much of the training provided to officers in the Ghana Prisons Service involves the acquisition of procedural knowledge (i.e., knowledge of the steps required to properly execute a given task). For instance, officers must gain proficiency in shooting stance, breath control, trigger control, sight alignment, and various weapon handling procedures. With adequate amount of practice, officers will generally achieve mastery of such skills. With repeated trials, an officer may come to master weaponry such that the task becomes a relatively unconscious process.

Therefore, simulation training is advantageous in that it provides the opportunity for repeated practice of several tasks jointly, as would be the case in naturalistic settings. Specifically, simulations are beneficial for use of force decision-making, because they permit multiple practice trials in the parallel performance of motor and cognitive skills (Bennell & Jones, 2005). Many of the alternative methods of training allow only the opportunity to practice motor skills in isolation (e.g. target practice) or to gain theoretical knowledge underlying decision-making ability (e.g. classroom instruction). In contrast, using simulation exercises are ideal in their capacity to provide the simultaneous practice of several automated tasks in conjunction with complex decision making strategies requiring controlled processing (Bennell & Jones, 2005).



2.2.2 Retraining needs

Once tasks have been trained and mastered, one generally requires periodic post-training intervention for knowledge maintenance. The process of forgetting entails a decline in recall of information or skill as a function of time (Baker, 1999). In studies examining knowledge retention, it has typically been found that forgetting increases most rapidly in the time period immediately after training and then diminishes as the skill-related retention or non-use period increases (Bahrick, 1979). Bahrick, (1979) recommends that initial retraining sessions be administered at intervals approximately equal to the expected period of retention (i.e. scheduled between anticipated occasions of actual skill or knowledge application). It has also been proven that thirty (30) minutes of refresher training at approximately six months following the initial training programme significantly mitigated declines in performance (O'Hara, 1990). Therefore, there is consensus that post-training interventions are necessary for skill maintenance.

2.2.3 Feedback



Feedback occurs when outputs of a system are routed back as inputs as part of a chain of cause-and-effect that forms a circuit or loop. Feedback resulting from an initial response provides a frame of reference for the quality of one's current performance and also an incentive for the modification of one's current performance.



Source: Bennell & Jones, (2005).

According to Bennell & Jones (2005), there are two primary types of information feedback. The first is Intrinsic Feedback and it refers to an inherent component of a task itself. This form of feedback is supplied to the trainee via a change in the environment following a given response. For complex decision-making tasks involving the potential use of force, there are typically multiple sources of Intrinsic Feedback to which one must be attuned in order to regulate one's behaviour accordingly. In a fight involving two inmates' scenario, for instance, an officer at the scene must evaluate several situational variables serving as feedback signals in order to select an optimal level of force. The second form of feedback is termed "Augmented or Extrinsic Feedback" and it refers to information that is not inherent in a given task and it is provided by an external source. Primarily a pedagogical tool, augmented feedback is typically provided by an instructor in training contexts.



2.2.4 Simulation fidelity

Simulation Fidelity is defined as the extent to which attitudes and skills acquired during a training programme are transferred to the actual working environment (Business Dictionary, 2016). Also, Fidelity in training simulation refers to the amount/kind of similarity between the training device (setting) and the operational equipment (setting) (Freda & Ozkaptan, 1980). Furthermore, it is the degree to which a model or simulation reproduces the state and behaviour of a real world object, feature or condition. Fidelity is therefore a measure of the realism of a model or simulation. In the field of modeling and simulation, fidelity describes the degree to which the representation within a simulation is similar to a real-world object, feature, or condition in a measurable or perceived manner (Summers, 2004).

There are basically two types of Simulation Fidelity and they are Physiological Fidelity and Physical Fidelity. Physiological Fidelity refers to the capacity of the training situation to produce somatic reactions (tendency to experience and communicate psychological distress in the form of physical symptoms) (Feder, 2001). In genuine use of force scenarios, an officer is required to render complex decisions and engage in complicated responses under conditions of time pressure, high stakes, and stress-induced physical discomfort.

Physical fidelity refers primarily to the degree of realism associated with the mechanical aspects and material structure of the training context (e.g. replicated weapon recoil, shoot-back effects, etc). In other words, Physical Fidelity is the level to which the virtual environment is made to look like the real environment.



2.2.5 A review of the impact of simulation-based training to train Prison Officers

The increase use of simulations in training prison officers has greatly altered the instructional regime of officers. Despite the widespread use of simulation exercises in training prison officers, empirical documentation of the impact of using simulation exercises to train prison officers is scarce. Indeed, an exhaustive literature search has led to the discovery of just a few studies directly related to this topic. Majority of the literature relating to this topic focused primarily on other security institutions such as the police and military (Strally, 2005, Helsen & Starkes, 1999 & White et al., 1991). Nevertheless, this review is useful, since many of the required skills and fundamental training principles for police and military personnel closely mirror that of prison officers (Pleban et al., 2002). Operations in police, prisons and military consistently require problem solving, strategizing and decision-making in conflict-ridden scenarios. Therefore, reviewing the studies of Strally, (2005), Helsen & Starkes, (1999), is justified and will contribute immensely to the findings of this study.

2.2.5.1 Strally, (2005)



The study by Strally, sought to examine the effects of simulation-based training on pilot's use of the Ballistic Recovery System (BRS). The study further sought to compare the effects of traditional training methods such as classroom lectures and computer-based training and simulation-based training method on Ballistic Recovery System (BRS) use and knowledge.

Thirty-six participants were recruited and divided into two groups. Eighteen pilots were assigned to the experimental/Simulation exercise Training group. These pilots received the in-depth simulation exercise training in parachute training intervention. Their training focused on well-planned exercises, with feedback provided to trainees based on their responses to simulated cues comparable to those in the actual work environment. Trainees learned by performing tasks and making improvements based on recommendations from the instructor. A variety of tasks were presented to the trainees to quickly provide an inexperienced operator with practice in decision making and other related skills.

Alternatively, eighteen pilots also received parachute training via traditional Ballistic Recovery System training methods. In the traditional aviation training methods, trainees were lectured, learning facts and procedures first through memorization. Trainees were then evaluated with written tests, typically performing tasks one at a time.

In conclusion, Pilots who trained with simulation exercises performed better than those who trained with traditional methods. Specifically those who trained using simulation exercises tended to have higher self-efficacy and scored higher on a knowledge test for Single-Pilot Resource Management (SRM).

Also, based on Oser et al., (1999) and other related work, the simulation-based training has proven to be an effective method for training pilots to effectively use the Ballistic Recovery System (BRS) parachute system. Furthermore, it has been found to be an effective method, reducing response time, enhancing high order and procedural skills, reducing training costs and time, and has been rated as highly effective by former simulation based trainees (Bowers & Morgan, 1991).



2.2.5.2 Scharr, (2002)

Similarly, the United States of America Army Research Institute for the Behavioural and Social Sciences and the University of Louisville, examined the instructional effectiveness of the United States Army National Guard's (ARNG) and Reserve Component Virtual Training Program (RCVTP). Structured exercises conducted in a simulation training environment and the Simulation Networking (SIMNET) training system, to provide Army National Guard armor units with intensive training experience during their weekend drills or annual training period indicated that after 12 hours of training using Reserve Component Virtual Training Program (RCVTP) units it took 46.1 percent less time to complete their tasks while making 76.1 percent fewer errors and requiring 84.4 percent less coaching.

Also, in 1991, the institute compared results from 714 platoons that received conventional training in the Armor Officer Basic Course with 39 platoons that received training based on simulation exercises. It found that simulation exercises both improved field performance ratings by 25 percent and saved 20 percent of time in the course (Site Staff, 2007).

2.2.5.3 Helsen & Starkes, (1999)

The study conducted by Helsen & Starkes, (1999), represents the first published attempt to evaluate the effectiveness of simulation exercise training for police officers in potential use of force situations. The sample comprised twenty (24) police officers ranging from 19 to 24 years of age. Prior to the investigation, each participant had acquired 80 hours of



training on policing fundamentals, although their shooting experience was limited. All officers were administered a pre-training test based on the nature of their responses to sample slide and video simulations involving potential use of force interventions (this provided a baseline measure of performance). Participants were then randomly assigned to one of four experimental groups as follows, with each group containing one female and five male officers:

Classic training: Focus on shooting precision with stationary pop-up targets.

Decision training with slides: Focus on use of force decision-making with sequentially presented slides based on a representative sample of law enforcement scenarios (e.g., apprehending suspects).

Decision training with video: Focus on use of force decision-making with acted out motion picture simulation at authentic locations e.g., parking space.

In preparation for the study, four representative scenarios were acted out by experienced

Finally, group that combines slide and video training.

police officers. A camera was placed on a moveable dolly (toy) track so as to enable filming from the perspective of one of the participating officers. These images were then presented to participants in Groups 2-4, in slide and/or video format, as life-size projections upon a white screen. Following a briefing regarding the nature of a given scenario, the participants were to interact with the projected figures in an attempt to first diffuse or de-escalate the situation. Ultimately, officers were required to employ a timely shooting or non-shooting response as deemed appropriate. Each individual received 10



hours of training in total. This included two hours of theoretical instruction (content
<u>www.udsspace.uds.edu.gh</u>

unspecified) and eight hours of practical training in use of force decision-making, either with simulations or stationary targets as specified by their designated group. Four weeks after the end of the training program, participants were administered a final post-test to assess changes in responses to simulated incidents in both slide and video format. A video recording of each subject's performance was assessed by expert police officers through an itemized evaluation protocol. Participants were rated on indices related to the quality of their use of force decision-making skills. These included the number of preventative actions in which the officer engaged to de-escalate the situation, as well as the number of shots fired either before or after the pre-determined legal window. Participants were also evaluated on shooting performance (i.e., accuracy) as measured by the number of hits upon the intended target.

In the pre-training test, all participants demonstrated approximately equal performance in terms of the average number of preventative actions attempted. Post-test simulations involving either slides or video indicated that video-based simulation training yielded the greatest increase in number of preventative actions. Slide training and slide + video training also significantly increased the number of preventative actions in which participants engaged during slide and video post-tests. However, the difference between the latter two groups was marginal. As predicted, classic (conventional) training methods produced only minimal improvement from pretest results. Contrary to the dramatic increase in the number of preventative actions related to video simulation training, no significant improvement was demonstrated with regards to shooting accuracy.

With respect to complex decision-making in a law enforcement context, this investigation provides empirical support for the use of simulation-based training in the training of



officers. The results suggest that the high fidelity with which video-based scenarios can be presented facilitates the acquisition and expansion of an adaptive behavioural repertoire for dealing with the dangerous situations typically encountered in police work. Retrospectively, participants themselves reported that the simulation training and associated feedback served to heighten confidence in their ability to appropriately respond to such critical scenarios.

2.2.5.4 White, Carson, & Wilbourn, (1991)

Their study investigated the effectiveness of simulation exercise training using an M-16 rifle simulator in training marksmanship skills versus the conventional method of live-fire training. Participants were two hundred and forty- seven (247) men and women registered in a 30-day Security Specialist training course for the U.S. Air Force Security Police. Prior to the investigation, all participants received three days of instruction pertaining to M-16 rifle safety, maintenance, and terminologies. Participants were also required to complete a brief questionnaire to assess previous experience with weapons. Eighty (80) of the participants were assigned to a control group and scheduled to receive thirty (30) minutes of live-fire training. This session included practice of sight alignment, target shooting, and other marksmanship fundamentals. The remaining one hundred and sixty-seven (167) participants were further divided into eight simulation training groups. The M-16 rifle simulator employed in the study consisted of four firing lanes, each equipped with a large screen upon which life-size scenarios could be projected. Each of the eight experimental groups received a different configuration of the following system features: (i.e., the live fire training time for individuals in the control group). Participants receiving simulator



www.udsspace.uds.edu.gh

training were required to shoot at a 9.5 in. x 40 in. kneeling target with a bull's-eye-type center ring from various distances. The accuracy of marksmanship skills was evaluated according to the total number of hits on the projected target.

In summary, the study supports the effectiveness of using simulation training in the acquisition of marksmanship skills, with simulation exercise training being most beneficial to those with minimal weapon experience (White et al., 1991).

In conclusion, every survey and every law enforcement institution examined, proved simulation exercises training had a positive effect. In every case in which simulation-based training was directly compared with traditional methods, simulations were observed to be superior on some or all criteria. In every case where the costs of simulation-based and traditional training were compared, simulation exercises were found to be less expensive, due to lower acquisition costs, lower operating costs or lower costs resulting from more effective or faster training. Also, in every case in which the authors of a study made a recommendation about the use of simulation-based training, they recommended its ongoing or expanded use. In short, simulation exercises training has demonstrably reached the point where questions of its fundamental effectiveness should no longer play a part in evaluating its potential use for any given project (Site Staff, 2007).

2.3 Benefits of using simulation-based training to train Prison Officers

Prison officers perform some of the most dangerous and stressful jobs in the world. They work in prisons and jails that are often hot and overcrowded, facing the constant threat of physical assault by inmates. The United States of America Bureau of Labour Statistics



<u>www.udsspace.uds.edu.gh</u>

reports that prison officers have one of the highest rates of nonfatal on-the-job injuries in the country.

Before employed in a state prison or county jail, prison officers undergo extensive safety and security simulated training. The quality of the simulated training can often mean the difference between life and death for the prison officers who guard prisoners. Therefore, Prison/Correctional Institutions all over the world employ simulation exercises to develop professionals, impact knowledge, skills, and attitudes, whilst protecting trainees from unintended risks. Safety and security training for prison officers includes a combination of classroom instruction and hands-on exercises designed to simulate situations faced by prison officers in the prison yard. Simulation training for prison/correctional officers includes firearms training, arrest and control techniques, use of chemical agents, the use of prisoner restraint devices, procedures for searching cells and the proper transportation of inmates (Bell, Kanar, & Kozlowski, 2008).

Training by simulation exercises provide the prison officer with a range of easily accessible learning opportunities. Simulation offers scheduled, valuable learning experiences that are difficult to obtain in real life. Officers address hands-on and thinking skills, including knowledge-in-action, procedures, decision-making, and effective communication. Critical teamwork behaviours such as managing high workload, trapping errors, and coordinating under stress are taught and practiced. Furthermore, simulation exercises provide the prison officer the freedom to make mistakes and to learn from the mistakes. Working in a simulated environment allows officers to make mistakes, officers gain powerful insight into the consequences of their actions and the need to get it right.



Also, the learning experience can be customized. Simulation can accommodate a range of learners from novices to experts. Recruits can brainstorm and gain confidence for tasks that allow them to focus on the more demanding part of their work such as caring for the inmates.

Simulation exercises promote the use of critical and evaluative thinking among officers. Simulation exercises may be ambiguous or open-ended thus, they encourage officers to contemplate the implications of a scenario. The situation feels real and therefore culminates into a more engaging interaction by officers.

Simulation exercises promote concept attainment through experiential practice. They help officers understand the nuances of a concept. Prison officers often find them more deeply engaging than other activities, as they experience the activity first-hand, rather than hearing about it or seeing it (Summers, 2004).

Another benefit of simulation exercises as a tool for effective training is, it serves as a means for teaching or demonstrating concepts to officers. This is particularly true of simulation exercises that make intelligent use of computer graphics and animations. Such simulations dynamically show the behaviour and relationship of officers and inmates, thereby providing the officer with a meaningful understanding of the prison system. A typical example is a simulated prison break by inmates at a maximum security prison. By showing the routes and methods used by inmates, the officer can actually see what is happening within the prison and is therefore left with a better understanding of the nature and aggression inmates can pose. Such a simulation should also permit officers to speed up, slow down, stop or even reverse a simulation as a means of aiding understanding. This



is particularly true when the simulating environment contains feedback or other operations which are not immediately intuitive upon an initial investigation.

Also, simulation-based training provides a technological alternative that resolves the tension between obligations by effectively mitigating the competition between their demands. Rather than conducting training in the conventional manner, simulation-based training may use a computer-generated virtual environment to augment or replace portions of the real environment. Thus, it often reduces or limits risk to the participants and the environment while reducing overall costs (Summers, 2004).

Another benefit is content, which relates the richness with which basic declarative information is delivered through a system to officers (Kozlowski & Bell, 2007). As Schreiber, (1998) notes, the presentation of information represents one of the key features of an instructional event. Text is the simplest means of conveying training content, although it is relatively low in information richness. To enhance the richness of the learning experience, additional features, such as still images/graphics, video, sound, and special effects can be added to the information stream. Training simulations typically utilize an array of multimedia features to convey information through different sensory modes (e.g., images, sound) and to create a realistic and relevant context (Cannon-Bowers & Bowers, 2001). For example, simulations are now incorporating video game quality graphics and many offer a set of supplementary multimedia learning materials (e.g., case studies, reference materials, tutorials, videos) on a CD-ROM or online. Stories and narratives are also increasingly being used to stimulate learners' interest, foster greater effort, and help guide the learner through the simulated experience.



Finally, simulation exercise training promotes communication between instructors and officers. It is important to consider features that influence communication richness or bandwidth, which determines the extent to which users can communicate via verbal and non-verbal means. One advantage of simulation exercise training is, it allows face-to-face interactions between instructor(s) and officers. This enables the expert trainer to evaluate officers' progress in real time and provide necessary feedback and guidance. It also allows rich interaction and information sharing among officers. Rich interaction is critical for information sharing, providing instructional support and creating realistic collaborative performance environments. Advanced training simulations, such as the Distributed Mission Training (DMT) systems used by the military, incorporate 2-way synchronized communication that allow individuals and teams to interact in real-time (Kozlowski & Bell, 2007).

2.4 Challenges of using simulation-based training approach to train Prison Officers

Despite the practical and instructional benefits of using simulation exercises to train prison officers, there also exist a number of costs and challenges associated with using simulations to deliver training. Some of the key challenges surrounding simulations involve managing development costs, leveraging higher levels of learner control, understanding individual differences, and shaping the unique social environment inherent in simulation exercises.

The first of the challenges is managing development costs. In the past, computer-based simulation exercises were often delivered via seminars or in classroom settings, which meant that security institutions such as the Ghana Prisons Service incurs a number of



www.udsspace.uds.edu.gh

indirect training costs associated with facilitators, classroom facilities, employee travel, and missed work (Summers, 2004). However, new and expanded technologies (e.g., Internet, broadband) allow simulations to be delivered to any computer and allow officers to engage in the experience when they wish. A benefit of this learning on demand model is that it greatly reduces or eliminates many of the variable and indirect costs associated with training delivery, thereby increasing the return on investment possible from simulation-based training. Indeed, estimates suggest that a substantial portion of training costs – upwards of 80% - is devoted to simply getting officers to the training site, maintaining them while there, and absorbing their lost productivity (Kozlowski, Toney, Mullins, Weissbein, Brown, & Bell, 2001). Simulation exercises that incorporate artificial intelligence or other advanced features may require significantly more developmental work. The result is that for many prison institutions, training simulations are only practical if these development costs can be repaid by delivering the course to a large number of officers (Summers, 2004).

Another challenge associated with simulation exercises in training prison officers is leveraging learner control. Lately, officers engage in learning without direct involvement of an instructor or a superior officer. The result is officers get greater control over their own learning. As Summers, (2004, p. 228) states, "Learners must make time for learning and apply themselves without the benefit of a class, mandatory homework, or other motivational pressures." In addition, officers must manage their learning process, including monitoring and evaluating their progress and use that information to make effective learning decisions, such as what and how much to study and practice. Research suggests that learner control can yield several benefits. For instance, it enables motivated learners to



www.udsspace.uds.edu.gh

customize the learning environment to increase their mastery of the content domain. In addition, learner control can induce active learning and allow learners to generate relationships among new concepts and their existing knowledge (Bell, Kanar, & Kozlowski, 2008). Despite its potential benefits, greater learner control is an important challenge facing training by simulation exercises. Specifically, research suggests that officers often do not make effective use of the control provided by technology-based training. Officers often do not accurately assess their current knowledge level; they do not devote enough effort to training, and make poor decisions, such as terminating study, practice early and skipping over important learning opportunities, resulting in deficiencies in performance (Bell, Kanar, & Kozlowski, 2008). The way forward is adaptive advice and guidance from instructors and superior officers to help guide officers through simulations exercises and enhance learning outcomes.

Also, understanding individual differences is another challenge associated with the use of simulation exercises in training officers. In recent years, there has been a growing recognition of the powerful influence that individual differences in ability, prior experience, and disposition (i.e., personality) can have on how trainees approach, interpret, and respond to training. Accordingly, it is important to understand how individual differences interact with the design of simulations to influence overall effectiveness. Trainees who are high in ability, prior experience, and motivation may benefit the most from the learner control offered by many experiential training simulations. High ability trainees, for instance, have sufficient cognitive resources to allow them to focus attention on learning activities, such as monitoring their learning progress and developing effective learning strategies, without detracting from their acquisition of important knowledge and



skills. Similarly, prior achievement or knowledge in the content domain may help reduce cognitive load, thereby allowing trainees to better integrate new concepts and make effective learning decisions. Some trainees prefer mentored instruction while others prefer group-problem solving exercises and self-paced learning. Training by simulation exercises currently does not address this diversity of learning styles. The fact that simulation-based training does not consider possible individual differences in learners means that only a portion of trainees may benefit from a particular application (Bell, Kanar, & Kozlowski, 2008).

The final challenge facing institutions such as the Ghana Prisons Service is the unique social environment that often results from simulation-based training design. The classroom atmosphere, interactions between officers and instructors, and face-to-face instruction are essential for learning. "The real distinctive competence of the classroom setting is the power of the people around you – the professor as facilitator and expert, the peers as sources of immediate feedback" (Katz,1999). "A high level of interactivity is not necessary for all training programs, but when it is important to learning or for giving employees an opportunity to socialize and network with their colleagues, the challenge is determining how to most effectively connect learners using communication and collaboration tools" (Bell, Kanar & Kozlowski, 2008).Although the social context is often an important part of the learning process, many simulation-based training continue to offer an unsocial learning experience, which can jeopardize the advantages of social interaction and collaboration in training.



2.5 Marksmanship

Marksmanship is the act or skill of precise shooting usually with a rifle. Therefore, a marksman is a person skilled with the ability to shoot at a target with precision (Dabuoh, 2017). In popular and historical usage, "sharpshooter" and "marksman" are considered synonyms. Within the shooting sports and military usages today, however, sharpshooter and marksman refer to distinctly different levels of skill, which are never misapplied. Specifically, in the US Army, "marksman" is a rating below "sharpshooter" and "expert". Four levels of skill are generally recognized today in both military and civilian shooting circles: unqualified, marksman, sharpshooter, and expert. Marksmanship badges for the three qualified levels are commonly awarded to both civilian and military shooters who attain proficiency in shooting higher than "unqualified".

The main difference between military marksmen and snipers is that marksmen are usually considered an organic part of a fire-team of soldiers and are never expected to operate independently, whereas snipers usually work alone or in very small teams. Snipers are also often tasked with responsibilities other than delivering long-range fire - specifically, conducting reconnaissance and directing artillery or air strikes. Within the military, marksmen are sometimes attached to an infantry fire-team or squad where they take accurate long-range shots at valuable targets as needed, thus extending the reach of the fire-team or squad.



2.5.1 Four Fundamentals of Marksmanship

The officer must understand and apply the four key fundamentals before he approaches the firing line. He must establish a steady position allowing observation of the target. He must aim the rifle at the target by aligning the sight system, and fire the rifle without disturbing this alignment by improper breathing or during trigger squeeze. These skills are known collectively as the four fundamentals. Applying these four fundamentals rapidly and consistently is the integrated act of firing.

The first principle is the Steady Position. The officer approaches the firing line and assumes a comfortable, steady firing position. The time and supervision each officer has on the firing line are limited. The officer must learn how to establish a steady position during integrated act of dry-fire training. The firer is the best judge of the quality of his position. If he/she can hold the front sight post is held steady through the fall of the hammer, there is a good position.

The second fundamental is Aiming. Having mastered the task of holding the rifle steady, the officer must align the rifle with the target in exactly the same way for each firing. The firer is the final judge as to where his eye is focused. The instructor or trainer emphasizes this point by having the firer focus on the target and then focus back on the front sight post. He checks the position of the firing eye to ensure it is in line with the rear sight aperture.

Also, the officer at the firing range must be able to control his breathe. As the firer's skills improve and as timed or multiple targets are presented, he must learn to control his breath at any part of the breathing cycle. Two types of breath control techniques are practiced during dry fire. The coach/trainer ensures that the firer uses two breathing techniques and



www.udsspace.uds.edu.gh

understands them by instructing him to exaggerate his breathing. The firer must be aware of the rifle's movement (while sighted on a target) as a result of breathing. The first technique is used during zeroing (and when time is available to fire a shot). There is a moment of natural respiratory pause while breathing when most of the air has been exhaled from the lungs and before inhaling. Breathing should stop after most of the air has been exhaled during the normal breathing cycle. The shot must be fired before the soldier feels any discomfort. The second breath control technique is employed during rapid fire (shortexposure targets). Using this technique, the officer stops his breath when he is about to squeeze the trigger.

The last fundamental is Trigger Squeeze. A novice firer can learn to place the rifle in a steady position and to correctly aim at the target if he follows the basic principles. If the trigger is not properly squeezed, the rifle will be misaligned with the target at the moment of firing. Trigger squeeze is important for two reasons: First, any sudden movement of the finger on the trigger can disturb the lay of the rifle and cause the shot to miss the target. Second, the precise instant of firing should be a surprise to the officer. The officer's natural reflex to compensate for the noise and slight punch in the shoulder can cause him to miss the target if he knows the exact instant the rifle will fire. The officer usually tenses his shoulders when expecting the rifle to fire. It is difficult to detect since he does not realize he is flinching. When the hammer drops on a dummy round and does not fire, the officer's natural reflexes demonstrate that he is improperly squeezing the trigger.



2.6 The Prison Officers' Training School (POTS)

The Prison Officers' Training School (POTS) was established in September, 1947 at Roman Ridge, Accra. It was formally known as Warders Training Depot. It is significant to note that the establishment of the school ended the practice of engaging temporary warders. Aside this, it also afforded those who had earlier on been engaged as temporary warders, the opportunity to have some formal training on the rudiment of prison work.

On 1st January, 1964, the Prisons Department became autonomous and renamed Ghana Prisons Service. Subsequently, the Warders' Training Depot also had its name changed to the Prison Officers' Training School. However, the designation of the head of the institution which was Training Officer remained unchanged until 1974 when it became "Commandant".

The Prison Officers' Training School offers Recruit Course for trainees. This course is offered to young men and women who have enlisted into the subordinate officer corps of the Service. It aims at introducing trainees to the rudiments of prison work. The duration of the course is nine (9) months which includes three (3) months of practical attachment to various prisons. Subjects taught at this level include Prison Duties, Penal Law, Interpersonal Skills, English Language, Computation, Drill, Martial Arts and Skills at Arms.

The Training School also offers Special Courses. Special Courses are organized for both superior and subordinate officers to update their knowledge in specialized areas of the prison work. Two (2) of such courses that have featured regularly in recent times are intelligence Management, and Management of Emergency and Serious Incidents within



prisons establishments. Refresher courses are also organized for serving officers to prepare them for promotion to higher ranks.

Officer Cadet Course is another course offered by the Prison Officers' Training School. This course is organized to prepare personnel for appointment into the superior officer corps. Such courses are structured for direct entrants, as well as eligible serving officers who have attained the rank of Chief Officer and above. The duration of the course is usually six (6) months. Subjects taught include Correctional Management, Emergency and Serious Incidents Management, Penal Law, Reception Duties and Staff Functions. Others are Social Psychology, Prison Management, Fundamental Officer Training, Stores Administration and Financial Management (Prison Officers' Training Manual, 2017).

However, it is sad to point out that, training rendered to officers at the Prison Officers' Training School (POTS) is mainly theoretical and concentrates on the traditional methods of training such as classroom lectures. This practice poses a lot of challenges to new officers and renders them vulnerable to inmates and officers. These new officers eventually get into trouble and are dismissed from the Prisons Service.



Recruits and cadet officers spend several hours in the classroom where a lot of theoretical lessons about prisons duties are taught. Practical courses such as riot control, correctional management, defensive tactics and Emergency and Serious Incident Management (ESIM) are all taught in the classroom thereby denying trainees the opportunity to visually and practically understand various concepts. A study by Johnson, (2013), revealed that prison officers' training is focused on the teaching of theory, but not on the application of that

theory to practice and this is negatively affecting performance. Consequently, he suggested training by simulation exercises and that forms the bases for this study.

2.7 Conclusion

The studies reviewed highlights a lot about improving the marksmanship skills of officers using simulation-based training in law enforcement institutions. However, due to the scarcity of empirical studies that has examined improving the marksmanship skills of prison officers using simulation-based training approach, only limited conclusions can be drawn. Indeed, this research is intended to provide evidence by means of empirical figures that, simulation-based training improves the marksmanship skills of officers.

Nonetheless, in every law enforcement institution examined, simulation exercises training was seen to have a positive effect. Studies which directly compared simulation based training with traditional methods, perceived simulation based training to be superior on some or all criteria. In cases where the costs of simulation-based and traditional training were compared, simulation exercises were found to be less expensive, due to lower acquisition costs, lower operating costs or lower costs resulting from more effective or faster training. It is also clear that simulation exercise training have great potential as a medium to create highly-relevant training contexts where trainees are active participants in the learning process.

Also, studies which recommended the use of simulation-based training, endorsed its ongoing or expanded use. In short, simulation-based training has demonstrably reached the



point where questions of its fundamental effectiveness should no longer play a part in evaluating its potential use for any given project.



CHAPTER THREE

METHODOLOGY

3.0 Introduction

This part of the study examines the profile of the study area, the research design, population of the study, sample and sampling techniques, data collection instruments, validity and reliability of instruments, data collection procedure, data analysis and ethical issues.

3.1 Profile of the Study Area

The only training facility of the Ghana Prisons Service is the Prison Officers' Training School (POTS) located at Roman Ridge, Accra. It was established in September, 1947at its present location, Roman Ridge, Accra. The Training School has staff strength of one hundred and fifty (150) personnel, comprising one hundred and thirty (130) Senior Officers and twenty (20) Junior Officers.



Courses offered at the Training School include Recruit Course. This course is offered to young men and women who have enlisted into the subordinate officer corps of the Prisons Service. It aims at introducing trainees to the rudiments of prison work. The duration of the course is nine (9) months and it includes three (3) months of practical attachment at various prison establishments. Subjects taught at this level include Prison Duties, Penal Law, Interpersonal Skills, and English language. Others include Computation, Drill, Martial Arts and Skills at firearms.

Also, the Training School offers Special Courses. Special Courses are organised for both superior and subordinate officers to update their knowledge in specialized areas of the prison work. Two (2) of such courses that have featured regularly in recent times are intelligence Management, and Emergency and Serious Incidents Management (ESIM) within prison establishments. Refresher courses are also organized for serving officers to prepare them for promotion to higher ranks.

Furthermore, the Training School offers Officer Cadet Course. This course is organized to prepare personnel for appointment into the superior officer corps. Courses in this domain are structured for direct entrants, as well as eligible serving officers who have attained the rank of Chief Officer and above. The duration of the course is usually six (6) months. Subjects taught include Correctional Management, Emergency and Serious Incidents Management (ESIM), Penal Law, Reception Duties and Staff Functions. Others are Social Psychology, Prison Management, Fundamental Officer Training (FOT), Stores Administration and Financial Management (Prison Officers' Training Manual, 2017).

3.2 The Research Design



This research is basically an action research. An action research is a research tradition which has the dual aims of action and research. It is also a research tradition that place emphasizes on cyclical, dynamic, and collaborative approaches to investigation of a problem (Asante & Yirebekyaa, 2015). Therefore, an action research was appropriate to equip officers with marksmanship skills using simulation-based training approach.

Also, an action research was chosen due to its relative advantages to other forms of conducting a research. It is participatory in nature, which implies interaction and coordination between respondents (officers) and the researcher. Officers feel part of the research hence are willing to positively contribute to the success of the work. Also, data is used rather than preferences and sentiments to draw conclusion. This makes the process of action research more scientific in nature, proposing ideas and theories that are backed up by data.

Finally, an action research is more reflective, analytical and increases problem-solving skills and consciously, promotes learning from experience.

3.3 Population of the Study

The population is made up of recruits at the Prisons Officers' Training School (POTS), Accra. The Training School is currently training four hundred and fifty (450) officers.

3.4 Sample and sampling techniques



There were fifty (50) participants out of the total population of four hundred and fifty (450) recruit officers that took part in the study. This comprised twenty (20) tradesmen and thirty (30) general duties officers. Tradesmen perform technical duties which aim at equipping prisoners with employable skills such as the masonry, carpentry, blacksmithing, bricklaying and many others. General duties officers perform the routine prison duties such as guard duties, escorting of prisoners and prison yard duties.

Simple random sampling technique and purposive sampling techniques were used in the sample selection. Simple random sampling technique was used to select the tradesmen; this ensured a fair and even representation. Purposive sampling technique was used to target general duties officers. This was because general duties officers will perform administrative and guard duties after passing out, hence they will not be directly involved in training. Secondly, a limited number of officers are needed for the research.

3.5 Data Collection Instruments

In order to authenticate and cross-validate data obtained for the study, both Quantitative and Qualitative Data collection Instruments were used. These instruments were questionnaires, interview guides and observation to obtain data for the study.

3.5.1 Questionnaires



Self-constructed questionnaires made up of prepared set of questions in logical order with alternative responses were administered to the respondents to obtain quantitative data. The first part of the questionnaires consisted of the demographical background of the respondents while the second section was made up of liker-type scale item which required the respondent to indicate the extent to which he/she agreed or disagreed to a given statement. The study found this kind of questionnaire (structured questionnaires) very useful as the respondents were educated. Also, questionnaires enable respondents to give out information on their experience with the heckler & Koch (G3) rifle were without fear.

This served as a platform for statistical analysis to be conducted, and thus more rigorous scientific assessments of the data obtained.

3.5.2 Interviews

Qualitative Data were collected through face- to- face interview with respondents using self-constructed interview guide, thus good rapport and trust was established with the respondents. This brought out additional information which contributed to the findings of this study.

3.5.3 Observation

A non-participant observation was used to monitor performance of respondents who received training by means of the G3 rifle simulator, study live shooting at the firing-range. Again, the same observation style was employed to observe respondents reaction during the classroom lectures and demonstrations.

3.6 Instrument Validity



Instruments used for the study went through both face and content validity. To ensure face validity of the instruments, copies of questionnaires and interview guides were issued to colleagues for proof reading and the necessary corrections were made (Bearden, 2004).

Content validity was guaranteed by relying on experts in the field of research who used their vast knowledge, experience and expertise to make sure that, the instruments were appropriate enough to measure what they were intended to measure.

3.6.1 Pre-Testing of Instruments (Pilot Study)

In order to erase uncertainties, insufficiencies, inappropriateness and any other problem, the instruments were pre-tested. A pilot test was conducted among twenty (20) senior prison officers and thirty (30) junior Prison Officers who had in-depth knowledge in simulation exercise. Out of the fifty (50) questionnaires administered to the officers, forty-six (46) were appropriately completed and submitted. Analyses of data obtained during the pilot test led to the restructuring of few items on the questionnaires which could not elicit information they were intended to obtain.

3.7 Reliability of Instruments

Internal consistency/reliability of questionnaire used for the study was achieved by using IBM SPSS (version 20) to run the data obtained during the pilot test. With a Cronbach's Alpha value of 0.72 obtained the instrument was considered dependable since Nually (1994) as cited in Mieloo, Hein and Wilma (2012) believed that, a Cronbach's Alpha test value of at least 0.70 and preferably higher, an instrument was internally consistent enough to secure a valid data for a study.

With the aim of avoiding subjectivity and biasness, responses to interview questions were recorded and transcribed. The transcribed version was read to the respondents to ensure credibility of the data collected. The written versions were finally classified under questions they matched on the interview guide.

3.8 Data Collection Procedure

The study obtained data from both primary sources and secondary sources. Primary data was obtained by means of field research at the Prisons Officers' Training School (POTS) to collect first hand information.

For two weeks beginning March 13, 2017 and ending on March 27, 2017, data for the research was collected. This was also a period the recruit officers had gone through all the rudiments of prisons duties hence they were equipped with lessons on marksmanship.

Data was collected by means of questionnaires, which also served as a form of structured written guide. It ensured less time is spent in soliciting for information that was given out to respondents to fill, and collected later. Data on the demographic characteristics and respondents experience with the heckler & Koch (G3) rifle were obtained.

At the pre-intervention stage questionnaire was administered to fifty (50) participants to assess their experience with the Heckler & Koch (G3) rifle safety and maintenance procedures.



Also, face to face interviews were carried out to have access to accurate information. It also helped to determine the physical and emotional reaction of each respondent. Secondary sources of data were acquired from Officer Cadet Course Intake 22 graduation brochure, website of the Ghana Prisons Service, Officer Cadet Training Manual and Recruit Officers Training Manual.

To ensure the effectiveness of the intervention, participants were divided into five (5) syndicates of ten (10) officers each. Participants were assigned to a lecture hall to receive

two-hours of lectures on marksmanship. The theoretical aspect was followed by roleplaying or imitation (simulation exercises) on sight alignment, target shooting, and other marksmanship fundamentals where each syndicate was assigned to five (5) officers who were highly experienced in the field. The various syndicates were again introduced to a G3 rifle simulator. Provided by the Ghana Prisons SWAT (Special Weapon and Tactics) Unit, the G3 rifle simulator employed in the study is an artificial replica of a G3 rifle. It also consists of five (5) firing lanes, each equipped with a large screen upon which life-size scenarios were projected. Participants practiced on the G3 rifle simulator for thirty (30) minutes.

Interactions had with the trainers (experienced officers) revealed that, the marksmanship skills of the participants had improved. An officer in-charge of a syndicate for instance expressed that, "My men have been very impressive as long as effective handling of weapon is concerned" when he was confronted with the question "Are your men making head way?"

At the post-intervention stage, series of responses elicited through interview with the participants showed that their marksmanship skills improved tremendously. Not to rely on responses elicited through interview alone to draw conclusion, a lone participant observation was further carried out to observe the positioning of officers and their rifles during the live-shooting exercises.

A week after the officers received marksmanship skills training through simulation exercises, it was important to examine their aftermath performance since the last objective of this research sought to evaluate the aftermath performance of the officers.

Thereafter, they were taken to the live firing range to test their marksmanship skills after receiving training through simulation. They also shot at thirty (30) metres standing position target with a bull's-eye-type centre ring. Data on the accuracy of marksmanship was evaluated according to the total number of hits on the projected target. A hit on the bull (middle of the target represents five (5) points, the next circle after the bull represents four (4) points, and in that order).

3.8.1. Situational Analysis (pre-intervention)

Data collected showed that majority of the respondents thirty-one (31) representing (62%) exhibited little knowledge about the safety and maintenance while nineteen (19) of them representing (38%) had much knowledge about the safety and maintenance of the G3 rifle. Figure 3.1 is the diagrammatic display of how much knowledge trainees have with the G3 rifle.





Figure 3.1: Experience with the Heckler and Koch (G3) Assault Rifle by recruits at the prison officers' training school (pre-intervention)

Source: Authors Field work, 2017

Information obtained as shown in figure 3.1 confirmed the result of the strategic needs assessment exercise embarked on by the research department.

Seeking to know why most of the officers are unable to exhibit good marksmanship skills, explains why the first objective of the study sought to find out the main cause of officers in the Ghana Prison Officers' Training School inability to show mastery in marksmanship. Series of pre-interviews with the officers revealed that, they were predominantly engaged in the theoretical aspects of marksmanship as compared to the practical aspect during training.

This showed that, the conventional method (lecturing) alone was insufficient to professionally equip recruit officers in the Prison Officers' Training School. Therefore, the primary goal of this study is to assess the effect of practical training model (simulation-based training technique) on the marksmanship skills of officers.

3.9 Data Analysis



As indicated earlier, questionnaire, interview and observation checklist were employed in collecting qualitative and quantitative data. The following tools were employed in the data analysis process.

Quantitative data obtained through questionnaires and observation checklists were first scrutinized by coding and tabulating. Coding was done in order to have the data in the IBM SPSS version 20 form for execution. Tabulation was done to have the processed information in a summarised form. Data was analysed with the research objectives in mind. The analysed data were finally presented in pie chart and bar chart forms.

Qualitative data acquired through interview with the instructors in the Ghana Prison Service were in verbal forms, hence were first recorded. The recorded versions were transcribed under questions they best answered on the interview guide. The transcribed versions were used to complement responses elicited on portion of the questionnaires in achieving the research objectives.

3.10 Ethical Issues

Bryman (2009) pointed out that, researchers in the process of data collection must demonstrate to respondents that, they have certain rights which are non-negotiable. This study has therefore taken into consideration the following ethical issues; permission to data collection, informed consent, anonymity and confidentiality.

3.10.1 Permission to collect data

With the help of the introductory letter obtained from the University for Development Studies (UDS), an introductory letter was issued to the investigator by the Commandant of the Ghana Prison Officers' Training School, Accra. By this letter, the investigator was authorised to collect data from sampled trainees. Obtaining formal permission from the authorities of the Prison Officers Training School was considered very essential because the U.S. Department of Education, Office of Safe and Drug-Free Schools (2007) contended that, a researcher can only obtain data from an institution for his/her research purposes after a formal permission had been granted by the superior of that institution.

3.10.2 Informed consent

The participants/respondents of the study were fully informed about the purpose for which this study was being carried out. Roles they were also expected to play were clearly articulated to them. The investigator deemed this exercise very important because in research, the rights of your respondents are not negotiable (Bryman, 2009).

3.10.3 Anonymity

To ensure that, the respondents remained anonymous in the course of the study, the researcher designed and used interview guides that did not disclose the identity of the officers interviewed during the study. Also, the observation for respondents made no provision for respondents'/observed officers names and their location. This encouraged respondents to give out relevant information without fear.

3.10.4 Confidentiality



Having disclosed the goal of the research to the participants, they were also assured that, data elicited from them were purely for academic purposes and that, such responses would be treated as such. Respondents were also assured that, under no circumstances would information acquired from them be disclosed to people who had nothing in common with the study.

CHAPTER FOUR

PRESENTATION, ANALYSIS AND DISCUSSION OF RESULTS

4.0 Chapter Overview

This chapter discussed the demographic characteristics of participants, situational analysis (pre-intervention), intervention and post-intervention, post-intervention analysis and discussions, and challenges faced in implementing simulation exercises.

4.1 Demographic Characteristics of Respondents

Data gathered on the demographic characteristics showed that, most of the participants (50%) fell within the ages of 24 and 29 years. 30% of them were within the ages of 18 and 23 years. 20% of the participants were found between 30 to 35 years. The figure 4.1 shows the age distribution of the participants.



Figure 4.1: Age distribution of participants

Source: Authors Field work, 2017

Data collected also revealed that, majority (76%) of the participants were males while 24% were females as shown in the figure 4.2:



Fig. 4.2: Sex distribution of participants

Source: Authors Field work, 2017

It is also important to state that, two categories of personnel are enlisted into the Ghana Prisons Service: Officers who are enlisted as Tradesmen and those who perform General prison duties. Tradesmen include tailors, masons, carpenters, blacksmiths and many others. General duties officers perform routine prisons duties such as escorting of prisoners and guard duties. Similarly, two categories of recruits (Tradesmen and General duties officers) are currently undergoing training at the Prison Officers' Training School. From figure 4.3, Forty percent (40%) of the participants were Tradesmen while sixty percent (60%) were General duties officer



Fig.4.3: Category of participants

Source: Authors Field work, 2017

4.2 Level of marksmanship skills possessed by officers

Interview session with the recruit officers revealed that they mostly engage in the theoretical aspect of marksmanship instead of combining it with the practical aspects. Recruits therefore come out as officers with poor marksmanship skills. It was further identified that, recruits were good at describing marksmanship but could not replicate it.



4.3 Discussion of Pre & Post Intervention Results

This part of the study discusses the pre & post Intervention results of the research.

4.3.1 Pre-Intervention (Situational Analysis)

The Research Department of the Prisons Service identified officers 'inability to expertly demonstrate marksmanship skills as a training need. This came to light when the Research Department of the Training School under the leadership of the researcher embarked on a strategic need assessment exercises in the school.

Data collected showed that majority of the respondents thirty-one (31) representing (62%) exhibited little knowledge about the weapon while nineteen (19) of them representing (38%) had much knowledge about the safety and maintenance of the G3. Figure 4.4 show how experienced the officers were with the weapons.



Fig. 4.4: Experience with the G3 rifle by recruit officers in the Prison Officers' Training School (pre-intervention)

Source: Authors Field work, 2017



<u>www.udsspace.uds.edu.gh</u>

Information obtained as shown in fig.4.4 confirmed the result of the strategic needs assessment exercise embarked on by the research department.

Seeking to know why most of the officers are unable to exhibit marksmanship skills, explains why the first objective of the study sought to find out the main cause of officers in the Ghana Prison Officers' Training School inability to show marksmanship skills.

Series of pre-interviews with the officers revealed that, they were predominantly engaged in the theoretical aspects of marksmanship skills as compared to the practical aspect. This informed that, the conventional method (lecturing) alone was insufficient to professionally equip the officers in the Prison Officers' Training School.

The participants were taken to the live-shooting range at Nsawam Medium Security Prison the following day. This exercise was to obtain first hand information on their accuracy of shooting at a target (marksmanship). Participants were divided into five (5) syndicates of ten (10) officers each.

The table 4.1 showed the score of each participant in a syndicate and the average scores of each of the five syndicates.



www.udsspace.uds.edu.gh

 Table 4.1: Marksmanship ability of the recruits (trainees) before simulation-based

 training

Respondents	syndicate 1	syndicate 2	syndicate 3	syndicate 4	syndicate 5
1 st Participant	1	1	3	2	0
2 nd Participant	0	2	0	0	1
3 rd Participant	3	0	1	2	2
4 th Participant	0	1	0	2	0
5 th Participant	1	0	2	0	0
6 th Participant	0	0	1	0	1
7 th Participant	1	1	1	2	1
8 th Participant	0	1	2	2	2
9 th Participant	0	2	1	0	1
10 th Participant	0	0	1	2	0
Average Score	0.6	0.8	1.2	1.2	0.8

Source: Authors Field work, 2017



www.udsspace.uds.edu.gh



Figure 4.5 is the diagrammatic presentation of average scores of the five syndicates

Fig.4.5: Average scores obtained by five (5) syndicates at a live-firing range before practical marksmanship skills training (simulation exercises)

Source: Authors Field work, 2017

The benchmark score for each participant was set at three (3) while the average benchmark score for each syndicate was also fixed at 3.0. However, none of the participant was able to attain the set benchmark score of three (3). This culminated in the poor average scores (0.6, 0.8, 1.2, 1.2 and 0.8) of the various syndicates as shown in figure 4.5 and this was evidence that, the officers indeed lacked the marksmanship skills.



Having identified the training needs of the officers, the next objective of the study aimed at assessing the effect of simulation-based training on the marksmanship skills of the officers. In collaboration with the authorities of the Prison Officers' Training School, Accra, the


researcher designed a simulation-based training strategy to help the officers overcome the identified problem.

The simulation-based training involved dividing the fifty (50) participants were divided into five (5) syndicates of ten (10) officers each. They were assigned to a lecture hall to receive two-hours of lectures on marksmanship. The theoretical aspect was followed by role-playing or imitation (simulation exercises) on sight alignment, target shooting, and other marksmanship fundamentals where each syndicate was assigned to five (5) officers who were highly experienced in the field. The various syndicates were again introduced to a G3 rifle simulator. Provided by the Ghana Prisons SWAT (Special Weapon and Tactics) Unit, the G3 rifle simulator employed in the study is an artificial replica of a G3 rifle. It also consists of five (5) firing lanes, each equipped with a large screen upon which life-size scenarios were projected. Participants practiced on the G3 rifle simulator for thirty (30) minutes.

Interactions with the trainers (experienced officers) during the field work revealed that, the marksmanship skills of the participants had improved. An officer in-charge of a syndicate for instance expressed that, "*My men have been very impressive as long as effective handling of weapon is concerned*" when he was confronted with the question "*Are your men making head way*?"

Series of responses elicited through interview with the participants revealed their marksmanship skills improved tremendously. Not to rely on responses elicited through interview alone to draw conclusion, a lone participant observation was further carried out.



4.3.3 Post-Intervention

Table 4.2 shows the score of each participant in a syndicate and the average scores of each of the five syndicates after the intervention (simulation-based training).

Table 4.2: Marksmanship	Ability of	the Officers (Trai	nees) After Simulation-base	d
training				

Participant	syndicate 1	Syndicate2	Syndicate 3	Syndicate 4	Syndicate 5
1 st Participant	4	3	4	2	3
2 nd Participant	4	3	3	3	5
3 rd Participant	3	5	4	3	2
4 th Participant	2	5	4	3	5
5 th Participant	5	5	4	4	4
6 th Participant	5	4	4	4	2
7 th Participant	5	5	3	3	3
8 th Participant	5	3	5	3	4
9 th Participant	5	5	2	4	2
10 th Participant	5	3	3	2	5
Average Score	4.3	4.1	3.6	3.1	3.5

Source: Authors Field work, 2017

Fig.4.2 showed the average scores obtained by five (5) Syndicates at the live-firing range after receiving marksmanship skills through simulation exercises.

www.udsspace.uds.edu.gh



Fig.4.6: Average scores obtained by five (5) syndicates during live-firing range after receiving marksmanship skill through simulation (Role-play and Imitation) *Source: Authors Field work, 2017*

The figure 4.6 shows the remarkable performance by the five syndicates at the live-firing range after been taking through marksmanship skills using the simulation-based training approach.

4.3.4 Post-intervention Analysis and Discussions

Analysis of quantitative data obtained through questionnaires showed that, thirty-one (31) of the participants representing sixty-two percent (62%) were less experienced in marksmanship skills while nineteen (19) of them representing thirty-eight percent (38%) were much experienced in the skills. Responses elicited from participants through face-to-face interview and results of observation made by the researcher (qualitative data) subsequently informed that, majority of the officers (62%) had little knowledge on



marksmanship skills since they were predominantly engaged in the conventional method of training (lecturing approach).

The average scores obtained by the syndicates during their first experience with the Heckler & Koch assault rifle (G3) in the course of the simulation exercise (practical marksmanship skills) were as low as 0.8 and 0.6 respectively. The results were below the set target of 3.0. Also, none of the participant was able to attain the set benchmark score of three (3). This confirmed the fact that, giving lectures on marksmanship skills without the field work (live-firing range) was inadequate to show mastery in marksmanship skills.

Again, the average score of each group at the live shooting range was computed after receiving marksmanship skills by means of simulation exercises on the G3 rifle simulator. Figure 4.6 is a graphical representation of the average score of respondents in five different syndicates after receiving marksmanship training through simulation exercises on the G3 rifle simulator. Participants in group 4 had the lowest average score of 3.1 which is above the benchmark target of 3.0. Respondents in group 1 scored the highest with an average score of 4.3. Also, majority of the participants scored above the set benchmark of three (3). The interpretation of this is that, the recruit officers became better off in terms of marksmanship skills when trained using simulation-based approach. No wonder the popular saying by Confucius in 450BC "Tell me, and I will forget. Show me, and I may remember. Involve me, and I will understand."



The figure 4.7 compares the performances of the various syndicates before and after the simulation-based training



Fig. 4.7: Pre-intervention and post-intervention comparison

Source: Authors Field work, 2017

Figure 4.7 compares the pre-intervention and the post-intervention average scores obtained by each syndicate at the live- shooting range. The blue bars represent the average scores obtained by respondents before the intervention while the red bars represent the average scores after the intervention (simulation-based approach). Before the introduction of the officers to the practical aspect of marksmanship skills (simulation exercises), their marksmanship skills were averagely rated between 1.2 and 0.6 as shown in figure 4.5. At



the post-intervention stage, participants received marksmanship skills training by means of simulation exercises. Each respondent also fired a Heckler/Koch (G3) assault rifle at the live-shooting range to test their marksmanship skills after simulating on the G3 rifle simulator. The average scores obtained by each syndicate were averagely rated between 3.1 and 4.3 as shown in figure 4.6. They are represented graphically by the red bars in figure 4.7. With a great difference of 2.9 between the pre-intervention and the post-intervention average scores, it is undeniable fact that, the simulation exercises improved significantly the marksmanship skills of the officers. This suggests that, officers in Prison Officers' Training School will professionally exhibit marksmanship skills when theoretical lessons on marksmanship skills are accompanied with the practical aspect (simulation exercises). This explains why summer (2012) put forward that, simulations cannot be over looked when officers' marksmanship skills are to be developed.

4.4 Challenges Involved In Training Officers Using Simulation-based Training



Secondly, simulation training is a time consuming method of training officers. Unlike classroom lectures that are usually in short durations, simulation training involves assembling a lot of logistics and personnel. This makes simulation as a method of training time consuming.



Also, creating or mimicking a real-life situation or event can be difficult. Creating a reallife situation such a prison break can be challenging and almost impossible to imitate.

Furthermore, simulation exercises cannot be applied in the teaching of theoretical concepts. Theoretical concepts are mostly taught and understood through classroom lectures. On the contrary, simulations are intended to bring to light the practical aspect of the concept.

Finally, during training, it is the desire of every officer (participant) to impress the instructor. This may lead to unhealthy competition among officers which can result in accidents.



CHAPTER FIVE

SUMMARY, FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This chapter discusses the introduction, summary, findings, conclusion and the recommendations of the study.

5.1 Summary

The main research question of the study was "the effect of simulation-based training on the marksmanship skills of officers in the Prison Service" which sought further directions through the following research questions;

- What level of marksmanship skills do officers in the Prison Officers' Training School (POTS) possess?
- 2. What is the cause of the high/moderate/low level of marksmanship skills of Officers in the Prisons Officers' Training School?
- 3. What is the effect of simulation- based training on the marksmanship skills of Officers in the Prison Officers' Training School?

Action research design was used since the study aimed at addressing specific training need. Fifty (50) recruits (trainees) were randomly and purposively sampled for the study. Quantitative data obtained through questionnaires observation checklist were analysed



using the IBM SPSS (version 20) software while qualitative data obtained through face-toface interview were recorded and transcribed to support related ideas.

5.2 Major Findings of the Study

The study revealed that majority of officers in the Ghana Prisons Service could not professionally demonstrate marksmanship skills as a result of being engaged in only the theoretical aspect of marksmanship skills. It of no doubt the Chinese believe in the saying that "What I hear I forget. What I see, I remember. But what I do, I understand".

Secondly, it was found out that, simulation-based training approach had proven to be an effective strategy for training officers in marksmanship skills training since it had tremendously improved the marksmanship skills of the officers. This supports the declaration that, the best way of equipping officers (force men) with marksmanship skills is by engaging them in simulation training (Summer, 2004).

The study also revealed that, the most effective way of training officers is by providing them with both theoretical and practical professional knowledge. For, it is generally believed that, putting into practice what one learns makes him/her perfect learner.





5.3 Conclusion

Based on the research findings, it was concluded that, the use of the conventional method (lecturing) in training officers in the Prison Officers' Training School was insufficient in equipping the officers with the needed professional marksmanship skills. It was also concluded that, though series of challenges are faced in providing productive simulation exercises for the officers, the simulation-based training approach had proven to be a prolific strategy when it comes to enhancing marksmanship skills of officers.

5.4 Recommendations

Based on the finding of the study, it is recommended that periodic needs assessment should be carried out by the research department of the Prisons Service. This will help identify the training needs of the officers.

Secondly, it is recommended that the mode of training officers in the Prison Officers' Training School should be design in a way that, each theoretical lesson is accompanied with practical sessions (simulations). This will not only equip officers with the theoretical aspects of Prisons duties but also, equip officers with practical understanding of what pertains on the field of work.

Furthermore, simulation-based training model should be employed in sharpening the marksmanship skills of officers in the school. This should be complimented with theoretical lessons to enrich the marksmanship skills of officers.

Finally, the backbone of simulation-based training is logistics. The Prison Officers' Training School is challenged by inadequate logistics and this hinders effective training. In



light of the above, the Prisons administration should make available logistics needed for simulation-based training activities.



REFERENCES

Asante, T., & Yirebekyaa, E.K. (2015). Action Research for Social Sciences. *Guiding Students and Faculty through the Action Research Process*. Tamale: UDS.

Bahrick, H. P. (1979). Maintenance of knowledge: *Questions about memory we forgot to ask.* Journal of Experimental Psychology: General, 108(3), 296-308.

Baker, M. A. (1999). Effects of performance standards for learning and relearning on retention of story content by fast and slow learners. *Dissertation Abstracts International Section A*: Humanities and Social Sciences, 60(2-A), 0331.

Bastable, S. B. (2008). Nurse as educator (3). Sudbury, Massachusetts: Jones and Bartlett.

- Bearden, W. O. (2004). Journal of Business Research. The use of expert judges in scale development Implications for improving face validity of measures of unobservable constructs. Department of Marketing, School of Business Administration, University of Miami.
- Bell, B. S., Kanar, A. M. & Kozlowski, S. W. J. (2008). Current issues and future directions in simulation-based training. Ithaca, NY: Cornell University, School of Industrial and Labor Relations, Center for Advanced Human Resource Studies.
- Bennell, C., & Jones, N. J. (2005). The Effectiveness of Use of Force Simulation Training Final Report, Department of Psychology, Carleton University, Ottawa.
- Bowers, C.A., & Morgan, B.B. (1991). Simulator scenario development for aircrew coordination training. *Technical report submitted to Naval Training Systems Center*, Orlando, Florida.



Bryman, A. (2009). Social Research Methods. Oxford University, United Kingdom.

- Business Dictionary, (2016). *Simulation*, Retrieved from http://www. BusinessDictionary.com.html [accessed on 13 January, 2017].
- Cannon-Bowers, J. A., & Bowers, C. A. (2009). Synthetic learning environments: On developing a science of simulation, games and virtual worlds for training. In S. W. J. Kozlowski & E. Salas (Eds.), *Learning, Training, and Development in Organizations*. Mahwah, NJ: Erlbaum.
- Clark, R. E. (2013). Reconsidering research on learning from media. *Review of Educational Research*, 53, 445-459.
- Dabuoh, P. (2017). *Profile of arms and ammunitions in the Ghana Prisons Service*. Osu: Cybernet.
- Feder, A. (2001). *Medically unexplained symptoms in an urban general medicine practice*.New York: American Psychiatric Publishing.
- Freda, J. S., & Ozkaptan, H. (1980). Manpower and educational systems technical area: *An approach to fidelity in training simulation*, Virginia: U.S Army Research Institute.
- Ghana Prisons service, (2017). Training Manuals for Officer Cadets. Cantonments: Cybernet.
- Helsen, W. F., & Starkes, J. L. (1999). A new training approach to complex decision making for police officers in potentially dangerous interventions. *Journal of Criminal Justice*, 27(5), 395-410.

Institute for Simulation and Training. (2014). *Three types of simulation*. Retrieved from http://www.ist.ucf.edu/background.htm [accessed on 13 January, 2017].



- Johnson, F. (2013). Skills in firearms for officers of the Ghana Prisons Service. Osu: Cybernet.
- Katz, J. A. (1999). Institutionalizing elegance: When simulation becomes a requirement. Simulation & Gaming, 30, 332-336.
- Klugiewicz, G.T. (2010). *10 key steps for safe, effective simulation training*. Retrieved from <u>https://www.policeone.com/close-quarters-combat/articles/2014121-10-key-steps-for-safe-effective-simulation-training/[accessed on 17 January, 2017].</u>
- Kozlowski, S. W. J., & Bell, B. S. (2007). Active learning: *Effects of core training design elements on self-regulatory processes, learning, and adaptability.*
- Kozlowski, S. W. J., Toney, R. J., Mullins, M. E., Weissbein, D. A., Brown, K. G., & Bell,
 B. S. (2001). Developing adaptability: A theory for the design of integratedembedded training systems. Advances in Human Performance and Cognitive Engineering Research, Vol. 1 (pp. 59-123). New York: JAI Press.
- Lalonde, M. W. (2004). Assessment in Police Recruit Simulations. Royal Roads University, British Colombia.
- Lateef, F. (2009). *Simulation-based learning: Just like the real thing*. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2966567 [accessed on 17 January, 2017].
- Mieloo, C., Hein, R., Wilma, J. (2012). *Validity and Reliability of the Strengths and Difficulties*, Institute of Child Healt, University College London, United Kingdom.

O'Hara, J. M. (1990). The retention of skills acquired through simulator-based training. *Ergonomics*, 33(9), 1143-1153.



- Online etymology dictionary, (2017). *Simulation*, Retrieved from <u>http://www.etymonline.com/index.php?allowed_in_frame=0&search=simulation[a</u> ccessed on 18 January, 2017].
- Oser, R. L., Baker, D. P., Prince, C., Shrestha, L., & Salas, E. (1999). Aviation computer games for crew resource management training. *International Journal of Aviation Psychology*, 3(2), 143–156.
- Pleban, R. J., Matthews, M. D., Salter, M. S., & Eakin, D. E. (2002). Training and assessing complex decision-making in a virtual environment. *Perceptual and Motor Skills*, 94(3), 871-882.
- Prisons Officers Training Manual, (2017). A comprehensive guide to officer training: *The modern correctional officer*. Accra: Prison Officers' training School.

Rifle simulator. *Military Psychology*, 3(3), 177-184.

- Scharr, T.M. (2002). Interactive video training for firearms safety. Federal Probation, 65(2), 45-51.
- Schreiber, D. A. (1998). Organizational technology and its impact on distance training. How innovative organizations are using technology to maximize learning and meet business objectives (pp. 37-65). San Francisco: Jossey-Bass
- Site Staff, (2007). Simulation-Based Training, Retrieved from<u>http://www.clomedia.com/2007/06/22/simulation-based-training[assessed on</u> 18 January, 2017].
- Strally, S. (2005). Using Scenario-Based Training to Teach Single Pilot Resource Management Related to the Use of the BRS Parachute. Embry-Riddle Aeronautical University, Daytona Beach, FL.



- Summers, G. J. (2004). Today's business simulation industry. *Simulation & Gaming*, 35, 208-241.
- Tailby, R., & Haslam, C. (2003). An investigation of errorless learning in memory impaired patients: *Improving the technique and clarifying theory*. Neuropsychological, 41(9), 1230-1240.
- WebFinance Inc. (2016). Training fidelity, Retrieved from <u>http://www.businessdictionary.com/definition/simulation.html</u>. [accessed on 17 January, 2017].

White, C. R., Carson, J. L., & Wilbourn, J. M. (1991). Training effectiveness of an M-16.



APPENDICES

APPENDIX A

UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

QUESTIONNAIRE FOR RECRUITS IN THE PRISON OFFICERS' TRAINING SCHOOL, ACCRA

This questionnaire is designed to solicit your views on a research titled "using simulationbased training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra ". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality. The first part of the questionnaire requires your demographic information. The last part seeks to find out your experiences in using the Heckler & Koch (G3) Assault Rifle.

Personal Information (tick $\sqrt{}$)

- 1. Sex: Male [] Female []
- 2. Age:
- (a) **18-23** []
- (b) 24-29 []



Use the scale to answer the following questions below, with a tick ($\sqrt{}$), show your agreement or disagreement.

1: Strongly Agree 2: Agree 3: Uncertain 4: Disagree 5: Strongly Disagree

 My sight alignment techniques were greatly improved after being introduced to marksmanship skills theoretically.

1: Strongly Agree 2: Agree 3: Uncertain 4: Disagree 5: Strongly Disagree

 I am unable to demonstrate good marksmanship skills due to the fact, great deal of the skills were theoretically presented.

1: Strongly Agree 2: Agree 3: Uncertain 4: Disagree 5: Strongly Disagree

- 3) The conventional method (lecturing method) as employed by the Training School remains the best approach to addressing the professional needs of officers in the Training School.
- 1: Strongly Agree 2: Agree 3: Uncertain 4: Disagree 5: Strongly Disagree
 - 4) My composure in handling the Heckler & Koch (G3) Assault Rifle has greatly improvement after being trained through simulation-based training.



www.udsspace.uds.edu.gh

1: Strongly Agree 2: Agree 3: Uncertain 4: Disagree 5: Strongly Disagree

5) Aiming is best achieved when officers are taken through simulation activities.

1: Strongly Agree 2: Agree 3: Uncertain 4: Disagree 5: Strongly Disagree

 Officers are professionally equipped when they are practically engaged in their supposed daily practices.

1: Strongly Agree 2: Agree 3: Uncertain 4: Disagree 5: Strongly Disagree



APPENDIX B

UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR INSTRUCTORS AT THE PRISON OFFICERS' TRAINING SCHOOL, ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

1) For how long have you been in this institution as an instructor?

.....

2) What are your opinions on the marksmanship skills of officers over the years?.....

.....

As compare to the adapted training technique what do you make out? Are your men

making head way? Why do you think so?.....



www.udsspace.uds.edu.gh

3) What is your general comment on the simulation-based training approach?
Would you suggest the simulation-based training is institutionalized in the training school?



APPENDIX C

UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
 Assault Rifle before the introduction of this training session?

2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?

.....

.....

3) Do you think this kind of training model should be encouraged in the school? Why do you think so?



APPENDIX C

UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
 Assault Rifle before the introduction of this training session?

2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?

.....

.....

3) Do you think this kind of training model should be encouraged in the school? Why do you think so?



APPENDIX C

UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
 Assault Rifle before the introduction of this training session?

2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?

.....

.....

3) Do you think this kind of training model should be encouraged in the school? Why do you think so?



APPENDIX C

UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
 Assault Rifle before the introduction of this training session?

2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?

.....

.....

3) Do you think this kind of training model should be encouraged in the school? Why do you think so?



APPENDIX C

UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
 Assault Rifle before the introduction of this training session?

2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?

.....

.....

3) Do you think this kind of training model should be encouraged in the school? Why do you think so?



APPENDIX C

UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
 Assault Rifle before the introduction of this training session?

2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?

.....

.....

3) Do you think this kind of training model should be encouraged in the school? Why do you think so?



APPENDIX C

UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
 Assault Rifle before the introduction of this training session?

2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?

.....

.....

3) Do you think this kind of training model should be encouraged in the school? Why do you think so?



APPENDIX C

UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
 Assault Rifle before the introduction of this training session?

2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?

.....

.....

3) Do you think this kind of training model should be encouraged in the school? Why do you think so?



APPENDIX C

UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
 Assault Rifle before the introduction of this training session?

2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?

.....

.....

3) Do you think this kind of training model should be encouraged in the school? Why do you think so?



APPENDIX C

UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
 Assault Rifle before the introduction of this training session?

2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?

.....

.....

3) Do you think this kind of training model should be encouraged in the school? Why do you think so?



APPENDIX C

UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
 Assault Rifle before the introduction of this training session?

2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?

.....

.....

3) Do you think this kind of training model should be encouraged in the school? Why do you think so?



APPENDIX C

UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
 Assault Rifle before the introduction of this training session?

2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?

.....

.....

3) Do you think this kind of training model should be encouraged in the school? Why do you think so?



APPENDIX C

UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
 Assault Rifle before the introduction of this training session?

2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?

.....

.....

3) Do you think this kind of training model should be encouraged in the school? Why do you think so?



APPENDIX C

UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
 Assault Rifle before the introduction of this training session?

2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?

.....

.....

3) Do you think this kind of training model should be encouraged in the school? Why do you think so?



APPENDIX C

UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
 Assault Rifle before the introduction of this training session?

2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?

.....

.....

3) Do you think this kind of training model should be encouraged in the school? Why do you think so?


APPENDIX C

UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
Assault Rifle before the introduction of this training session?

2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?

.....

.....

3) Do you think this kind of training model should be encouraged in the school? Why do you think so?



APPENDIX C

UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
Assault Rifle before the introduction of this training session?

2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?

.....

.....

3) Do you think this kind of training model should be encouraged in the school? Why do you think so?



APPENDIX C

UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
Assault Rifle before the introduction of this training session?

2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?

.....

.....

3) Do you think this kind of training model should be encouraged in the school? Why do you think so?



APPENDIX C

UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
Assault Rifle before the introduction of this training session?

2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?

.....

.....

3) Do you think this kind of training model should be encouraged in the school? Why do you think so?



APPENDIX C

UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
Assault Rifle before the introduction of this training session?

2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?

.....

.....

3) Do you think this kind of training model should be encouraged in the school? Why do you think so?



APPENDIX C

UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
Assault Rifle before the introduction of this training session?

2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?

.....

.....

3) Do you think this kind of training model should be encouraged in the school? Why do you think so?



APPENDIX C

UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
Assault Rifle before the introduction of this training session?

2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?

.....

.....

3) Do you think this kind of training model should be encouraged in the school? Why do you think so?



APPENDIX C

UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
Assault Rifle before the introduction of this training session?

2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?

.....

.....

3) Do you think this kind of training model should be encouraged in the school? Why do you think so?



APPENDIX C

UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
Assault Rifle before the introduction of this training session?

2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?

.....

.....

3) Do you think this kind of training model should be encouraged in the school? Why do you think so?



APPENDIX C

UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
Assault Rifle before the introduction of this training session?

2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?

.....

.....

3) Do you think this kind of training model should be encouraged in the school? Why do you think so?



APPENDIX C

UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
Assault Rifle before the introduction of this training session?

2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?

.....

.....

3) Do you think this kind of training model should be encouraged in the school? Why do you think so?



APPENDIX C

UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
Assault Rifle before the introduction of this training session?

2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?

.....

.....

3) Do you think this kind of training model should be encouraged in the school? Why do you think so?



APPENDIX C

UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
Assault Rifle before the introduction of this training session?

2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?

.....

.....

3) Do you think this kind of training model should be encouraged in the school? Why do you think so?



APPENDIX C

UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
Assault Rifle before the introduction of this training session?

2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?

.....

.....

3) Do you think this kind of training model should be encouraged in the school? Why do you think so?



APPENDIX C

UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
Assault Rifle before the introduction of this training session?

2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?

.....

.....

3) Do you think this kind of training model should be encouraged in the school? Why do you think so?



APPENDIX C

UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
Assault Rifle before the introduction of this training session?

2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?

.....

.....

3) Do you think this kind of training model should be encouraged in the school? Why do you think so?



APPENDIX C

UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
Assault Rifle before the introduction of this training session?

2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?

.....

.....

3) Do you think this kind of training model should be encouraged in the school? Why do you think so?



APPENDIX C

UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
Assault Rifle before the introduction of this training session?

2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?

.....

.....

3) Do you think this kind of training model should be encouraged in the school? Why do you think so?



UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
Assault Rifle before the introduction of this training session?

.....



2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?

.....

3) Do you think this kind of training model should be encouraged in the school? Why do you think so?

UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
Assault Rifle before the introduction of this training session?

.....



2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?

.....

3) Do you think this kind of training model should be encouraged in the school? Why do you think so?

UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
Assault Rifle before the introduction of this training session?

.....



2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?

.....

3) Do you think this kind of training model should be encouraged in the school? Why do you think so?

UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
Assault Rifle before the introduction of this training session?

.....



2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?

.....

3) Do you think this kind of training model should be encouraged in the school? Why do you think so?

UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
Assault Rifle before the introduction of this training session?

.....



2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?

.....

3) Do you think this kind of training model should be encouraged in the school? Why do you think so?

UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
Assault Rifle before the introduction of this training session?

.....



2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?

.....

3) Do you think this kind of training model should be encouraged in the school? Why do you think so?

UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
Assault Rifle before the introduction of this training session?

.....



2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?

.....

3) Do you think this kind of training model should be encouraged in the school? Why do you think so?

UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
Assault Rifle before the introduction of this training session?

.....



2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?

.....

3) Do you think this kind of training model should be encouraged in the school? Why do you think so?

UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
Assault Rifle before the introduction of this training session?

.....



2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?

.....

3) Do you think this kind of training model should be encouraged in the school? Why do you think so?

UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
Assault Rifle before the introduction of this training session?

.....



2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?

.....

3) Do you think this kind of training model should be encouraged in the school? Why do you think so?

UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
Assault Rifle before the introduction of this training session?

.....



2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?

.....

3) Do you think this kind of training model should be encouraged in the school? Why do you think so?

UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
Assault Rifle before the introduction of this training session?

.....



2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?

.....

3) Do you think this kind of training model should be encouraged in the school? Why do you think so?

UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
Assault Rifle before the introduction of this training session?

.....



2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?

.....

3) Do you think this kind of training model should be encouraged in the school? Why do you think so?

APPENDIX C

UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
Assault Rifle before the introduction of this training session?

2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?

.....

.....

3) Do you think this kind of training model should be encouraged in the school? Why do you think so?



APPENDIX C

UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
Assault Rifle before the introduction of this training session?

2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?

.....

.....

3) Do you think this kind of training model should be encouraged in the school? Why do you think so?



UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
Assault Rifle before the introduction of this training session?

.....



2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?

.....

3) Do you think this kind of training model should be encouraged in the school? Why do you think so?

UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
Assault Rifle before the introduction of this training session?

.....



2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?

.....

3) Do you think this kind of training model should be encouraged in the school? Why do you think so?

UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
Assault Rifle before the introduction of this training session?

.....



2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?

.....

3) Do you think this kind of training model should be encouraged in the school? Why do you think so?

UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
Assault Rifle before the introduction of this training session?

.....

- 2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?
- 3) Do you think this kind of training model should be encouraged in the school? Why do you think so?

.....



UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
Assault Rifle before the introduction of this training session?

.....

- 2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?
- 3) Do you think this kind of training model should be encouraged in the school? Why do you think so?

.....



UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
Assault Rifle before the introduction of this training session?

.....

- 2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?
- 3) Do you think this kind of training model should be encouraged in the school? Why do you think so?

.....



UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
Assault Rifle before the introduction of this training session?

.....

- 2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?
- 3) Do you think this kind of training model should be encouraged in the school? Why do you think so?

.....



UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
Assault Rifle before the introduction of this training session?

.....

- 2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?
- 3) Do you think this kind of training model should be encouraged in the school? Why do you think so?

.....



UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
Assault Rifle before the introduction of this training session?

.....

- 2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?
- 3) Do you think this kind of training model should be encouraged in the school? Why do you think so?

.....



UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

Did you have experience on the effective handling of the heckler& Koch (G3)
Assault Rifle before the introduction of this training session?

.....

- 2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?
- 3) Do you think this kind of training model should be encouraged in the school? Why do you think so?

.....



UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

 Did you have experience on the effective handling of the heckler& Koch (G3) Assault Rifle before the introduction of this training session?

.....

- 2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?
- 3) Do you think this kind of training model should be encouraged in the school? Why do you think so?

.....



UNIVERSITY FOR DEVELOPMENT STUDIES

GRADUATE SCHOOL OF STUDIES

FACULTY OF EDUCATION

INTERVIEW GUIDE FOR RECRUITS AT THE PRISON OFFICERS' TRAINING SCHOOL (POTS), ACCRA

This interview guide is designed to solicit your views on a research titled "using simulation-based training approach to improve the marksmanship skills of recruits at the Prison Officers' Training School in Accra". Please be assured that, any information obtained from you is solely for this research. Hence, the obtained information will be treated with the highest level of confidentiality.

 Did you have experience on the effective handling of the heckler& Koch (G3) Assault Rifle before the introduction of this training session?

.....

- 2) Would you say the simulation-based training approach has equipped you professionally? If yes then what is new?
- 3) Do you think this kind of training model should be encouraged in the school? Why do you think so?

.....

