

UNIVERSITY OF CAPE COAST

TRAINING AND JOB PERFORMANCE OF ADMINISTRATIVE SENIOR  
STAFF AT THE UNIVERSITY OF CAPE COAST

KWABENA NIMADE OWUSU

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BY

KWABENA NIMADE OWUSU

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## DECLARATION

### Candidate's Declaration

I hereby declare that this thesis is the result of my own original research and that no part of it has been presented for another degree in this University or elsewhere.

Candidate's Signature: ..... Date.....

Candidate's Name: Kwabena Nimade Owusu

### Supervisor's Declaration

We hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the University of Cape Coast.

Principal Supervisor's Signature: ..... Date: .....

Name: Dr. Abraham Ansong

Co-Supervisor's Signature: ..... Date: .....

Name: Mrs. Edna N. A. Okorley

## ABSTRACT

This study aimed at assessing training and job performance among administrative senior staff at the University of Cape Coast. Specifically, the study sought to assess the level of effectiveness of training among the administrative senior staff; evaluate the job performance of the administrative senior staff; and finally assess the effect of training on the job performance of the administrative senior staff. Using Krejcie and Morgan's (1970) statistical table, 214 administrative senior staff were sampled out of 478. Data was obtained through a self-administered questionnaire and the results were analysed by the use of the Statistical Package for Social Sciences (SPSS, V21.0) software and the SMART PLS (V3). The findings revealed that there was a moderate level of job performance in all the dimensions of performance. For example, the level of performance among the administrative senior staff was moderate in terms of decision making and individual composure. It was also found that, training had the highest impact on adaptive performance at UCC. This was followed by contextual performance and the least being task performance. The study concludes that training among the administrative senior staff has been successful in influencing how they adapt, though generally, it can be concluded that other variables that influence performance were not included. This study recommends that the Training and Development Section at UCC should ensure Section-specific, Unit-specific and Department-specific needs assessment for training that is based on job performance requirements for such Sections, Units and Departments.

## KEY WORDS

Adaptive Performance

Contextual Performance

Effectiveness

Evaluation

Task Performance

Training

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I express deep gratitude to my parents for supporting me to succeed in all my educational pursuits.

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**DEDICATION**

To my lovely wife, children, parents and siblings.

## TABLE OF CONTENTS

	Page
DECLARATION	ii
ABSTRACT	iii
KEY WORDS	iv
ACKNOWLEDGEMENTS	v
DEDICATION	vi
LIST OF TABLES	x
LIST OF FIGURES	xi
CHAPTER ONE: INTRODUCTION	
Introduction	1
Background to the Study	1
Statement of the Problem	5
Purpose of the Study	6
Research Objectives	7
Research Questions	7
Significance of the Study	7
Delimitation of the Study	8
Limitation of the Study	8
Definition of Terms	8



Organisation of the Study	9
CHAPTER TWO: LITERATURE REVIEW	
Introduction	11
Theoretical Review	12
Conceptual Review	14
Empirical Review	39
Conceptual Framework	49
Chapter Summary	51
CHAPTER THREE: RESEARCH METHODS	
Introduction	52
Research Design	52
Research Approach	52
Study Area	53
Population	54
Sampling Procedure	55
Data Collection Instrument	56
Pre-testing	57
Data Collection Procedures	58
Data Processing and Analysis	60
Measurement of Variables	60
Structural Equation Modelling	61
Validity and Reliability of the Model	62
Internal Consistency Reliability	62
Convergent Validity	63
Discriminant Validity	63

Ethical Considerations	65
Chapter Summary	65
CHAPTER FOUR: RESULTS AND DISCUSSION	
Introduction	66
Background Information of Respondents	66
Analysis of the Objectives of the study	69
CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMENDATIONS	
Introduction	89
Summary of Findings	89
Conclusions	92
Recommendations	93
Suggestions for Future Research	94
REFERENCES	95
APPENDICES	113

## LIST OF TABLES

Table	Page
1. Pre-testing Results	58
2. Frequency Distribution of Questionnaires	59
3. Background Information of Respondents	67
4. Evaluation of Training Effectiveness	70
5. Evaluation of Staffs Job Performance at UCC	74
6. Indicator Loadings	80
7. Construct Reliability and Validity	81
8. Heterotrait-Monotrait Ratio (HTMT)	82
9. Structural Model Results	86

## LIST OF FIGURES

Figure	Page
1. Conceptual Framework – Training and Job Performance	50
2. Path Model	83

## CHAPTER ONE

### INTRODUCTION

#### **Introduction**

The greatest asset of organisations is their human resource. It is the human abilities that ensure actual production, even though, the ergonomics of the work environment, modern equipment and quality raw materials can contribute to productivity (Asare-Bediako, 2008 as cited in Degraft-Otoo 2012). It is the people in an organisation who put other resources to work for the realisation of organisational objectives. In fact, without human resource, all other resources will lie idle. Haslinda (2009) as cited in Osman, Ho and Carmen Galeng, (2011) posits that human resources are an organisation's greatest assets because without them, everyday business functions such as managing cash flow, making business transactions and dealing with customers would not be completed.

#### **Background to the Study**

The indispensable nature of human resource in organisations makes it imperative for organisations to enhance the capabilities of their staff to match the current demands of their work. The dynamic internal and external environments of organisations warrant that the capabilities of staff should be developed to meet modern demands of the organisation. Training is undoubtedly a popular means by which organisations around the globe equip employees with the requisite capabilities they need to do their jobs properly. According to Heathfield (2012), the right employee training, development and education at the right time provide big payoffs for the organisation to increase

productivity, knowledge and loyalty of employees. Without the right training, employees can be the organisation's biggest liability but when they are trained effectively, they can become the organisation's biggest asset (Bartram & Gibson, 2000 as cited in Bofo, 2011). Mullins and Christy (2013) opine that training is necessary to ensure adequate supply of staff who are technically and socially competent, and are capable of career advancement into specialist departments or management positions.

Globally, training, development and education have been recognised as the main tools for improving employees' performance to make them useful organisational members (Mbiya, Egessa & Musiega, 2014). They also present that, in France for example, management training and development is backed by a law which demands that firms should allocate 1.5 per cent of their payroll value to training, or else, the government would demand that amount from the organisation. Due to this initiative, worker productivity in France was among the best in the world in the 1960s and 1970s. That improvement resulted in an increment in management training of employees in France. This example indicates that in various countries around the world, some steps are taken to ensure workforce development through training for organisational and national development.

Considering the human resource landscape from a continental perspective, many organisations in Africa are mostly challenged when it comes to the availability of requisite skills for work but these skills can be acquired through training. The International College of Economics and Finance (2015) posits that the battle for highly qualified and skilled labour is increasing in Sub-Saharan Africa and as organisations prepare for growth,

their demand for certain skills to support their expansion objectives has increased. This demand for requisite skills calls for effective approaches to training. However, according to Mezue (2014), many organisations in Africa use a wrong training approach and that is the ‘Training Light’ approach. A ‘training light’ approach is where an organisation undertakes training without a holistic training strategy. Thus, a training strategy that is not continuously aligned with organisational culture and does not allow for the use of mentors and feedback. For example, for new employees, some firms have short on-boarding training activities. Mezue (2014) proposes that instead of a ‘training light’ approach, organisations in Africa need to use a ‘training heavy’ approach; an approach that positions organisations as remedial schools and highlights continuous training that aligns with organisational culture and permits mentorship and feedback.

On the Ghanaian scene, Budhwar and Debrah (2013) present that Human Resource Management (HRM) developed from the systems implemented by the British Colonial Administration through the introduction of western labour management practices which are based on employee development. Abdulai (2000) as cited in Quartey (2012) provides that the Constitution of the Fourth Republic of Ghana reveals key guidelines for HRM. Major among these guidelines are: Human Resource Development Policy, Recruitment and Selection, Women and Equal Employment Opportunity, Employee Rights and Welfare and Compensation and Benefits.

In spite of these guidelines, Quartey (2012) reveals that the needed consideration for human resource issues has been absent in organisations in Ghana and that has resulted in the lack of systematic policies to govern HRM

activities in Ghana. In view of these, several governments have carried out programmes to empower Ghana's human capital with the necessary skills through training. One of such efforts is the establishment of the Council for Technical and Vocational Education and Training (COTVET) Act, COTVET Act 718 in 2006 by the Government of Ghana. According to the Act, efforts should be made for introducing competency-based training and assessment system, promotion of technological proficiency, development of training systems and mechanisms for better livelihoods.

With regard to improving the competencies of staff in universities and public organisations, the Conference of Rectors, Vice-Chancellors and Presidents of Universities (COREVIP) proposed in 1996 that, appropriate tailor-made training should be used to boost the skills of all those involved in the running of universities and public organisations. As a result, various universities as well as other public organisations in the country have been making efforts to ensure that their human resource base is equipped with the necessary skills, knowledge, abilities and competencies.

For universities, Esia-Donkoh, Bampoh-Addo, and Afful, (2013) propose that, to ensure the development of knowledge, skills, abilities and competencies of staff, training and development must be a constant activity carried out by management of the universities in Ghana. The University of Cape Coast (UCC) is bound by this proposition since it seeks to ensure the improvement of knowledge, skills and competencies of its staff. For the University of Cape Coast to reap the desired outcomes in improving the capabilities of its staff, it should be able to focus training on various job performance objectives. This will help to unravel training strategies that are



appropriate for specific job performance dimensions which could be the task performance, contextual performance or adaptive performance of staff. It appears the University only focuses on how training can help to improve the general performance of its staff without considering the specifics when it comes to staff job performance.

### **Statement of the Problem**

The University of Cape Coast (UCC) has been conducting various training and development programmes for its administrative senior staff to enhance their skills knowledge and abilities. The University trains these staff with the belief that the training activities will help the University to save the cost involved in hiring new employees with the capacity that is lacking in the University as Katcher and Snyder (2003) as cited in Mwangi (2017) assert. In spite of this aim, it seems the University of Cape Coast does not get the returns on its investments in training these administrative senior staff. This is because, the Directorate of Human resource intimates that heads of various sections, units and departments complain about job performance lapses among the administrative senior staff at the University.

Daniels (2003) as cited in Obi-Anike and Ekwe (2014) posits that UCC, like many organisations do not get the full returns from their investment in training and assert that this could be as a result of the inability to link training activities to various job performance objectives. The effect of not linking training to various job performance objectives is that, the University would not know the effect training has on the various aspects of job performance. Training should not affect only an aspect of employees' performance but should be able to affect all the dimensions of employees'

performance. According to Koopmans, Bernaards, Hildebrandt, De Vet, and Van Der Beek (2014) training objectives should not only be geared towards the completion of tasks, but also towards improving employee's ability to adapt to changes in the environment and improving in interpersonal communication and initiating actions.

A number of studies in literature both in Ghana (Ampomah, 2016; Anane-Appiah, 2011; Sarkodie, 2011) and abroad (Amin, Saeed, Lodhi, Mizna, Iqbal, and Tehreem, 2013; Ojoh and Okoh, 2015; Al-Mzary, Al-rifai, and Al-Momany, 2015; Shaheen, 2013; Onango and Wanyoike, 2014; Athar and Shah, 2015; Sultana, Irum, Ahmed and Mehmood, 2012) have established a positive effect of training on overall job performance, ignoring the effect training had on specific dimensions of job performance. This study therefore intends to fill this gap in literature by assessing the effect of training on employees' job performance on three different performance dimensions as developed by Koopmans, Bernaards, Hildebrandt, Schaufeli, De Vet & Van Der Beek (2011).

These three dimensions are Adaptive performance, Contextual performance and Task performance. In addition, most of the studies have only been adopting simple linear regression analysis to determine the effect training has on performance. This study therefore employed a more rigorous analysis by using the Partial Least Square Structural Equation Modelling to analyse data to establish the relationships and further assess the predictive effect of training on job performance of administrative senior staff at the University of Cape Coast.

### **Purpose of the Study**

The purpose of this study is to assess the extent to which training influences job performance of administrative senior staff at the University of Cape Coast (UCC).

### **Research Objectives**

This study specifically aims at achieving the following objectives:

1. Assess the level of effectiveness of training among administrative senior staff at the University of Cape Coast.
2. Evaluate the job performance of administrative senior staff at the University of Cape Coast.
3. Examine the effect of training on the job performance of administrative senior staff at the University of Cape Coast.

### **Research Questions**

Research questions to guide the study are:

1. How effective is training among administrative senior staff at the University of Cape Coast?
2. What is the level of job performance of administrative senior staff at the University of Cape Coast?
3. What is the effect of training on the job performance of administrative senior staff at the University of Cape Coast.

### **Significance of the Study**

This study looked at the extent to which training impacts the performance of administrative senior staff at the University. Both internal and external stakeholders like staff, university management and other organisations stand to benefit from findings of the study. Also, the study is

significant for researchers because the findings on the effect of training on the three dimensions of job performance of these administrative senior staff have been discussed. This will contribute to the body of existing literature on the effect of employee training on job performance.

### **Delimitation of the Study**

The study organisation is the University of Cape Coast. The study is conducted for administrative senior staff. The population therefore excludes all senior members, all junior staff and all academics senior staff in various units, sections and departments at the University.

### **Limitation of the Study**

The limitation of this study is that, findings cannot be generalised for all employees at the University. It can only be generalised for a section of the senior staff category, which is the administrative senior staff. This is because staff in other parts of the University may have different views concerning training and its related issues at the University.

### **Definition of Terms**

#### **Training**

In this study, training is captured as the various training activities that are carried out at the University of Cape Coast to improve the job performance of administrative senior staff.

#### **Job Performance**

Job performance is captured as the aptitude with which administrative senior staffs do their jobs to contribute to the running of their individual departments, units and sections. The study considers three dimensions of job performance which are task performance, adaptive performance and

contextual performance. Task performance refers to the proficiency with which an employee performs central job tasks. Adaptive performance refers to an employee's proficiency in adjusting to changes in work duties or the work environment. Contextual performance refers to employee behaviours that support the organisational, social and psychological environment in which the central job tasks are performed.

### **Administrative Senior Staff**

In this study, administrative senior staff refers to employees within the senior staff category who are administrators in departments, sections and units at the University of Cape Coast.

### **Organisation of the Study**

The first chapter introduced the study, giving the background to the study, statement of the problem, general objective, specific objectives, research questions, significance of the study, delimitation of the study, limitation of the study, definition of terms and the chapter organisation. The second chapter focused on the review of related literature. The third chapter dealt with the research methods which included the research design, research approach, the study area, population of the study, sampling and sample size, data collection instrument, instrument pre-ting, data collection procedure, data processing and analysis, measurement of variables, Structural Equation Modelling, validity and reliability model, internal consistency reliability, convergent validity, discriminant validity, ethical considerations and chapter summary. Chapter four dealt with the analysis of data, results and discussions. The results of the analysis were presented in various tables.

Chapter five presented the summary of the study, the conclusions drawn, recommendations and suggestions for future research.

## CHAPTER TWO

### LITERATURE REVIEW

#### Introduction

Training deals with imparting skills and knowledge that provides definite and suitable capabilities. Training has a direct focus of building employees' expertise, attitudes and productivity and these competencies play a major role in an organisation's overall effectiveness (Devi & Shaik 2012). Organisations must properly assess training needs, deliver training and carry out a comprehensive evaluation to determine how it relates to the job performance of employees. Job performance goes to the extent of determining activities employees must carry out and the manner in which those activities should actually be carried out to get the job done. Thus, how successfully employees in the organisation perform all the related tasks of a job using the right approach and attitude (Brown & Arendt, 2010).

The dimensions of performance must be considered within the framework of training and its effect on performance. The effect of training on job performance mostly depends on the framework within which training is carried out for employees. In spite of possible challenges, training creates value for financial investments for both the organisation and its employees. Training produces benefits for both the employee and the organisation by positively influencing employee performance (Sultana, Irum, Ahmed & Mehmood, 2012). This chapter reviews related literature on training and job performance by scholars and researchers. It explains the Human Capital

Theory which underpins this study and also provides the empirical review for the study.

## **Theoretical Review**

### **The Human Capital Theory**

This study is underpinned by the Human Capital Theory which was postulated by Schultz (1961) and developed extensively by Gary S. Becker in his work on the economics of employer-provided training (1962, 1964). The human capital theory provides that education or training imparts useful knowledge and skills into employees and that increases their productivity and incomes (Becker, 1964). Becker differentiates between specific human capital and general human capital. He refers to specific human capital as expertise acquired through education and training which is particularly for a firm (firm-specific or context-specific skills). General human capital, on the other hand is knowledge acquired through education and training which is valuable across board (general skills example, reading and writing).

Becker sees human capital to be similar to physical means of production, for instance factories and machines. He therefore states that investments can be made in employees through education and training and the productivity of the investment depends in part on the rate of return on the investment. Bassi and McMurrer (2016) proffer that, the human capital theory propounded by Becker has shown strength and continues to be the major theory used for appreciating human capital investments from both the individual's and firm's perspective.

Bohlander, Snell and Sherman (2007) define human capital as the knowledge, skills, and capabilities of individuals that have economic value to



an organisation. The Organisation for Economic Cooperation and Development (OECD, 2001) describes human capital as the knowledge, skills, competencies, and attributes embodied in individuals that facilitate the creation of personal, social and economic well-being. Marimuthu, Arokiasamy and Ismail (2009) as cited in Neagu, Lazar, Teodoru and Macarie (2016) present it as knowledge required and acquired by employee that increases the employees' capabilities in performing activities of economic values.

The human capital theory is relevant to this study because it looks at employees' resources as the knowledge, skills, competencies, experience and attitudes that employees possess to facilitate the realisation of the objectives of the organisation. These skills, competencies, knowledge amongst others can only be developed through training and retraining of the employee. Through training, organisations will enhance their human capital base for higher job performance. The theory states that people are worth investing in as a form of capital. Hence, Bratton and Gold (2015) state that the performance of employees and the results achieved can be considered as a return on investment in training.

The theory applies to this study since the job performance of the administrative senior staff is expected to be influenced by training, which requires funding as an investment and good performance as a return. Based on the human capital theory, the idea of investing in employees has gained great attention, due to the fact that organisations' greatest assets are their human resource base and they (organisations) reap what they sow in their human resource in terms of good job performance. Organisations that have a

dream to outperform their competitors can only realise it with personnel who have the requisite skills, knowledge and abilities. This can be achieved through training as an investment.

## **Conceptual Review**

### **The Concept of Training**

According to Cole (2014) in his book, *Personnel and Human Resource Management*, training is a learning activity directed towards the acquisition of specific knowledge and skills for the purpose of an occupation or task. Training could also be seen as a learning process that seeks a relatively permanent change in employees to improve their ability to perform on the job. Through training, organisations try attaining their goal of raising adaptable and capable employees who have ‘state of the art’ skills, knowledge and abilities to do their current jobs more productively (DeCenzo & Robbins, 2007).

Dessler (2010) sees training as a means of giving new or current employees the skills they need to perform on their various jobs. The focus of training is the work or the task, for example, the need to have efficiency and safety in the operation of particular machines or equipment. According to Monappa and Saiyadain (2008) as cited in Degraft-Otoo (2012) training is the teaching or learning activities carried out for the primary purpose of helping organisational members to acquire and apply the knowledge, skills and abilities needed by that organisation. Training is an ideal way to learn a job (Wang & Noe, 2010).

All organisations depend on their human resource to carry out various activities. As a result of this, organisations must ensure that their employees do not remain the same in terms of their skills, knowledge and attitudes towards work. The recognition of the importance of training in recent years has been heavily influenced by the intensification of competition and the relative success of various organisations (Tabassi, Ramli & Bakar 2012). As a strategic tool, training serves as an indispensable activity for grooming effective individuals in organisations.

Training involves the development and changing of specific skills, knowledge, attitudes and social behaviour for the purposes of work. Through training, relevant skills, knowledge and competencies are transferred to employees to improve their performance on current jobs and future ones. Tabassi, Ramli and Bakar (2012) also submit that considerable and continuous investment in training has been necessitated by technological developments and organisational change, making some employers to realise that organisational success lies in the skills and abilities of their employees. This makes training very important to the employees and the organisation (Devi & Shaik 2012). Training is beneficial for organisational performance and specifically, it is a core organisational strategy for influencing employee retention and human capital growth (Chen, 2014).

According to Brunt (2016) training falls under Human Resource Development, and the activities in training under the Human Resource Development function are: the identification of training needs, selection of methods and training programmes suitable for the needs, implementation of the programmes and evaluation of their results. DeCenzo and Robbins (2007)

posit that training seeks a relatively permanent change in individuals to enhance their ability to perform on the job because it is a learning experience. Training therefore needs to be seen by management of every organisation as a long-term investment in its human resource for the future.

In order to hold their employees in readiness for the future, organisations rely on learning strategies, training technology and development efforts (Salas, Shuffler, Thayer, Bedwell & Lazzara, 2015). The knowledge, skills and abilities needed in the global economy to sustain a competitive advantage in organisations are increasing and changing (Howard & Jacobs, 2016). The growth of organisations presents changes in the way work is done and employees are therefore supposed to develop new set of skills that meet the changing requirements of their jobs.

However, Salas and Stagl (2009) as cited in Salas and Grossman (2011) intimate that few employees have the cultural, interpersonal and technological proficiency necessary for these changing work demands. Therefore, it is appropriate training that will provide the behavioural and attitudinal characteristics that employees need to succeed in doing their jobs. These critical behaviours and attitudes must be nurtured to become permanent employee characteristics for job performance.

Salas and Stagl (2009) as cited in Salas and Grossman (2011) add that for employees to acquire needed technological proficiencies, huge investments should be made by organisations in training to create the required employee performance outcomes necessary for the organisations' survival. This is because when employees are in the right shape, the organisation benefits. Devi and Shaik (2012) agree to this in stating that organisations invest in

employee training and development because the organisations need them (employees) to acquire improved skills and greater capabilities that result in higher morale and productivity. In the same vein, Salas et al., (2015) are of the view that fewer errors, higher morale, greater teamwork, increased motivation, higher commitment and improved work quality which all translate into competitive advantage are the results of effective training.

Sarvadi (2005) as cited in Loy (2012) however contends that instead of seeing training as critical in the organisation, a lot of top managers see it to be a voluntary activity to pursue. This managerial attitude to training can be detrimental to an organisation's short-term and long-term improvement. According to Loy (2012) top managers of organisations have this attitude to training because they see it (training) as a cost not an investment. However, employees who receive appropriate and effective training are likely to perform better than those who are given poor or no training. Properly trained employees can avoid actions that create law suits, injuries and numerous errors. This will ensure massive reduction of unnecessary organisational cost and vice versa. Grossman and Salas (2011) for example, opine that poorly trained employees can cause organisations to pay legal fee in billions of dollars.

### **Factors for Effective Training**

Since training is so essential in modern organisations, it is important to ensure that it is effective. An effective training programme actually teaches what it is designed to teach, and it teaches skills and behaviours that will help the organisation achieve its goals. The purpose of training is for employees to be equipped with the knowledge, skills and behaviours highlighted in training

activities for application on daily basis in doing their work (Noe, 2010). This should be done by ensuring that training is for appropriate purposes. Blanchard and Thacker (2010) propose that trainers can properly determine how well trainees are progressing by considering the purpose of training and adjusting appropriately. Training objectives keep the trainer on the right track. In addition, trainers must ensure that trainees are aware of the purpose of training in order to evaluate themselves in terms of where they are and where they are going.

Another primary concern within the concept of training is the transfer of skills, knowledge etc. to work to ensure positive changes. In the view of Cummings and Worley (2014) the degree to which learning acquired from training is positively transferred to the job to ensure proper changes in the delivery of work is the basic necessity of training. Therefore, in evaluating training, it will be prudent to find out if changes in job performance and results are due to the training activity that was conducted. This is because, even though training may be acquired by employees but learning alone cannot constitute effective training.

It is the transfer of learning that will show the effectiveness of training. But transfer of learning may be affected by some factors which must be noted by the organisation. Peters, Baum and Stephens (2011) indicate examples of these factors such as resource constraints, lack of opportunity to implement newly learned capabilities, management and support systems implemented in an organisation, cultural standards that inhibit employees from totally making use of their talents and taking initiative or implementing change. For training to be effective organisations should carry out training

needs assessment, areas of training needs assessment, appropriate training design and the evaluation of training.

### **Training Needs Assessment**

Rapid changes in the workplace have necessitated the use of Training Needs Analysis to ensure that employees are given training that is based on their competency needs. Since Training Needs Assessment (TNA) provides clear guidelines as to which job skill deficiencies must be fixed, there is no doubt that TNA processes must be ensured during training. According to Clarke (2010) TNA refers to the organisational process of collecting and analysing data that supports decision making about when training is the best option (or not) to improve individuals' performance, define who should be trained and exactly what content should be taught. In other words, whether or not to embark on training depends on needs assessment. To throw more light on this, Decenzo and Robbins (2002) as cited in Novia (2013) suggest that management of organisations can ascertain the need for training by determining organisational goals, tasks that will ensure the realisation of these goals and any skill deficiencies that exist in the performance of the tasks.

Rikkua and Chakrabartyb (2013) add up by stating that needs assessment is the starting point in the training process. Thus, at the needs assessment stage, an organisation's needs are established to form the basis of an effective training activity. Again, they note that needs assessment determines where and what kind of training activities are needed, who to be included in training, conditions under which training will occur and the criteria to guide evaluation of the activity. TNA is a process that questions what type of skills, knowledge and abilities are required by employees to

make them more effective. Through TNA, gaps that exist between current job performance and desired job performance levels are exposed. To Armstrong (2011) TNA is sometimes assumed to be concerned only with defining the gap between what is happening and what should happen.

### **Areas for Training Needs Assessment**

Since employees work to fulfil the overall organisational purpose, it is imperative to conduct TNA on the organisational level, the task level and then the individual level. According to Brown and Arendt (2010) training needs analysis must be conducted on the organisational, task and individual levels. The TNA on the various aspects of the organisation are covered as follows:

#### **Organisational Analysis**

The analysis of organisational needs leads to the identification of training needs in various departments, which then shows the training needs of each employee (Armstrong, 2011). It establishes priority areas for training activities in the organisation and hence considers the various resource needs within and outside the organisation to carry out training. Brown and Arendt (2010) provide that the aspect of the organisation where training is needed and the condition that is necessary for training is determined by organisational analysis. They add that as the organisation develops, its future employee ability needs are determined by organisational analysis.

Tooksoon (2011) in his view presents that organisational analysis looks at the organisation's strategic direction and then looks at whether managers, peers and employees agree to the training activity and whether resources which are funds, time and expertise are available for training. When training is in line with an organisation's objectives and goals, management is



able to realise those objectives and goals in the near future. Managers must make their training count because it is the way to influence the future success of an organisation. According to Punia and Saharan (2011) this organisational success can be achieved by directing training to the needs of the organisation.

### **Task Analysis**

Careful task analysis can add substantial value to an organisation's training courseware (Burch, 2015). According to Brown and Arendt (2010) task analysis starts with work prerequisites and weighs the knowledge and skills of employees to decide their training needs. For them, a good task analysis should consider the situation under which tasks will be performed, established performance standards, task performance frequency, skills and knowledge needed to perform the tasks as well as how best to acquire those skills. Deciding that an employee needs training, without a concrete breakdown of tasks involved in the person's work shall result in the acquisition of general skills, knowledge and abilities (SKAs) for that position not specific SKAs needed by such an employee.

Thus, the core responsibilities of the position must be outlined and training must be offered to match the demands of those responsibilities. This will ensure the effectiveness of task analysis and hence the training activity. According to Caruso (2018) the driver of performance must become the focal point in order to improve the efficacy of a task analysis, thus, skills, knowledge, expectations, information and motivation must be considered in focusing on the individual whiles the environment and incentives must be considered when focusing on culture.

## Person Analysis

Amongst employees, those who require training and those who do not is revealed by person analysis. It is person analysis that helps trainers to establish what a training activity should cover, how it should be structured as well as its content. According to De Mel, McKenzie and Woodruff (2012) person analysis is the last stage of TNA and it detects which employee needs training and their training needs and it is the end product of the other phases of needs analysis. Person analysis cannot be done without evidence from various sources of information concerning the employee's job. It must be done with the backing of consciously produced reports and documents about the work of employees who need training. Miller and Cekada (2010) recommend that information for person analysis can be gathered from performance evaluation and goals, performance problems (low productivity, absenteeism etc), observation, work samples, interviews, questionnaires, attitude surveys and aptitude tests.

Sharif (2015) is of the view that person analysis answers important questions like: who are to be trained, how much knowledge do they currently possess on the subject, by what style should they learn and who should carry out the training. Also, person analysis answers questions as to whether employees have the requisite skills and whether there have been changes in policies, procedures, software or equipment that demands employees' training. Person analysis considers the individual abilities needed by each employee to do their work well as well as the latest skills they would need to grow in the future. The focus of person analysis is to elicit an employee's skills, knowledge and attitude and the standards needed by that employee to

do his/her job at the required level (Connor & Shaw, 2008). Person analysis must therefore reveal gaps in employee performance levels and propose measures of bridging the gaps for desired performance.

Degraft-Otoo (2012) asserts that the return on investment in training for an organisation will be minimal if training is not based on an effective needs analysis since needs analysis answers the question of who needs to learn what? He emphasised that there is a learning need when there is a gap between the competencies which are required for the effective performance of a job (i.e. required or expected competencies) and the competencies actually possessed by the employee (i.e. actual competencies). Sporis, Harasin, Bok, Matika and Vuleta (2012) submit that carrying out training needs analysis will establish that training is required, that it will provide for the detected needs of the employee and it is a conduit for addressing performance gaps which are due to bad attitudes or lack of skills and knowledge. In carrying out effective and structured training, identification of training needs is one of the first major things to do. After assessing the needs of trainees on all the specifics discussed above, trainers must endeavour to establish an appropriate training design in accordance with the preferred training outcomes.

### **Appropriate Training Design**

Experts in Human Resource Development have become more concerned with the training design procedure due to its importance. Training design stands as a foundational activity in the responsibilities of Human Resource Development experts (Gilley, Shelton, & Gilley, 2011). Designing training programmes concerns the determination of participants, discovery of resource persons and selection of the right methods and techniques for

training. This is an integral part of systematic approach to training. With the help of training experts, the design of training must be custom made and it must promote the active participation of employees at various levels of the organisation.

According to Imran and Tanveer (2015) the starting point of training design is the conclusions made during the needs analysis period and the design ends with a model for the training program. Based on the details of training and the presentation mode, a lesson plan is prepared, training materials which are based on learning approaches must also be assembled (Imran & Tanveer (2015). It is important to see training design as a series of activities that interrelate with each other and not as separate entities. When training design is recognised as a system, training will be more effective and efficient (Salas, Grossman & Heyne, 2014). Based on an effective design, training is delivered to impart the competencies employees must possess for personal and organisational development. The right trainers must be used and the right environment must be provided to ensure that training is carried out successfully. After designing and rolling out training, organisations can determine whether the desired outcomes were achieved or not when the evaluation of training is done.

### **Evaluation of Training**

Niazi (2011) opines that various stakeholders, for example, senior management of an organisation may have various views and desired objectives about training. Therefore, when organisations carry out various training activities for their employees, the organisations must conduct an evaluation of the training to get information pertaining to the training activities. Getting

wide-range information for a training activity may help to know the main beneficiaries of the training, the cost involved and its related monetary gains (Noe, 2010).

In the evaluation of training, data must be gathered concerning the training activities to make informed judgments. The gathering of data in a fair and methodical manner for training evaluation ensures an effective evaluation process for stakeholders (example employees, managers) in the organisation. Per the results of analysed data, these stakeholders will be able to determine the efficacy of specific training interventions in order to drive the acquisition of organisational knowledge for the realisation of organisational goals. According to Griffin (2011) training evaluation helps to provide the basis for investing in employees, proving the significance of training activities and supporting the reasons for the repetition of some training programmes.

The Australian Public Service Commission - APSC (2005) posits that training evaluation forms part of accountability, professionalism and ethical behaviour in public service. Evaluation of training is a basic requirement for a good training and development system. Training evaluation provides an analysis of the whole training activity in social and monetary terms in order to determine a comprehensive cost-benefit study to assist in making decisions (Pineda, 2010). For the purposes of making decisions with training evaluation outcomes, management of organisations always want to quantify considerable benefits that accrue to the organisation from training activities organised (Noe, 2010).

The evaluation of training for employees must be done by an established model or means. One of the most widely accepted models for

evaluating training is the Kirkpatrick model of training evaluation. This model, which evaluates training on four levels, is widely used by various Human Resource Management Professionals in organisations as well as researchers. The four levels of evaluation presented by Kirkpatrick in his articles in the 1960s are still being used for research in modern times (Gubbins, Corrigan, Garavan, O'Connor, Leahy, Long, & Murphy, 2012). Kirkpatrick and Kirkpatrick (2011) offer a model of evaluating training at various levels in the following sequences: evaluating trainees' reactions to training, evaluating learning effects on trainees, evaluating work behavioural changes of trainees and lastly, evaluating the organisational results. The following are the levels of training evaluation as provided by Kirkpatrick.

#### **Level 1 – Reactions**

Reactions measure how trainees are satisfied with or appreciate training that is conducted for them. This level collects the views of participants concerning training in terms of how they were satisfied with or liked their training. According to Kirkpatrick and Kirkpatrick (2011) the trainer must always assess the trainees' reaction with the training activity in order for trainees to recognise that the trainer is concerned about their interest in terms of training and also for the trainer to use the suggestions of trainees for future improvement of training.

Level 1 deals with the development of an assessment guide to quantify reactions of the participants. This can be done by collecting data from employees by using a questionnaire to be answered by the employees. Some researchers show that several companies carry out surveys to assess the reactions of trainees for training programmes. For example, Chase,

Houmanfar, Hayes, Ward, Vilaradaga, and Follette (2013) and Noe (2010) state that 74 per cent and 91 per cent of companies respectively, develop training evaluations practices. Organisations use responses on reactions to determine the effectiveness of the training activity and for further development of the programme.

### **Level 2 – Learning**

This level determines the extent to which trainees have learned the skills, knowledge and attitudes (SKAs) that trainers wanted to impart through the training. According to Armstrong (2011) the second level provides information about the degree to which learning goals are achieved after training. Trainers should determine how conversant trainees are with the principles, details, technique and procedures that were taught during training.

This should be done because, appropriate reviews to the training activity can be properly done when trainers know the knowledge trainees have acquired and where they fall short. Phillips (2010) present that an evaluation of trainees learning is imperative since it shows the extent to which changes have occurred in trainees' level of knowledge, skills and attitudes.

### **Level 3 – Behaviour**

This level determines a change in work behaviour of trainees in terms of how they carry out their work with the new knowledge, attitudes and skills they have acquired from the training. Armstrong (2011) reveals that this level measures the degree to which the requisite employee behavioural changes have happened when trainees return to their jobs. Change in work behaviour is perhaps the most difficult to determine and most demanding (Kirkpatrick &

Kirkpatrick 2011). To properly measure outcomes in level 3, employees should be given enough time to perform their jobs after training.

This will help to show whether they are applying the new skills or not. If their work behaviour does not change because they could not apply the new skills, it indicates that there were issues with the training activity. Spector and Fox (2010) particularly suggest that if changes in work behaviour do not occur, it is important to assess whether that is as a result of employees' lack of appreciation with training at level 1 or because they could not complete the learning objectives at level 2. They add that an assessment should be done to ascertain whether the lack of change in work behaviour is not because of the training activity but is due to other factors like a lack of desire, opportunity, support, or rewards for changing behaviour.

#### **Level 4 – Results**

This level measures specific outcomes resulting from training and whether training could be counted as a worthwhile activity. The basis for measuring the benefits of training against its cost is provided at this level (Armstrong, 2011). At the fourth level some indicators of organisational performance can be used to determine the results on employees' performance. For example, higher morale, minimised errors, minimising cost or reducing waste, improving efficiency, improved quality levels of services or products, improving productivity levels and increased sales etc (Armstrong, 2011). According to Kirkpatrick and Kirkpatrick (2011) and Noe (2010) results at level 4 is measured after training to calculate the benefits of training to the organisation.



Degraft-Otoo (2012) from the Ghanaian perspective agrees with the Kirkpatrick model of evaluating training and proposes four similar ways of evaluating training as follows: trainee satisfaction, evaluating learning, evaluating learning application and the impact of all three on the organisation. He is of the view that as businesses expect returns on various investments, training is also an investment by the organisation in its employee and must therefore provide returns to the organisation.

Dessler (2010) in the same vein presents four categories of training evaluation. The first level deals with evaluation of employees' reactions to training which is whether employees liked the training. The next level is on employee learning where an assessment can be done to examine whether they learned the skills they needed to learn. This is followed by behaviour which examines whether employees demonstrate a new and desired on-the-job behaviour as a result of training. Then objectives are finally assessed. This determines whether measurable results set as a result of training have been achieved. The efficacy of training is determined by Kirkpatrick's four levels of training evaluation model specified above. The model requires that evaluation begins from the first level and continues orderly to the fourth level. The levels require clear-cut analysis because they are the determination of training effectiveness.

### **The Concept of Job Performance**

Britt and Jex (2014) opine that job performance is all the behaviours employees put up while doing their work. To clarify it, Brown and Arendt (2010) state that it is how well employees complete tasks as well as the attitude with which they complete the tasks. Whiles Blume, Baldwin, Ford and

Huang (2010) consider job performance as the art of carrying out actions efficiently and effectively to meet agreed job objectives. Employee job performance is an input-output process. It measures efficiency of employees by considering the inputs that are utilised to produce outputs.

Thus, job performance is seen to have two dimensions namely: effectiveness and efficiency. Cardy and Leonard (2014) contends that from an employee's perspective, job performance is fundamentally the result of a chain of behaviours that are exhibited to carry out a task and therefore, the various tasks performed on daily basis contribute to job performance in general. However, supervisors see job performance as the outcomes of various activities of employees rather than the activities themselves, because it is the outcomes that count in employee job performance appraisals.

Similarly, Williams (2002) as cited in Cooke (2013) models job performance as having two aspects namely, work outcomes and job-relevant behaviours. Work outcomes deal with task performance, such as quantity or quality of work done. On the other hand, job-relevant behaviour deals with the behavioural aspects that must be exhibited by employees to obtain the requirements in their work performance. This implies that job-relevant behaviours grant employees the needed support for carrying out the task-related aspects of their work. From another context, Jex and Britt (2014) opine that job performance is restricted to the core task activities that are based exclusively on job analysis. However, it has been realised that job performance has extended into behavioural aspects that directly associate with the core tasks. This suggests that, if the core tasks shall be well performed, the behavioural competencies of employees must be developed.

Elnaga and Imran (2013) therefore propose that these employee competencies that must be developed can be developed through effective training. Not only will training improve the overall performance of employees, it will also enhance superior organisational performance. When employees are unable to do their work according to the preferred or desired standards set by management, it connotes that there is a performance gap that must be bridged. To Swart, Mann, Brown and Price (2012) bridging a performance gap refers to implementing a relevant training intervention for the sake of developing particular skills and abilities of the employees and enhancing their performance.

Ternni, Abdulai and Mohammed (2014) observe that, in organisations, managers face the risk or the tendency of addressing all performance associated problems (gaps) with training and considering it (training) as the eventual answer to all negative job performance issues. They add that it is very essential to understand that knowledge and skill deficits are not always the cause of performance problems hence; training does not address all job performance problems. The foregoing presentations on job performance warrant that, job performance should be thoroughly analysed by managers of organisations to effectively detect the problems associated with it. To contribute to the analysis into job performance, Asare-Bediako (2008) as cited in Degraft-Otoo (2012) models it as a combination of 'ability' and 'motivation' which then produce the outcome called job performance.

The model is mathematically shown as follows:

Job Performance = Ability + Motivation. Thus, fJP = A + M

(Where P = Performance; A= Ability; M = Motivation; and f = function). This equation means that job performance is a function of ability and motivation. 'Ability' according to this model is the 'can' feature of job performance and it provides solutions to the question of whether employees can do the job. Resources, work environment and competencies are the factors that enhance the ability of employees to perform a particular assignment. On the other hand, 'Motivation' according to the model is the 'want' feature of job performance and it provides answers to the question of whether employees are willing to do the job. It is the degree to which employees are willing to commit their time, effort and attention to their work (Degraft-Otoo, 2012).

Factors like rewards and leadership style account for the level of motivation among employees in performing their jobs. It is in line then, to draw the conclusion that, where employees are willing and have the ability to do their job, managers can be sure of a good job performance of their employees. The job performance model is key in ensuring employee improvement and Human Resource Development professionals and managers of organisations must comply with it to be able to develop high performing employees. Terni et al. (2014) again present that the objective of training, which is to develop various capacities and competencies among employees represents only one of the several factors that determine job performance.

They therefore suggest that where performance problems exist, managers should always do a situational analysis to find out if those performance problems stem from a lack of relevant job competencies or not. If it is proven upon the analysis that those job performance problems are due to competency gaps, then they can be fixed with the appropriate training

intervention and vice versa. Jex and Britt (2014) agree with Johari and Yahya (2016) in stating that job performance is mostly assessed in terms of financial figures or through the combination of expected behaviour and task-related aspects. Jex and Britt (2014) as well as Sacket and Lievens, (2012) note that measures of job performance can either be an absolute value or a relative judgement and to a certain degree, employee job performance can be generalised as the whole organisation's performance. They add that the absolute value of job performance is based on objective outcomes like total sales or productivity.

On the other hand, relative judgements of job performance are performance evaluations that are based on the behavioural-related dimensions which are subjective in nature. In their view, job performance of employees can therefore be generally categorized into task performance and contextual performance. Whiles task performance is directly related to the job to be performed itself, contextual performance deals with the context or general environment within which the job is done.

According to LePine, Hanson, Borman and Motowidlo (2010) task performance borders on employee behaviours that are essential to accomplish job tasks, but contextual performance is the requisite employee performance behaviour required to preserve and promote the organisational, social and psychological setting in the organisation. Due to the nature of task and contextual performance and the fact that they relate closely, Bergeron, Shipp, Rosen and Furst (2013) as well as A de Waal, Goedegebuure and Akaraborworn (2014) assert that, when measuring job performance, it is

imperative to combine items in both task and contextual performance because it is not easy to separate them.

Task and contextual performance contribute significantly in calculating the overall work performance ratings of employees in organisations (Poropat 2011). From the same perspective, Bolino, Klotz, Turnley and Harvey (2013) hint that the ratings of supervisors for employees are a function of task performance and contextual performance. Also, the overall employees' job performance is appraised on the basis of task and contextual performance. Therefore, supervisors of employees should be prompted to consider task and contextual performance in measuring job performance because they both inure to the realisation of overall organisational objectives. Hasan (2013) therefore concludes that those two dimensions of job performance are vital for the attainment of organisational objectives.

### **The Nature and Dimensions of Job Performance**

Employers consider job performance as the outcome or series of job behaviours put up by the employee. Hence, job performance is not a single construct but consists of various work behaviours. These work behaviours are exhibited in performing different tasks on daily basis in the organisation. Cardy and Leonard (2014) state that, broadly, the various tasks employees perform in their day to day activities contribute to their job performance. In line with this, Jex and Britt (2014) refers to Campbell's 1993 model on the dimensions of work performance based on a factor analytic research setting out eight dimensions of performance. These are task proficiency, non-job-specific-task-proficiency, written and oral communication, demonstrating

effort, maintaining personal discipline, peer and team performance, supervision or leadership and managerial or administrative duties.

The model shows that all jobs consist of task proficiency which is the activities that employees carry out in doing their core jobs. Jobs also have non-job-specific task proficiency and that is tasks that are not specific to a given job, but expected of all employees. These are job behaviours that are not in a direct relationship to the job, but are carried out within the job scope. Also, jobs have written and oral communication tasks. This is the skill with which the employee carries out communication. Again, all jobs have an aspect of demonstrating effort. This shows how employees are committed to the main tasks of their jobs.

The model also shows that all jobs entail maintaining personal discipline; signifying how employees ensure disciplinary standards at all times in doing their work. Employees should not be breaking rules and regulations of the organisation. Moreover, employees should facilitate peer and team performance in all jobs. This refers to the ability of employees to demonstrate a sense of being responsible in performing their jobs within groups of people. Employees should ensure that they spur others on to succeed in their assignments. This should be done through coaching and advising others especially when the tasks are inter-related.

In addition, jobs have a dimension of supervision or leadership. This is where the employee is held accountable for the performance of others. Hence, the employee can be assigned with the duty of rewarding or sanctioning others according to what they do in carrying out their jobs. Managerial or administrative duties of employees are also a part of job performance. These

refer to duties that are not directly supervised but are performed to serve the organisation or the groups employees belong to. For example, monitoring individuals of a group to help them realise their objectives and monitoring organisational assets.

Campbell's model shows that, in general, individual employee job performance consists of the behaviours or actions that are relevant to the goals of an organisation. This means that individual employee job performance pertain only to behaviours or actions of employees. This also suggests that individual employee job performance is confined within actions that are under the control of the employee and not actions that are inhibited by the environment of the employee. Koopmans, Bernaards, Hildebrandt, de Vet, and van der Beek (2014) on the other hand present that job performance comprises three general aspects namely: task performance, contextual performance and adaptive performance.

The first aspect, task performance refers to the proficiency with which an employee performs central job tasks. Sometimes, other names used for task performance are work-specific task proficiency, technical proficiency, or in-role performance. Campbell refers to work-specific task proficiency (core work tasks) and non-work-specific task proficiency (tasks not specific to a given job, but expected of all employees) as task performance (Koopmans et al., 2011). Koopmans et. al. (2014) add that significant indicators for assessing task performance are: work quality, planning and organising work, being result-oriented, prioritising and efficiency of work.

The second one, contextual performance refers to employee behaviours that support the organisational, social and psychological



environment in which the central job tasks are performed. According to Koopmans et al. (2011), out of the eight dimensions of Campbell's work performance framework, six of them which are: demonstrating effort, maintaining personal discipline, facilitating peer and team performance, written and oral communication, management and administration, supervision and leadership can all be considered as contextual performance. Significant indicators for assessing contextual performance are: taking initiative, accepting and learning from feedback, cooperating with others, and communicating effectively (Koopmans et al, 2014).

Adaptive performance, the third dimension, refers to an employee's proficiency in adjusting to changes in work duties or the work environment. That is, the extent to which an individual adapts to changes in a work system or work roles. Work performance behaviours such as learning new tasks, technologies and procedures, adapting to culture or fellow employees and physical surroundings, dealing with uncertain or unpredictable work situations and solving problems creatively forms part of adaptive performance (Koopmans et al. 2011). Currently, it has become more and more important for employees to adjust to the changes in their work environment due to the fast-changing effects of a factor like technology. Significant indicators for assessing adaptive performance are: dealing with uncertain and unpredictable work situations, adjusting work goals when necessary and proposing creative solutions to novel difficult problems (Koopmans et. al. 2014).

### **Evaluation of Job Performance**

Objective measures of employee job performance like the number of days the employee is absent, output maintained in organisational records,

counts of specified acts or the subjective measures like quality work from the employee or supervisors serve as the basic focus in the evaluation of employee job performance. Although, these processes of evaluating job performance provide important information, yet these methods cannot help in capturing the total complexity and the fullness of behaviours that include the job performance of an employee (Koopmans et al., 2011). As a result of the complexities, the question as to what actually are the components of employee job performance arises. This is because job performance is a construct that comprises several aspects and hence cannot be measured directly. So in order to be able to measure the construct of job performance, indicators that form it (job performance) should be identified.

Koopmans et al (2011) therefore provide that job performance consists of various constituents (components or dimensions) and these constituents in turn, consist of indicators that can be directly measured and that the dimensions can be generalised across jobs. The various components of employee job performance can be measured with indicators that specifically define the components of job performance as specified below:

#### *Task Performance*

According to Koopmans et. al. (2014) significant task performance indicators for evaluating individual employee job performance are: work quality, planning and organising work, being result-oriented, prioritising and efficiency of work.

#### *Contextual Performance*

Indicators for evaluating contextual performance are grouped into two for practical reasons. These are indicators at the interpersonal level and

indicators at the organisational level. At the interpersonal level four significant employee job performance indicators are identified. These are: taking initiative, accepting and learning from feedback, cooperating with others, and communicating effectively. Also, at the organisational level the four significant employee job performance indicators identified are: showing responsibility, being customer-oriented, being creative and taking on challenging job tasks (Koopmans et. al. 2014).

#### *Adaptive performance*

For adaptive performance, there are six significant indicators of employee job performance. These are: showing resiliency (thus, coping with stress, difficult situations and adversities), proposing creative solutions to novel difficult problems, having current work knowledge, having current work skills, dealing with uncertain and unpredictable work situations and adjusting work goals when necessary (Koopmans et. al. 2014).

### **Empirical Review**

#### **Evaluation of Training and job performance**

Mollahoseini and Farjad (2012) in a study assessed the Effectiveness of training in the Takestan University. Questionnaire was used to collect primary data from 70 employees sampled with the convenience sampling method. After evaluating training with the Kirkpatrick model, the results showed that there was a mean value of 3.66 on the reaction level, which signified that most of the respondents were satisfied with the training. On the learning level, the mean value was 3.58 which implied that majority of the respondents learned the skills taught during the training programme. On the level of behaviour, the mean value was 3.39 which meant that, the

participants' job behaviour changed and they could transfer what they learnt onto their jobs, though not as strongly as the reaction and learning levels. At the result level, a mean value of 3.42 was achieved. This meant that the employees realised improvements in their work output due to the training.

In another study on Evaluating Training using the Four Levels Model, Steensma and Groeneveld (2010) sampled 34 employees using the simple random sampling method. Primary data was gathered using questionnaires and means and standard deviations were used to present the results. The study revealed that reaction to the content of the training was very positive. On the learning level, the study showed that the training was successful in improving the level of theoretical knowledge of employees.

Trained participants reached far higher levels of knowledge after the training; knowledge scores were significantly higher ( $p < 0.02$ ). On the behaviour level, the study showed that after the training, employees significantly made more use of desired managerial behaviours ( $p < 0.001$ ). On the results level, the mean value of self-evaluation by the participants in the training was 3.6 and with ( $p < 0.01$ ); it was revealed that participants demonstrated better results in terms of general managerial and leadership skills etc.

In a related study, Dorri, Akbari and Sedeh (2016) did a study on the Kirkpatrick Evaluation Model for in-service Training. Questionnaire was used to collect primary data from 80 respondents. The overall mean value of participants regarding the reaction level was 3.2. This implied that staff evaluated their training as satisfactory. On the learning level, the mean value obtained by the researcher was 3.7. The result obtained from the employees

per the p-value ( $p < 0.05$ ) on learning was statistically significant. It was shown that the level of knowledge and skill of participants in the training improved after the training. The mean value obtained by the researcher for behaviour was 3.1. Thus, on behaviour, it was deduced that the participants exhibited the desired work behavioural changes after the training. The mean value obtained by the researcher for results was 3.3. This meant that the training helped in the achievement of the strategic goals established by the organisation.

Again, Farjad (2012) whose study was on the Evaluation of the Effectiveness of Training Courses in the Islamshahr University by the Kirkpatrick Model used a convenience sampling method to sample 81 employees of the Islamshahr University. Questionnaire was used to gather primary data from participants of this study. The study results showed that personnel of the Islamshahr University indicated that their training was almost acceptable in terms of reaction. The study showed that the overall mean result for reaction was 2.76 which signified that the participants were not actually satisfied in terms of reaction. With regard to learning, personnel of the University again indicated that their learning from training was almost acceptable. The overall mean result for learning was 3.23, signifying that participants did learn but not as much as they expected from training in the University.

On the level of behaviour personnel of the University reported that their ability to transfer the capacities they developed from training to their jobs was also almost acceptable, hence, they could have done better in their job behaviour. From the study, the mean result for behaviour was 2.64, which

signified that the personnel's job behaviour improved after the training lesser than expected, though it was not too bad. For results, the study showed that personnel of the University indicated that their performance was almost acceptable. From the study, the mean value for result was 2.53 and that signified that participants realised improvements in their work output after training but it was not at the level expected by the employees of the University.

Borate, Gopalkrishna, Shiva Prasad and Borate (2014) conducted a study on Evaluation of Employee Training Effectiveness and Development Program. Using the simple random sampling method, 33 respondents were sampled. The study found that in terms of reaction, the expectations of the employees from training were met and they were satisfied with their training as a whole. Also, change in reaction had significant influence on training effectiveness. With regard to learning, the study revealed that the practical knowledge on the job and confidence of the employees increased significantly. Then again, a change in learning had a significant influence on training effectiveness. In terms of behaviour, the employees indicated that training prompted their professional behaviour. Moreover, a change in behaviour had a significant influence on training effectiveness. On results, it was revealed that there were significant improvements in the job performance of the employees which could be recognised in their increased productivity levels as reported by the employees.

In the work of Curado and Teixeira (2014) on Training Evaluation Levels and Return on Investment, the proportionate sampling technique was used to sample 45 employees out of a total of 158 and primary data was

collected with questionnaire. The results showed that in terms of reaction, most participants of the training were very satisfied with the courses, namely, contents, meeting of objectives and teaching methods. On learning, evaluation values proved that the participants learned from the training programme. The results indicated that trainees increased their skills and qualifications in the topics addressed at the training programme.

As a result of learning, the results showed that there were lesser requests of corrective actions after the training (66.7% reduction). With regard to behaviour, the results again showed that training effectiveness evaluation values proved that, job behaviour of participants improved after the training. The analysis showed that after the training there was a fifty per cent (50%) reduction in the number of nonconformities in the job performance of participants. On the level of results, this study found that associated business results were realised after training. For example, the results indicated that accidents at work reduced by eleven per cent (11%) as reported by the employees. The participants also reported that the quality of their work output increased as the rate of nonconforming work output figures largely reduced.

In another study, Neeraj, Abhishek, Abhilash, Rubia, and Rajni (2014) evaluated Employee Training Effectiveness and sampled 181 employees out of a population of 330 using the simple random sampling method. Primary data was gathered with questionnaire designed on a Likert scale. The findings related to the reaction level of the study indicated that, employees were satisfied with their training and their expectations were met at an acceptable level. For the learning level which was for creating positive attitude among the trainees, the results indicated that participants achieved satisfactory progress in

their learning. They acknowledged that their level of learning through training increased.

On the behaviour level, the results showed that training led to employees' professional behaviour improvement. The employees significantly confirmed that after the training, they could put into practice the knowledge they gained and could pass it on to others. On the results level, the findings showed that practical knowledge on the job and confidence of the employees to initiate their own action increased significantly. The employees also reported significant reduction in poor quality issues and reworks per hundred.

A study by Rafiq (2015) looked at Training Evaluation using the Kirkpatrick Model. Interviews were used to gather primary data from 30 employees who participated in the training. The results showed that, in terms of reaction, employees were satisfied with their training and their expectations were met. The employees revealed a significant satisfaction with their training because (70%) of the content of the training were very closely relevant to their job contents. Similarly, the employees indicated that their knowledge after the training improved and their learning curve increased. The employees indicated that their knowledge in professional and personal work life as well as their confidence level improved.

On the behaviour level, the employees indicated that their attitude and job behaviour changed positively. Their inner self specialties came out and their skills got polished. The employees reported that they could utilise their soft skills in their daily work life effectively and they avoided super imposing their personal biases at the work place. On the level of results, the employees indicated that their overall productivity and efficiency improved. From the



results, it was realised that they could complete their assignments on time and could sometimes beat deadlines. The employees also revealed an improvement in their work output in terms of problem solving, decision making, communication skills, ethics and stress management.

Rehmat, Aaltio, Agha and Khan (2015) in their review of Training Effectiveness in Call Centres sampled 242 employees from 642 employees with the convenience sampling method. Questionnaire was used to gather primary data from the respondents and frequencies and percentages were used to present the results. The results showed that in terms of reaction, the employees were satisfied with the training as it was impactful. The employees adjudged the training to be (96%) successful. At the learning level the results also proved that employees learned a lot from training. The participants rated the degree to which they learned from training to be (86%). Similarly, on the behaviour level, training impacted positively on the job behaviour of the employees. Results from the study indicated that the change in their behaviour was (77%). The findings at result level indicated that employee job performance improved significantly after training. Ratings from the employees showed that there was (65%) improvement in their work output after training.

In Evaluating the Effectiveness of Training Using the Four Level Kirkpatrick Model, Mohamed and Alias (2012) sampled 36 employees using the stratified sampling method. Questionnaire was used to gather primary data from respondents. The study revealed that on the reaction level, the mean score was 4.25, suggesting that respondents were very satisfied with the training. The findings showed that the respondents were happy and enjoyed

the overall training, thus the course structure, the administration and the learning initiatives.

On the level of learning, the employees revealed that learning increased to the tune of (11.4%). Thus almost all participants achieved a positive knowledge gain from training. With regard to the behaviour level, most of the employees responded that they could apply the knowledge, skills and attitudes they learned from the training to their jobs. The findings for the behavioural change showed that more than two thirds of the respondents (68%) were able to apply the knowledge, skills and attitude they gained from training at the workplace and similar results were recorded at the results level.

#### **Effect of Training on Job Performance**

Amin, Saeed, Lodhi, Mizna, Iqbal, and Tehreem, (2013) carried out a study on the impact of employees training on their job performance in education sector of Pakistan. The study employed questionnaires designed on a 5-point Likert scale to gather primary data from a sample size of 200 employees. Simple regression analysis was conducted to examine the effect of various training efforts on overall job performance of the employees. The findings proved that training has a positive effect on job performance. The results of the study showed that training leads to important benefits for individual, team and organizational performance.

Ojoh and Okoh (2015) investigated the impact of training on employees' job performance. A set of structured questionnaire was used as the instrument for data collection and the sample size was 60 employees who were sampled from a population of 70. The results showed that training impacts positively on the organisation under the study. Secondly, the findings also

revealed that training is an organisational way of improving on employees' performance. It further revealed that lack of training brings about low productivity of workers.

Al-Mzary, Al-rifai and Al-Momany, (2015) studied training and its impact on employees at Jordanian Universities. The objective of the study was to examine the attitudes of administrative leaders and administrative employees concerning the training courses provided for them as well as the impact of training on their job performance at the Yarmouk University in Jordan. Data was gathered with questionnaires and 40 administrative employees in the University were sampled for the study. The study found that training courses are related to the training needs of the employees to a medium degree. Results indicated also that training positively affects employees' job performance.

Onyango and Wanyoike (2014) did a study on the effects of training on employee performance in Siaya County, Kenya. The study employed questionnaires to collect data from 56 respondents using the stratified sampling technique. Inferential analysis was conducted to determine the effect of training on performance of the employees. The results of the study showed that there is a strong positive relationship between training and development of employees and performance. The results implied that the performance of the employees was positively influenced by training.

Ampomah (2016) studied the effect of training and development on employee performance in the Pentecost University College in Ghana. The simple random sampling technique was used in selecting the sample size of 30 employees across the University. Questionnaires and interviews were used to

collect data from the respondents of the study. The findings showed that employees' link their performance to training which indicate that training and development improves employee performance positively resulting in job satisfaction of the employees. The study also found that employees are motivated through training, and, training and development results into higher performance.

Shaheen, Naqvi and Khan (2013) studied employees training and organisational performance with mediation by employees' performance. The convenience sampling method was used to sample 174 respondents and questionnaires were used to collect primary data from the respondents. Regression analysis was conducted to determine the effect of variables on other related ones. The study revealed a significant effect of employee training on employee performance, employee training on organisational performance and employee performance on organisational performance.

In fact, a number of studies, Athar and Shah, 2015; Asfaw, Argaw and Bayissa, 2015; Mwesigwa, 2010 etc have established a positive effect of training on the performance of employees. For example, according to Dannelly, Otey, Croy, Harrison, Rynders, Hertel and Weltman (2011) training results in better employee performance and that creates good organisational performance and the realisation of stated organisational goals. Kim and Brymer (2011) present that the performance of individual employees and that of the organisation is enhanced as a result of training. Training produces benefits for both the employee and the organisation by positively influencing employee performance through the development of employee knowledge,

skills, ability, competencies and behaviour (Sultana, Irum, Ahmed & Mehmood, 2012).

Groebner, Shannon, Fry and Smith (2011) found that training enables employees to be more productive than those who do not receive any formal training when both categories of employees perform the same duties. Training activities have a positive effect on employees in getting them ready to be more effective in their work, improving their technical capabilities, interpersonal abilities and teamwork skills (Cooke 2013). Over time, training improves performance by reducing cost of maintenance of equipment and machinery, cost of workplace accidents which results in lower insurance premiums, cost of wasted time and materials, cost of absenteeism and costs of recruitment as a result of doing internal promotion of skilled staff (Groebner, Shannon, Fry & Smith, 2011). They add that training improves interpersonal employee communication, employee morale and satisfaction, customer satisfaction and time management, while improving the profit margins of organisations.

### **Conceptual Framework**

This section presents a conceptual framework of the variables in this study.

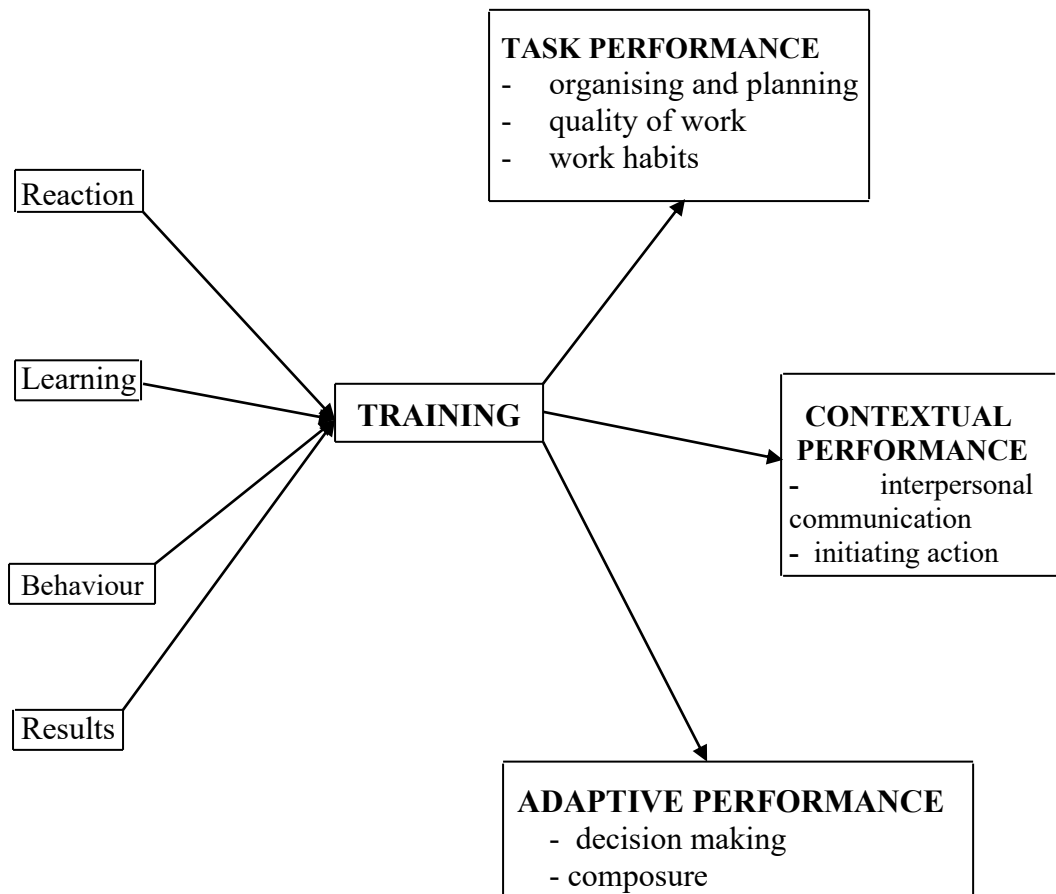


Figure 1: Conceptual Framework – Training and Job Performance

Source: Author’s construct, (2018)

The main independent variable is training and the dependent variable is job performance. In this study, training is measured in terms of the levels of effectiveness of training as outlined by Kirkpatrick and Kirkpatrick (2011). These are with respect to reaction, learning, behaviour and results of training. Job performance in this study is based on three dimensions as developed by Koopmans et al (2011). These dimensions are: Adaptive performance, Contextual performance and Task performance. Judging from the constructs of Koopmans et. al. (2014), significant task performance indicators for evaluating individual employee job performance are: work quality, planning and organising work, being result-oriented, prioritising and efficiency of work.

Indicators for evaluating contextual performance in this study are: taking initiative, accepting and learning from feedback, cooperating with others, and communicating effectively, showing responsibility, being customer-oriented, being creative and taking on challenging job tasks (Koopmans et. al. 2014).

For adaptive performance, there are six significant indicators of employee job performance. These are: showing resiliency (thus, coping with stress, difficult situations and adversities), proposing creative solutions to novel and difficult problems, having current work knowledge, having current work skills, dealing with uncertain and unpredictable work situations and adjusting work goals when necessary (Koopmans et. al. 2014).

### **Chapter Summary**

This chapter has provided a review of literature based on the objectives and purpose for which the study was conducted. The chapter began with a theoretical review by providing a theory that underpinned the study. The chapter has also provided a review of concepts which included; the concept of training, job performance, evaluation of training, evaluation of job performance etc. The chapter also includes a review of studies conducted in the area of training and job performance. The chapter concludes with a conceptual framework that indicates the various variables considered in this study.

## CHAPTER THREE

### RESEARCH METHODS

#### **Introduction**

This chapter deals with a description of the methodology that is employed for this study. It presents the research design, study area, research approach, study area, population of the study, sample and sampling procedure, data collection instrument, pre-testing etc.

#### **Research Design**

Research methodology refers to the procedural framework for a study for the purpose of drawing a meaningful conclusion from any piece of research; the procedural framework of the data collection must be appropriate and relevant (Malhotra & Birks, 2012). The study adopted the cross-sectional survey design. A survey is a means of gathering data about the characteristics, actions, or opinions of a group of people, referred to as a population (Malhotra & Birks, 2012).

The cross-sectional survey strategy was adopted because it has been found to be suitable for analysing a phenomenon, situation, problem, attitude or issues by considering a cross-section of the population at one point in time (Robson, 2011). Also, the causal design was adopted to enable the researcher investigate the effect a variable has on the other. These variables are ‘training’ - the independent variable and ‘job performance’ - the dependent variable.

#### **Research Approach**

This study adopted the quantitative approach. The quantitative approach enables a researcher to objectively and systematically examine the



relationships, cause and effect among variables of a study. According to Creswell (2012) this approach to research must be used if the analysis of data is geared towards deductive reasoning and objectivity. Also, this type of approach provides an objective and precise description of practical life situations.

### **Study Area**

The University of Cape Coast (UCC) is the study area for this study. The UCC was established in 1962 and was officially inaugurated by President Osaagyefo Dr. Kwame Nkrumah in December 1962. Located in the Cape Coast Metropolis in the Central Region of Ghana, it is one of the very few sea-front universities across the world. The UCC is selected for this study because it is one of the tertiary institutions that employ the target population on whom this study is being conducted. Data at the Division of Human Resource indicates that the UCC employs 5312 people. This comprises 756 senior members, 1475 senior staff and 3081 junior staff.

The University first started as a University College and on 1<sup>st</sup> October, 1971, it gained full status as an independent University capable of conferring various certificates to its products by an Act of Parliament, the University of Cape Coast Act, 1971 (Act 390). The authority of the University was finally entrenched by the University of Cape Coast Law, 1992 (PNDC Law 278). Although, originally, the university was established to produce professional teachers for secondary schools in Ghana but over the years, the University has expanded into several other areas of academia like Business, Nursing, Medicine and Law etc. By the year 2017, the University had the following Schools/Faculties: School of Business, School of Medical Sciences, School of

Pharmacy, School of Physical Sciences, School of Biological Sciences, School of Agriculture, School of Graduate Studies and Research, School of Law, Faculty of Social Sciences, Faculty of Education and Faculty of Arts.

These Schools/Faculties have now been grouped into five colleges because the University has now adopted the collegiate system. The colleges that have been formed are as follows: College of Distance Education, College of Agriculture and Natural Sciences, College of Humanities and Legal Studies, College of Health and Allied Sciences and College of Education Studies. Like other universities, UCC also has non-academic units that provide support services to the establishment. They are the Directorate of Academic Affairs, Directorate of Human Resource, Directorate of Legal Consular and General Services, the Directorate of Finance etc. At the top level of the University Management is the Vice-Chancellor, the Pro-Vice-Chancellor and the Registrar who is the administrative head and Secretary to the council of the University.

### **Population**

This study was carried out in the University of Cape Coast. The population of the study was all Senior Staff. The target population, due to time and cost considerations, was the administrative senior staff category. Administrative senior staff includes chief administrative assistants, principal administrative assistants, senior administrative assistants and administrative assistants. All the administrative senior staff work as administrators in various departments, sections and units across the University.

According to the Directorate of Human Resource of the University, there are a total of four hundred and seventy-eight (478) administrative senior staff at the University. Among them, there are hundred (100) Administrative Assistants, two hundred and twenty seven (227) Senior Administrative Assistants, one hundred and thirty two (132) Principal Administrative Assistants and nineteen (19) Chief Administrative Assistants.

### **Sampling Procedure**

The study concentrated on administrative senior staff in all Departments, Sections and Units at the University. Respondents out of the total population of 478 were selected to serve as the sample size. The simple random sampling technique was employed for the study. The simple random sampling technique was employed for this study because the study seeks to examine the effect of one variable on the other for the purpose of generalising the results for the administrative senior staff. The justification for using the simple random sampling technique is that, the Directorate of Human Resource's Revised Unified Scheme of Service for Senior Staff (2017) describes administrative senior staff as a homogenous group who perform essentially the same functions in their jobs. Thus, all these staff are administrators and they bear similar job performance characteristics at the University.

To determine the exact sample size, the Krejcie and Morgan (1970) as cited in Delice (2010) sample size determination table was used. A sample size of two hundred and fourteen (214) administrative senior staff was selected from the target population of four hundred and seventy-eight (478) administrative senior staff for the study. In order to get a fair representation of

each category of staff in the sample size of two hundred and fourteen (214), the number of each category of staff was divided by the total number of the target population (478) and was multiplied by the sample size (214). After that, the lottery method of the simple random sampling technique was used to select respondents from each category of staff. Therefore, forty five (45) administrative assistants, one hundred and one (101) senior administrative assistants, fifty nine (59) principal administrative assistants and nine (9) chief administrative assistants were randomly selected to sum up to the sample size of two hundred and fourteen (214) respondents.

### **Data Collection Instrument**

Structured questionnaire (Appendix B) was used by the researcher for this study. Questionnaire was administered to all respondents in the Departments, Sections and Units at the University to collect primary data. Questionnaire as an instrument is convenient in reaching respondents who are literate and are difficult to contact and it enables them to answer the questionnaire at their own pace (Sarantakos, 2012). Questionnaire also serves as a more convenient means of gathering data from a relatively large population.

The questionnaire for this study was prefaced by the topic of the study and also introduced the researcher. The preface gave a firm assurance of anonymity and confidentiality to respondents. The questionnaire was designed in three sections. Section A of the questionnaire covered the demographic features of administrative senior staff. Section B contained questions to evaluate training using the Kirkpatrick and Kirkpatrick (2011) training evaluation model. The questionnaire items were designed using a five

point Likert scale. Section C of the questionnaire captured questions to ascertain job performance using the Koopmans et al., (2011) job performance measurement constructs. The questionnaire items were designed on a Likert scale.

### **Pre-testing**

The instrument for this study was pre-tested to ensure its reliability. This was done by using similar staff at University of Education, Winneba (UEW). In December, 2017, the researcher submitted an introductory letter (Appendix A) to the Human Resource Division of UEW for the study. After explaining the authenticity and need for pre-test of the study, questionnaires were administered to the same category of staff at UEW for the pre-testing.

The total number of questionnaires administered to the staff was twenty three (23) and nineteen (19) were returned. So there was an eighty three per cent (83%) response rate. For most student questionnaires, a minimum of ten (10) questionnaires for the pre-testing study is sufficient (Saunders, 2011). According to DeVellis (2016) a minimum value of 0.7 should be achieved for Cronbach's Alpha to ensure reliability of a study instrument. The reliability test was therefore carried out for the Cronbach's Alpha values and after the test, reliability values achieved for the instrument were 0.98 and 0.94 for training and job performance respectively, which are all above the 0.7 standard for reliability. Reliability of the study instrument was therefore ensured as shown as follows.

**Table 1: Pre-testing Results**

<b>Questionnaire Category</b>	<b>No. of Items</b>	<b>Sample Size</b>	<b>Cronbach Alpha</b>
Section B: Evaluation of training	18	23	0.98
Section C: Evaluation of job Performance	27	23	0.94

Source: Field Survey, (2018)

### **Data Collection Procedures**

Questionnaires were personally administered by the researcher to respondents in the study to gather data. The Division of Human Resource of UCC was contacted to access data for the list of all administrative senior staff to be used for the study. Questionnaire was employed to gather data because of the nature and characteristics of the respondents. Because of the busy nature of the respondents, questionnaires were appropriate to ensure that they get enough time to read, understand and answer the questions. Therefore, the self-administered questionnaires were the main source of primary data. Data collection was from 23<sup>rd</sup> January, 2018 to 26<sup>th</sup> February, 2018.

An introductory letter providing an explanation for the purpose and authenticity of the study was first delivered to the Directorate of Human Resource at the University of Cape Coast to seek permission for the data to be collected (Appendix A). The researcher was asked to come two days later for feedback. The needed permission was granted on the second day and the validated questionnaires were delivered to respondent. Return envelopes were attached to each questionnaire delivered to the respondents to facilitate confidentiality and quick responses. Distribution was done to cover all the sampled administrative senior staff at the University. A period of nine (9) days

was agreed upon between the researcher and the staff for collection of the answered questionnaires.

Respondents were assured of confidentiality on each of the questionnaires. This was done to increase the number and quality of responses. Due to the busy schedule of the respondents, the period agreed upon for collection was extended from nine days to three more weeks because, many of the staff had not answered their questionnaire after the nine days. The researcher therefore notified the respondents that answering the questionnaire would require at most ten minutes of their time. The researcher also followed-up on respondents frequently through phone calls and personal visits to remind the respondents to answer the questionnaires in the course of the extension period. Due to the frequent follow-ups, almost all the answered and unanswered questionnaires were returned at the end of the third week in February, 2018. Out of the 214 questionnaires administered, 209 which represent (97.6%) were returned (Table 2).

**Table 2: Frequency Distribution of Questionnaires**

Category of staff	Distributed		Returned	
	Freq.	%	Freq.	%
Administrative Assistants	45	21.03	44	20.56
Senior Admin. Assistants	101	47.19	99	46.26
Principal Admin. Assistants	59	27.57	58	27.10
Chief Admin. Assistants	9	4.21	8	3.73
<b>TOTAL</b>	<b>214</b>	<b>100</b>	<b>209</b>	<b>97.6</b>

Source: Field Survey, (2018)

### **Data Processing and Analysis**

The Partial Least Square-Structural Equation Modelling tool and the Statistical Package for the Social Sciences software (V21.0) were used to process the data. The data was first of all cleaned by the removal of incomplete and ambiguously filled questionnaire. The data was coded and inputted into the software. For specific research objectives 1, questionnaire based on the Likert scale was used to collect data from the respondents. Means and standard deviations were used to present the results of the study. Also, for specific objective 2, questionnaire based on the Likert scale was used to collect data from the respondents. Again, means and standard deviations were also used to present the results.

Research objective one was to assess the level of training effectiveness. Means and standard deviations were used to assess the various levels of training effectiveness to determine the perception of staff. With respect to research objective 2, in the ascertainment of job performance, mean and standard deviations were used to measure job performance among the administrative senior staff at UCC. For specific objective 3, inferential analysis was conducted to examine the effect of training on job performance of administrative senior staff at UCC. The Structural Equation Modelling (SEM) was used to examine objective three, due to the rigorous nature of the SEM (Hair, Ringle & Sarstedt, 2011).

### **Measurement of Variables**

In this study, the variable ‘training’ was evaluated according to the Kirkpatrick and Kirkpatrick (2011) training evaluation model. According to the model, there are four constructs on which training is evaluated. These are



reaction, learning, behaviour and results. Therefore, questionnaire which was adapted from Awang, Ismail and Noor (2010) was grouped under each construct of the model in order to measure the level of effectiveness of training. The questionnaire items were designed using a five-point Likert scale. Level of training effectiveness has been used as 'Training' (Independent variable) in this study.

The variable 'job performance' was ascertained based on the Koopmans et al. (2011) job performance evaluation constructs. They propose four constructs on which job performance can be ascertained. Among the four constructs, job performance was measured based on three most appropriate constructs. These are: task performance, contextual performance and adaptive performance. Therefore, in order to ascertain job performance, questionnaire was adapted from Koopmans et al. (2011); Awang, Ismail and Noor (2010) and were grouped appropriately under each construct. The questionnaire items were designed on a Likert scale. The level of job performance has been used as 'Job Performance' (Dependent variable) in this study.

### **Structural Equation Modelling**

The study employed structural equation modelling (SEM) to examine the effect among the variables. The software used to examine the effect is the SMART Partial Least Square (PLS, V3). SEM considers the element between each latent construct and observed indicators. SEM is a blend of two statistical methods of factor analysis and path analysis into one broad statistical method (Sarstedt, Ringle, Henseler & Hair, 2014). According to Sarstedt et al (2014), SEM consists of two-parts. 1) measurement of the part that relates the observed variable with latent variable through confirmatory

factor analysis, and 2) structural part that establishes the relationship between the latent variables with regression simultaneously. PLS also involves no assumptions about the population or scale of measurement (Iacobucci, 2010). PLS is quite robust with regard to inadequacies like skewness, multicollinearity of indicators and misspecification of the structural model (Hair et al., 2013).

### **Validity and Reliability of the Model**

There are several criteria for assessing model structures. In general, a systematic application of different criteria is carried out in a two-step process, (1) the assessment of the measurement model and (2) the assessment of the structural model. To assess the measurement models, reflective and formative models have been distinguished. Assessment of reflective measurement models includes composite reliability to evaluate internal consistency, individual indicator reliability, and average variance extracted (AVE) to evaluate convergent validity. In addition, the Fornell-Larcker criterion and cross loadings are used to assess discriminant validity (Hair et al, 2013).

### **Internal Consistency Reliability**

Internal consistency is a form of reliability used to judge the consistency of results across items on the same test. It determines whether the items measuring a construct are similar in their scores (i.e., if the correlations between the items are large) (Drolet & Morrison, 2001) as cited in Alexandrov (2010). The composite reliability is a more appropriate measure of internal consistency than the cronbach's alpha (Hair et al, 2011). The composite reliability varies between 0 and 1, with higher values indicating higher levels of reliability. It is generally interpreted in the same way as

Cronbach's alpha. Specifically, composite reliability values of 0.60 to 0.70 are acceptable in exploratory research, while in more advanced stages of research, values between 0.70 and 0.90 can be regarded as satisfactory (Nunally & Bernstein, 1994) as cited in DeVellis (2016).

### **Convergent Validity**

Convergent validity is the extent to which multiple items used to measure the same concept agree (MacKinnon, 2012). Anderson and Gerbing (1988) as cited in Byrne (2016) state that convergent validity is established if all factor loadings for the items measuring the same construct are statistically significant. According to Hair et al. (2016) convergent validity could be accessed through factor loadings and the Average Variance Extracted (AVE). Hair, Ringle, and Sarstedt (2011) point out that to establish convergent validity, factor loadings must be 0.70 and above. An AVE value of 0.50 or higher indicates that, on average, the construct explains more than half of the variance of its indicators. Conversely, an AVE of less than 0.50 indicates that, on average, more errors remain in the items than the variance explained by the construct.

### **Discriminant Validity**

Discriminant validity is the extent to which a construct is truly distinct from other constructs by empirical standards. Thus, establishing discriminant validity implies that a construct is unique and captures a phenomena that is not represented by other constructs in the model (MacKinnon, 2012). The Heterotrait - Monotrait Ratio (HTMT) is a means of determining the discriminant validity of a PLS-SEM model. According to Henseler, Ringle and Sarstedt (2015) a latent construct has discriminant validity when its

HTMT ratio is below 0.850. The Fornell-Larcker criterion is also an approach to assessing discriminant validity. It compares the square root of the AVE values with the latent variable correlations (Fornell & Larcker, 1981) as cited in Farrell (2010). Specifically, the square root of each construct's AVE should be greater than its highest correlation with any other construct (Hair et al., 2013).

The first essential criterion for the assessment of the PLS-SEM is the coefficient of multiple determinations ( $R^2$ ) for each endogenous construct.  $R^2$  measures the explained variance of a latent variable relative to its total variance. Chin (2010) describes  $R^2$  values of 0.67, 0.33 and 0.19 in PLS SEM path models as substantial, moderate and weak, respectively. The next step to assess the structural model comprises the evaluation of the regression coefficients between the validated latent variables. A regression coefficient magnitude indicates the strength of the relationship between two latent variables. Some authors argue that regression coefficients should exceed 0.1 to account for a meaningful impact within the model (Henseler & Fassott, 2010). Furthermore, regression coefficients should be significant at the 0.05 level.

Finally, another assessment of the structural model involves the model's capability to predict. The predictive relevance of the structural model is assessed by the Stone-Geisser's  $Q^2$  statistic (Ober, Ayroles, Stone, Richards, Zhu, Gibbs & Simianer, 2012). In the structural model,  $Q^2$  values larger than zero for a certain reflective endogenous latent variable indicate the path model's predictive relevance for this particular construct. As a relative measure of predictive relevance, values of 0.02, 0.15, and 0.35 indicate that

an exogenous construct has a small, medium, or large predictive relevance for a certain endogenous construct. (Hair et al, 2016). It is also imperative to measure the impact of individual endogenous variables on an exogenous one. This is achieved through assessing the effect size ( $f^2$ ). As posited by Cohen, Powell, Healey, Kennedy, Moisen, Pierce and Ohmann (2010),  $f^2$  values of 0.02, 0.15, and 0.35, respectively, represent small, medium, and large effects of the exogenous latent variable.

### **Ethical Considerations**

The identity of respondents was not disclosed in the questionnaire. Also, respondents were assured of anonymity and confidentiality in answering the questionnaire. Again, in order to seek permission to conduct the study at the University, an introductory letter explaining the legitimacy and purpose of this study was forwarded to the Directorate of Human Resource at UCC.

### **Chapter Summary**

The purpose of this chapter was to describe the methods used in achieving the aim of this study. So far, it has been noted that for data collection and analysis, a quantitative method which involved structured questionnaire was used. There has also been significant background information regarding the study context at University of Cape Coast including the way the data was collected and processed. Ethical consideration for the study has also been explained above.

## CHAPTER FOUR

### RESULTS AND DISCUSSION

#### **Introduction**

This chapter deals with the analysis and discussion of data obtained from respondents in the study. It begins with a presentation of the background information of respondents which is followed by the analysis of responses to the research questions. Means and standard deviations were used to analyse data obtained from the field. Similarly, SEM was used to analyse data to draw conclusions on the research objectives. A total of 214 questionnaires were issued and 209 returned, representing a response rate of 97.6%.

#### **Background Information of Respondents**

The first section of the questionnaire sought to obtain demographic information of the respondents. Information obtained included sex, age group, years of work experience and level of educational qualification. Table 3 presents the distribution of background information of respondents.

**Table 3: Background Information of Respondents**

<b>Background information</b>	<b>Frequency</b>	<b>Percentage (%)</b>
<i>Sex</i>		
Male	96	46.0
Female	113	54.0
<i>Total</i>	209	100.0
<i>Age Range (years)</i>		
21-25	37	18
26-30	4	2
31-35	82	39
36-40	49	23
41 and above	37	18
<i>Total</i>	209	100.0
<i>Years of Work Experience (years)</i>		
1-5	96	46.0
6-10	90	43.0
11-15	17	8.2
16-20	6	2.8
<i>Total</i>	209	100
<i>Educational level</i>		
Diploma	37	17.7
Degree	100	47.8
Masters	72	34.5
<i>Total</i>	209	100.0

Source: Field Survey, (2018). N=209

Table 3 shows the sex distribution of the respondents. Out of the total of two hundred and nine (209) respondents, one hundred and thirteen (113) representing fifty four percent (54%) were made up of female respondents and ninety six (96) respondents representing forty six percent (46%) were males. This indicates that the administrative senior staff at the University are female dominated. The study also examined the ages of respondents. From Table 3, it could be noted that, out of the two hundred and nine (209) administrative senior staff that were respondents, eighty two (82) respondents representing thirty nine percent (39%) were between the age ranges of 31-35 years whiles forty nine (49) respondents representing twenty three percent (23%) were within the age range of 36 to 40 years.

Also, thirty seven (37) respondents representing eighteen percent (18%) were between the age range of 21 and 25 years. Among the respondents, those who were above forty one (41) years were thirty seven (37) administrative senior staff, representing eighteen percent (18%). The results imply that the University of Cape Coast is dominated by young adults who are aged between 26 and 40 years followed by prime-aged adults. The study further examined the years of respondents work experience. Table 3 again shows that out of the two hundred and nine (209) respondents, ninety six (96) representing forty six percent (46%) had worked with the University between 1 to 5 years, whereas ninety (90) respondents representing forty three percent (43%) had worked with the University between 6 to 10 years. Also, seventeen (17) respondents representing 8.2% had worked between 11 to 15 years.

It is noted from the Table that the percentages of respondents work experience decreases with increasing years of length of service to the University. The implication is that majority (46%) of the respondents have worked with the University between 1 to 5 years. This category of staff tends to leave the institution during the early years of their appointment. This can be as a result of certain unmet expectations. Differences in the educational levels of respondents may influence their job satisfaction and job performance at the UCC.

Table 3 further indicates that, out of the total two hundred and nine (209) respondents, hundred (100) of them representing 47.8% held a first degree, while seventy two (72) respondents representing 34.5% held master's degree and thirty seven (37) respondents representing 17.7% held diploma. It is therefore clear that the University's administrative senior staff workforce is



dominated by first degree holders or higher qualification. This implies that, majority of the administrative senior staff at the University possess the required qualification for the performance of their jobs.

### **Analysis of objectives of the study**

The study collected data on training and job performance of administrative senior staff at UCC. The descriptive aspect was processed with SPSS and analysed with means and standard deviations. The inferential aspect was processed with SMART PLS v3, and analysed with structural equation modelling. The level of effectiveness of training was gauged using Kirkpatrick and Kirkpatrick's (2011) four main constructs which are reaction, learning, behaviour and results. Meanwhile, job performance was gauged using three main constructs according to Koopmans et al. (2011). The job performance evaluation model comprises task performance, contextual performance and adaptive performance.

### **Assessing the Level of Effectiveness of Training among Administrative Senior Staff at the University of Cape Coast**

This objective aimed at determining how administrative senior staff evaluate the effectiveness of training conducted for them at the University. To answer this objective, the study provided questions to elucidate the extent to which the employees considered training to be effective based on the dimensions of the effectiveness of training. Table 4 indicates the overall mean values of the employees' reactions, learning, behaviour and results towards the level of effectiveness of training at the University.

**Table 4: Evaluation of Training Effectiveness**

		Reaction	Learning	Behaviour	Results
N	Valid	209	209	209	209
Mean		3.5251	3.6208	3.8971	3.7713
Std. Deviation		.81580	.77873	.78190	.72453

Source: Field Survey, (2018).

**Mean classification: 1.00-2.32 = Low, 2.33-3.66 = Moderate, 3.67 – 5.00 =**

### **High**

Awang, Ismail and Noor (2010) have established that, overall mean values within the range of 1.00-2.32 indicate a low level of effectiveness; an overall mean value between 2.33-3.66 signifies a moderate level of effectiveness; while overall mean values between 3.67-5.00 indicate a high level of effectiveness of training. From Table 4, on the level of reaction, there were five (5) items that were used to measure the effectiveness of training in terms of the reaction of administrative senior staff at the University. The results showed that these staff at the University are satisfied in terms of their training needs assessment, appropriateness of training to their competency needs and intervals between their training.

The overall mean of these items as shown in Table 4 reveals that the overall employees' reaction to training is moderate ( $M = 3.525$ ,  $SD = 0.815$ ). Based on these items, it is indicated that the administrative senior staff are moderately satisfied with the training programmes conducted for them at the University. From the perspective of the human capital theory, this implies that the University makes some returns on their investment in training for these employees by satisfying their training demands to a certain extent.

This finding shows that these employees of the University are satisfied to some extent with the University's training activities. However, they are not very pleased with their training. This finding conforms to the finding of Mollahoseini and Farjad (2012) who found that most employees were satisfied with their training. Their finding showed that there was a mean value of 3.66 on the reaction level, which signified that most of the respondents were moderately satisfied with the training programs. The finding of this work is also in line with that of Borate et al., 2014; Curado and Teixeira, 2014.

On the level of learning, four (4) items were used to measure the effectiveness of training in terms of learning among the administrative senior staff at the University. The results showed that these employees at the University acquired some knowledge from training; their learning goals were met and needed learning aids were used to impart knowledge into them. The overall mean score of these items as shown in Table 4 means that overall employees' learning from training is again moderate ( $M=3.620$ ,  $SD=0.778$ ). Based on the human capital theory, it is deduced that the University makes some returns from their investment in training these employees but the rate of return in terms of learning is moderate.

This finding shows that the University's training strategy ensures acquisition of knowledge and skills etc but the strategy is not capable of ensuring maximum or utmost impartation of knowledge, skills, attitudes etc into these employees. The finding of this study conforms to that of Mollahoseini and Farjad (2012) who got a mean score of 3.58 in their study, signifying that employee learning from training was moderate. The finding of

this study also conforms to that Curado and Teixeira, (2014); Steensma and Groeneveld (2010).

With regard to behaviour in Table 4, four (4) items were used to evaluate the level of effectiveness of training in terms of employee behaviour as a result of training. It can be deduced that these employees of the University could adopt better or new methods in doing their jobs, apply the knowledge they acquired, take initiatives to achieve goals and their attitudes improved towards their jobs. The overall mean score for behaviour as shown in Table 4 means that the changes in job behaviour of these employees are high ( $M=3.897$ ,  $SD=0.781$ ). Because the changes in job behaviour are high, the University makes high returns on their investment in training these staff for the purpose of improving their work attitude.

This finding shows that the University's training strategy empowers these employees to transfer what they learn during training. This means that the University can continue to apply training methods that ensures transfer of learning for these employees. The finding of this study conforms to that of Awang, Ismail and Noor (2010) whose overall mean score for behaviour was 3.8, signifying that changes in the employees' job behaviour was high.

On the level of results, from Table 4, five (5) items were used to assess the level of effectiveness of training in terms of results accrued from the training of these administrative senior staff at the University. Thus, if the University would count it worthy or beneficial to train these employees, it would depend on the results of training. The results showed that training was effective in making these employees aware and obedient to the statutory administrative regulations and improved their problem-solving skills. The

overall mean score for result in Table 4 shows that training is beneficial among these employees ( $M=3.771$ ,  $SD=0.724$ ).

From the human capital theory perspective, this mean score shows that the University makes good returns from investing in training these employees for the purpose of improving their job performance. This means that the University should continue to count it beneficial to train these employees and sustain its training efforts. The finding of this study conforms to that of Steensma and Groeneveld (2010) whose overall mean score for results was 3.6, signifying that some benefits accrued to the organisation due to training of its staff.

#### **Evaluation of the Job Performance of Administrative Senior Staff at the University of Cape Coast**

This objective aimed at assessing the job performance of the administrative senior staff at the University based on their training. To answer this objective, the study employed questions that will show the extent to which the employees considered their job performance to be low, moderate or high based on the dimensions of job performance. Table 5 indicates the overall mean values of these employees in terms of organising and planning, quality of work, work habits, interpersonal communication, initiating action, decision making and composure. These dimensions help to determine the level of their job performance at the University.

**Table 5: Evaluation of Staffs Job Performance at UCC**

		Organising and Planning	Quality of Work	Work Habits	Interpersonal Communication	Initiating Action	Decision Making	Composure
N	Valid	209	209	209	209	209	209	209
Mean	3.1579	3.2807	3.3469	3.4414	3.3301	3.2847	3.2935	
Std. Dev.	.68391	.70551	.68676	.73860	.70021	.70519	.75674	

Source: Field Survey, (2018)

**Mean classification: 1.00-2.32 = Low, 2.33-3.66 = Moderate, 3.67 – 5.00 = High**

According to Awang et al. (2010) overall mean values of job performance within the range of 1.00-2.32 is low. Mean values of job performance between the ranges of 2.33-3.66 is moderate and those between the ranges of 3.67-5.00 refer to high job performance. From Table 5, it is noted that the job performance of these employees on the dimension of organising and planning is good. These employees perform their jobs well in prioritising multiple assignments, using time effectively and consistently meeting deadlines.

From the Table, the overall mean value for organising and planning means that the level of these employees' job performance in terms of organising and planning is moderate ( $M=3.157$ ,  $SD=0.683$ ). This means that, although the level of job performance among these employees is good and the University makes some returns from investing in training; judging from the human capital theory perspective, however, the returns are within the average level. The finding of this study corroborates with the work of Awang et al.

(2010); Mollahoseini and Farjad (2012) who got an overall mean value of 3.62 and 3.42 respectively, which implied that the job performance of the employees was good but moderate.

On the dimension of quality of work, Table 5 shows that they perform their jobs well. In terms of accuracy, correct application of procedures, ensuring minimal errors and attentiveness to job details, these employees of the University do a good job. From Table 5, the overall mean score for quality of work indicates that the level of these employees' job performance in terms of quality is at the moderate level ( $M=3.280$ ,  $SD=0.705$ ). Based on the human capital theory, this implies that, the level of job performance among these employees is good and the University makes some returns from training.

However, the mean score shows that the returns in terms of job performance remain within the average level. The finding of this study conforms to the work of Neeraj et al. (2014) who realised that there was a reduction in poor quality issues of employees after training. Also, the finding of this work in line with the results of Awang et al. (2010); Mollahoseini and Farjad (2012) who got an overall mean value of 3.62 and 3.42 respectively, which implied that the job performance of the employees was within the moderate level.

In terms of work habits, Table 5 again presents that the employees acquired proper work habits in delivering on their jobs. This is shown in the ability of these employees to perform their jobs within the established departmental practices, ensuring that the job is done according to the approved work schedule and ensuring professionalism to meet job requirements. But the extent to which they do all these in their jobs is minimal. This is because the

overall mean score for work habits indicates that the level of these employees' job performance is at the moderate level ( $M=3.346$ ,  $SD=0.686$ ).

In accordance with the human capital theory, this mean score implies that, the University makes some returns from investing in training to ensure appropriate work habits of the employees. However, the mean score shows that the quality of their work habits in performing their jobs is average. The finding of this study conforms to the work of Curado and Teixeira (2014) who found that the rate of non-conforming work outputs among the employees reduced after training. Also, the finding of this study is in line with that of Steensma and Groeneveld (2010) as well as Awang et al. (2010) who got an overall mean value of 3.6 and 3.62 respectively, which implied that the job performance of the employees was within the moderate level.

With regard to interpersonal communication, it is noted from Table 5 that, the administrative senior staff engage in good interpersonal work relationship. The employees ensure this by relating well with both superiors and subordinates inside and outside their departments. They also ensure a good rapport among themselves, listen to instructions and use diplomacy to diffuse tensed situations. But again, the extent to which they ensure proper interpersonal communication is minimal since the overall mean score indicates that the level of these employees' performance is moderate ( $M=3.441$ ,  $SD=0.738$ ).

From the human capital theory perspective, it is deduced that there are returns accruing from training these employees for effective interpersonal communication. However, the overall mean value shows that the rate of proper interpersonal relationship in doing their jobs is on the average level.



The finding of this study conforms to the work of Rafiq (2015) who found that as a result of training, employees improved in their communication skills in carrying out their jobs. Again, the finding of this study is in line with that of Awang et al. (2010) who got an overall mean value of 3.62, implying that the job performance of the employees was within the moderate level.

On the construct of initiating action, Table 5 reveals that these employees are able to ensure that action is taken where necessary in the course of doing their jobs. This is done through taking available advantage to act beyond the normal requirement. Also, they are able to act independently within their departmental objectives, volunteer and suggest methods to improve their departmental operations. From Table 5, the overall mean score for initiating action means that the level of these employees' performance is moderate ( $M=3.330$ ,  $SD=0.700$ ). The overall mean score for this construct suggests that the University makes some returns from training; based on the human capital theory.

Yet, again, the overall mean value signifies that the extent to which the employees initiate action is also on the average level. That means that these employees do not initiate critical action that yields high performance results. The finding of this study conforms to that of Neeraj et al. (2014) whose result showed that, after training, the employees improved in their confidence to act independently in doing their jobs. Again, this finding conforms to the findings of Steensma and Groeneveld (2010); Awang et al. (2010) who had overall mean values of 3.6 and 3.62 respectively, indicating that the job performance of the employees was within the moderate level.

On the dimension of decision making, it is noted from Table 5 that these employees performance is good. These employees perform their jobs well in identifying problems and opportunities and making the right decision by probing sources to understand the problem or opportunity. Also, they are able to make appropriate choices by evaluating options and involving others to make quality decisions. From the Table, the overall mean value for decision making means that the level of these employees' job performance in making high yielding decisions is moderate ( $M=3.284$ ,  $SD=0.705$ ). With regard to the human capital theory, this means that these employees make decisions that yield some returns for the University. However, the return is within the average level. The finding of this study conforms to the results of Rafiq (2015) which showed that employees improved in terms of decision making after training. Also, the finding of this study is in line with that of Awang et al. (2010); Mollahoseini and Farjad (2012) who got an overall mean value of 3.62 and 3.42 respectively, implying that the job performance of the employees was moderate.

On the dimension of composure, Table 5 shows that these employees of the University perform their jobs well to some extent. They do well in terms of maintaining effective performance under pressure, coping and dealing with stress and presenting a positive disposition even under stress. From Table 5, the overall mean score for composure indicates that the level of these employees' job performance in terms of their individual composure at work is moderate ( $M=3.293$ ,  $SD=0.756$ ). With regard to the theory underpinning this study, this finding implies that the level of job performance of these

employees in terms of composure is good and the University makes some returns from training.

However, the mean score shows that the returns in terms of individual composure on the job are average. This means that these employees are not able to produce the best output at work when they undergo pressure and stress. The finding of this study conforms to the work of Rafiq (2015) who realised that the employees improved in their stress management skills after training. Also, the finding of this study conforms to that of Awang et al. (2010); Steensma and Groeneveld (2010) who got an overall mean value of 3.62 and 3.6 respectively, which implied that the job performance of the employees was within the moderate level.

#### **Effect of Training on Job Performance of Administrative Senior Staff**

The third research objective sought to examine the effect of training on job performance of the administrative senior staff. Thus, how much training contributes to the level of these employees' job performance? In order to examine the extent to which training of administrative senior staff at the University of Cape Coast predict job performance, a structural equation modelling was used; since performance was measured with three different variables. The results of the SEM indicate how well staff training predicts job performance. It also indicates how much unique variance in the independent variable (staff training) explains the dependent variables (Adaptive, Contextual and Task performance).

The results of the structural equation modelling begin with an assessment of the model to determine its fitness. Table 6 presents results on the loadings of the various indicators that measure the latent variables. Hair,

Hult, Ringle and Sarstedt (2014) posit that a measurement model is appropriate when its indicators load above 0.7 on the latent variables or load between 0.4 and 0.7 in situations where maintaining the indicators that load between 0.4 and 0.7 does not lead to an increment in the reliability of the model. Almost all the indicators that loaded were above 0.7. A few of the indicators that loaded below the minimum preferred threshold of 0.7 were maintained because they did not lead to an increment in the reliability of the model. Other indicators that loaded below the minimum threshold value of 0.7 were removed to enable the Average Variance Extracted (AVE) figure meet the minimum threshold of 0.5. Table 6 presents the list of latent variables, indicators retained and their respective outer loadings.

**Table 6: Indicator Loadings**

Indicator	Adaptive Performance	Contextual Performance	Task performance	Training
SBLQ12				0.796
SBRQ10				0.708
SBRQ7				0.790
SBRQ8				0.650
SCQ3			0.537	
SCQ9			0.798	
SCQ10			0.660	
SCQ11			0.878	
SCQ12		0.610		
SCQ13		0.729		
SCQ20		0.849		
SCQ21	0.801			
SCQ23	0.794			
SCQ27	0.734			

Source: Field Survey, (2018).

Also, the reliability of each construct was assessed by observing the composite reliabilities of the constructs used in the model. The results are presented in Table 7. The composite reliability, which also measures internal consistency of each construct, is well above the minimum required value of 0.7, thus 0.820 for Adaptive performance, 0.777 for Contextual performance, 0.815 for Task performance and 0.826 for Training (Table 7). Specifically, composite reliability values between 0.60 and 0.70 are acceptable in exploratory research, while in more advanced stages of research, values between 0.70 and 0.90 can be regarded as satisfactory (Nunally & Bernstein, 1994) as cited in DeVellis (2016). This confirms the reliability of all constructs used in the model. The Cronbach's Alpha results are all above the threshold of 0.7.

**Table 7: Construct Reliability and Validity**

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Adaptive Performance	0.819	0.822	0.820	0.604
Contextual Performance	0.783	0.794	0.777	0.541
Task performance	0.815	0.841	0.815	0.533
Training	0.827	0.832	0.826	0.545

Source: Field Survey, (2018).

Heterotrait-Monotrait Ratio (HTMT) is also another means of determining the discriminant validity of a PLS-SEM model. According to Henseler, Ringle and Sarstedt (2015), a latent construct has discriminant validity when its HTMT ratio is below 0.850. As presented in Table 8, the

HTMT ratios of the multi-item constructs (Performance: Adaptive, Contextual, Task and Training) used in the model were well below the threshold value of 0.850. The model is valid since it has met the conditions for composite validity, internal reliability and discriminant validity. The discriminant validity was assessed using the Heterotrait-Monotrait Ratio. The results are presented in Table 8.

**Table 8: Heterotrait-Monotrait Ratio (HTMT)**

	Adaptive Performance	Contextual Performance	Task performance
Adaptive Performance			
Contextual Performance	0.790		
Task performance	0.688	0.847	
Training	0.273	0.260	0.225

Source: Field Survey, (2018).

The results of the structural model indicate that there is a positive relationship (path coefficient = 0.224: Figure 2) between Training and Task Performance of employees, and this relationship is significant ( $p = 0.002$ : Table 9). Also, the results of the structural model indicate that there is a positive relationship (path coefficient = 0.263: Figure 2) between Training and Contextual Performance of employees and this relationship is significant ( $p = 0.002$ : Table 9). Finally, the structural model results indicate that there is a positive and significant relationship (path coefficient = 0.278: Table 9: Figure 2:  $p = 0.000$ : Table 9) between Training and Adaptive performance.

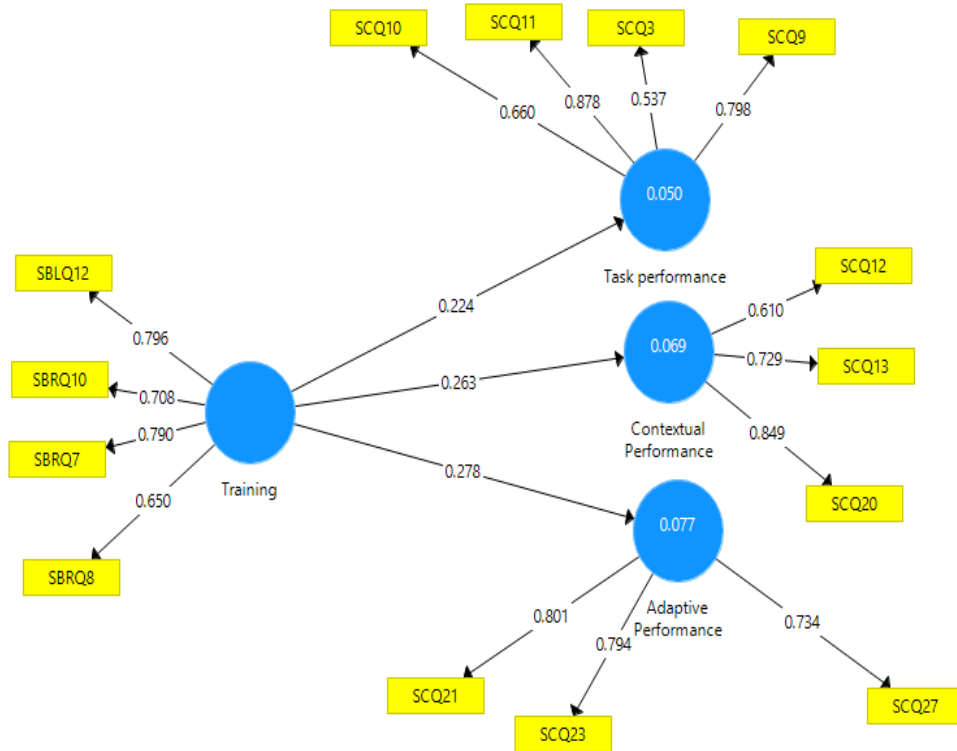


Figure 2: Path Model

Source: SMART PLS (2018).

The results from Table 9 indicate that all the path co-efficients are statistically significant, which leads to the conclusion that the path coefficients are statistically significant from zero. Hair et al (2016) concludes that the structural model path coefficients can be interpreted relative to one another. If one path coefficient is larger than another, its effect on the endogenous latent variable is greater. This points out that training of staff at UCC has the highest effect on the Adaptive performance of the staff (27.8%). Job performance behaviours such as making high yielding decisions and maintaining individual composure on the job forms part of adaptive performance.

The next most significant effect exists between Training and Contextual Performance (26.3%). Job performance constructs such as ensuring proper interpersonal communication and initiating action can be considered as contextual performance. The last significant effect is between Training and Task performance (22.4%). Significant task performance indicators for evaluating individual employee job performance are: good quality of work, effective organising and planning of work and proper work habits. This points out that training of administrative senior staff at UCC has the greatest effect on their ability to adapt within their work environment.

Table 9 also presents results on the coefficient of determination values ( $R^2$  values). Both the  $R^2$  and the Adjusted  $R^2$  play the same role. According to Hair, Ringle, and Sarstedt (2011), the coefficient represents the exogenous latent variables' combined variations on the endogenous latent variable. The result indicates that Training can account for 7.7% of the variations in Adaptive Performance; this is followed by 6.9% in Contextual Performance. The lowest variation is Training with respect to Task Performance (5%). In scholarly research that focuses on managerial issues,  $R^2$  values of 0.75, 0.50, or 0.25 for endogenous latent variables can, as a rule of thumb, be respectively described as substantial, moderate, or weak (Hair, Ringle & Sarstedt, 2011; Henseler & Fassott, 2010).

This implies that at UCC, training alone marginally contributes to the job performance of these staff. In other words, other factors may contribute more to job performance than training. According to Asare-Bediako (2008) as cited in Degraft-Otoo (2012) job performance is a combination of 'ability' and 'motivation'. This means that job performance is a function of ability and



motivation. 'Ability' is the 'can' feature of job performance and it provides solutions to the question of whether employees can do the job. Factors that influence 'ability' are resources, work environment and competencies. On the other hand, 'Motivation' is the 'want' feature of job performance and it provides answers to the question of whether employees are willing to do the job.

'Want' is the degree to which employees are willing to commit their time, effort and attention to their jobs. Factors like rewards and leadership style account for the level of 'motivation' among employees in performing their jobs. All these factors interplay to determine which of them will have a greater contribution to job performance. The finding of this study therefore implies that there is a marginal contribution of training to the job performance of these staff while factors like resources, rewards, leadership style and work environment could have a greater contribution to their job performance.

The small value of the  $R^2$  does not put an indictment on the predictive capacity of the model. Hair et al (2016) have established that as part of assessing the significance of a model in SEM, it is imperative to assess the effect size of constructs to an endogenous variable. In smart PLS, the  $F$ -Squared is used to assess the effect size. The effect size ( $f^2$ ) allows for assessing an exogenous construct's contribution to an endogenous latent variable's  $R^2$  value. The  $f^2$  values of 0.02, 0.15, and 0.35 indicate an exogenous construct's small, medium, or large effect, respectively, on an endogenous construct (Cohen et al., 2010). The results from Table 9 shows that the effect size of Training on Adaptive performance is 0.083, this is followed by the effect of Training on Contextual Performance (0.074) and the least, Training

and Task Performance (0.053). From the classification of Cohen et al (2010) it can be concluded that Training has a small effect size on employee job performance.

**Table 9: Structural Model Results**

	Path Coefficient	T Statistics	R <sup>2</sup>	Adjusted R <sup>2</sup>	Q <sup>2</sup>	P-Value	F <sup>2</sup>
Training -> Adaptive Performance	0.278	3.893	0.077	0.073	0.0407	0.000	0.083
Training -> Contextual Performance	0.263	3.103	0.069	0.065	0.033	0.002	0.074
Training -> Task performance	0.224	3.155	0.050	0.046	0.012	0.002	0.053

Sig. value ( $p \leq 0.05$ )

Source: Field Survey, (2018)

Groebner, Shannon, Fry and Smith (2011) have pointed out that in explaining human behaviour; even small values of R-square can be quite meaningful. R-square is about explanatory power and not truly about "fit." Hair et al (2016) also point out that in addition to evaluating the magnitude of the R<sup>2</sup> values as a criterion of predictive accuracy, researchers should also examine Stone-Geisser's Q<sup>2</sup> value (Geisser, 2017). Chin (2010) holds out that Q<sup>2</sup> values larger than 0 suggest that the model has predictive relevance for a certain endogenous construct. In contrast, values of 0 and below indicate a lack of predictive relevance.

Hair et al (2011) indicate that as a relative measure of predictive relevance, values of 0.02, 0.15, and 0.35 indicate that an exogenous construct has a small, medium, or large predictive relevance for a certain endogenous

construct. Table 9 shows  $Q^2$  values of Training on Adaptive Performance (0.0407), Training on contextual Performance (0.033) and Training on Task Performance (0.0102). The results indicate that Training has a small predictive relevance on employee performance. The results show that the model has a predictive relevance of Training on the performance of the employees. This is because the  $Q^2$  values for adaptive performance, contextual performance and task performance are all above the threshold of zero (0). This study has provided a key dimension to understanding Training and employee Job Performance by indicating three key performance dimensions. The results have shown that Training has a positive effect on the Job Performance of the administrative senior staff.

The findings of this study support the findings of the following studies: Amin et al. (2013) found that training has a positive effect on employees and leads to important benefits for individuals, teams and organisational performance. Ojoh and Okoh (2015) concluded that training is an organisational way of improving workers performance. Similarly, Al-Mzary et al's (2015) results indicated that training positively affected the job performance of the administrative staff of the Yarmouk University. In addition, Onyango and Wanyoike's (2014) results showed that there is a positive effect of training on the performance of employees.

The results of this study show that Training has varied effects on job performance dimensions. Based on this study, it has been seen that though the general perception is that training influences employee performance; but among administrative senior staff at UCC, training influences their adaptive performance more than any other performance dimension. Training to a high

extent affects their ability to learn and adapt to changing working environment. This is very important to help fit in the changing business environment.

The second dimension of employee performance influenced by training at UCC is staff contextual performance. Contextual performance in this study refers to employee behaviours that support the organisational, social and psychological environment in which the central job tasks are performed. This goes on to prove that training at UCC help administrative senior staff to maintain personal discipline, facilitate peer and team performance and improve leadership. And lastly, training influences the proficiency with which these employees perform central job tasks.

## CHAPTER FIVE

### SUMMARY, CONCLUSIONS AND RECOMENDATIONS

#### **Introduction**

This chapter presents the summary, conclusions and recommendations of the study. Whiles the summary presents a concise overview of the research problem, objectives, methodology and findings, the conclusions cover the overall results concerning the findings of the study with regard to the research questions. Finally, this chapter provides recommendations for policy makers and directions for future research. The study has been guided by the following objectives;

1. Assess the level of effectiveness of training among administrative senior staff at the University of Cape Coast.
2. Evaluate the job performance of administrative senior staff at the University of Cape Coast.
3. Examine the effect of training on the job performance of administrative senior staff at the University of Cape Coast.

#### **Summary of Findings**

The study was conducted on training and the job performance of administrative senior staff at the University of Cape Coast; it assessed the effectiveness of training; ascertained the job performance of these administrative senior staff and examined the effect of training on the job performance of these staff of the University.

The target population for the study comprised all administrators in the senior staff category at the University of Cape Coast. The Krejcie and Morgan

(1970) as cited in Delice (2010) sample size determination table was used to select a sample size of 214 respondents for the study. This implies that the sample for the study represents 27.4 percent of the total number of senior staff at the University. Simple random sampling technique was used to select the number of respondents from the target population. Therefore, 214 respondents were randomly selected from the administrative senior staff category for this study.

The study employed a structured questionnaire as the instrument for data collection to obtain data on the demographic features of respondents and the variables being studied. The Structural Equation Modelling (SEM) was used to examine the actual contribution of training to job performance. The dependent variable was job performance; measured in three dimensions of Task, Contextual and Adaptive performance while training was the independent or explanatory variable in the SEM analysis. SEM considers the element between each latent construct and observed indicators. The study further used means and standard deviations to determine how the administrative senior staff evaluated training and consequently assessed their job performance. The study arrived at findings as follows:

- The descriptive statistics results of the study revealed that in terms of appropriateness of training, time interval between training, competence of trainers etc., the administrative senior staff were generally satisfied with the training conducted for their improvement in the University. Similarly, the study revealed that these employees of the University acquired some knowledge, skills and abilities from their training. The

content of their training were useful and learning aids were used to enhance their learning of training content.

Also, it was realised that the training caused positive changes in the job behaviour of these employees in terms of adopting better methods of work, taking initiative, taking challenging tasks etc in the performance of their jobs at the University. Again, it was revealed that there were improvements in these administrative senior staff in terms of quality of work, commission of little or no errors in performing tasks, obeying statutory regulations for their work etc as a result of their training at the University of Cape Coast.

- Moreover, the study revealed that in terms of the proficiency with which the administrative senior staffs perform central job tasks, the analysis showed that these employees were successful in carrying out their assignments. In addition, they successfully performed their jobs with regards to behaviours that support the organisational, social and psychological environment in which the central job tasks are performed. In the same way, they successfully performed their jobs in relation to their proficiency in adjusting to changes in work duties or the work environment.
- With respect to the final objective of this study, it was shown that Training had a positive effect on the various performance dimensions as used in this study. Also, training was statistically significant in explaining all the forms of job performance. The path model indicated that Training had the highest effect on Adaptive Performance, followed by Contextual Performance and the least is Task Performance.

## Conclusions

The following conclusions are made based on the analysis and findings of this study. Training activities that are carried out at the University of Cape Coast have good consequences on the administrative senior staff. Specifically:

- These staff were satisfied with their training at the University (*reaction*). They could learn what was taught during the training activities at the University (*learning*).

They could transfer what they learnt during the performance of their jobs (*behaviour*).

And, all these proved that training was beneficial and worthwhile for the administrative senior staff (*results*).

- Moreover, the study revealed that there was a positive effect of training on the *task performance* of these staff at the University in terms of organising and planning, quality of work and work habits etc. Also, a positive effect was seen on the *contextual performance* of these staff with regard to interpersonal communication and initiating action etc. In the same way, there was a positive effect on *adaptive performance* of the staff in terms of decision making and composure.
- On the whole, the study revealed that training had a positive effect on job performance of the administrative senior staff at the University of Cape Coast. This study intended to predict the real effect training has on the dimensions of job performance of the staff. The contribution of Training to Adaptive performance is higher than its contribution to the other performance dimensions. Though the results show a predictive



relevance, this study concludes that Training alone marginally contributes to the job performance of administrative senior staff at UCC. The study finally concludes that there are some other factors that could be having a larger effect on the job performance of these employees at the University. These factors could be rewards, leadership styles of superiors, resources and the work environment.

This study, as part of others, has added to the growing body of literature on the effect of training on the job performance of this category of employees in organisations. It is anticipated that, other studies that will be carried out in the future will draw and make inferences from this study and build upon it so that there shall be a better understanding into the effect of training on the job performance of administrative staff in organisations.

### **Recommendations**

The following recommendations are made, based on the findings and conclusions of the study.

- This study recommends that to generate higher levels of satisfaction with training, the Training and Development Section of the University must ensure that specific learning goals are set for these staff and better learning aids are employed during training. Effective assessment of knowledge and skills acquired should be conducted and staff should be given the opportunity to apply the knowledge and skills they receive from training. Management of the University must constantly employ strategies that empower these staff to transfer what they learn during training.

- The study also recommends that for the University to further maximise the job performance of these staff, the Training and Development Section of the University should employ tailor made needs assessment that provides these staff with duty specific skills, knowledge and abilities in their sections, units and departments at the University. This will help to identify needs that are peculiar to the contextual and task performance of the administrative senior staff at the University.

### **Suggestions for Future Research**

The following research areas are suggested for further studies.

- Studies can engage in a comparative analysis across public and private organisations in Ghana to identify other dimensions to the Training and employee Job Performance relationship.
- Studies could also compare the strategies for training and job performance of two or more public or private universities in Ghana.

Findings from these studies will contribute greatly to our understanding into the operations of management forces on training and job performance in organisations and Ghana's higher educational institutions.

## REFERENCES

- A de Waal, A., Goedegebuure, R., & Tan Akaraborworn, C. (2014). Adapting the high performance organization framework to the Thai context. *Measuring Business Excellence*, 18(2), 28-38.
- Abdulai, A. I. (2000). Human resource management in Ghana: prescriptions and issues raised by the Fourth Republican Constitution. *International Journal of Public Sector Management* 13.5 (2000): 447-466.
- Alexandrov, A. (2010). Characteristics of single-item measures in Likert scale format. *The Electronic Journal of Business Research Methods*, 8(1), 1-12.
- Al-Mzary, M. M. M., Al-rifai, A. D., & Al-Momany, M. O. E. (2015). Training and Its Impact on the Performance of Employees at Jordanian Universities from the Perspective of Employees: The Case of Yarmouk University. *Journal of Education and Practice*, 6(32), 128-140.
- Amin, A., Saeed, R., Lodhi, R. N., Mizna, S., Iqbal, A., & Tehreem, R. (2013). The impact of employees training on the job performance in education sector of Pakistan. *Middle-East Journal of Scientific Research*, 17(9), 1273-1278.
- Ampomah, P. (2016). The Effect of Training and Development on Employee Performance in a Private Tertiary Institution in Ghana (Case Study: Pentecost University College (Puc)-Ghana). *Asian Journal of Social Sciences and Management Studies*, 3(1), 29-33.
- Anane-Appiah, S. (2011). *Evaluation of training and development practices in the Ghana Police Service: A Case Study of Akropong Division in the Eastern Region* (Doctoral dissertation).

- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103(3), 411.
- APSC, (2005). *Evaluating Learning and Development: A Framework for Judging Success*, Australian Public Service Commission, Canberra.
- Armstrong, M. (2011). *"A handbook of Human Resource Management Practice,"* (11th ed.). London. Kogan Page Publishers.
- Asare-Bediako, K. (2008). *Professional skills in human resource management*. Kasbed Limited, Accra.
- Asfaw, A. M., Argaw, M. D., & Bayissa, L. (2015). The impact of training and development on employee performance and effectiveness: A case study of District Five Administration Office, Bole Sub-City, Addis Ababa, Ethiopia. *Journal of Human Resource and Sustainability Studies*, 3(04), 188.
- Athar, R., & Shah, F. M. (2015). Impact of training on employee performance (banking sector Karachi). *IOSR Journal of Business and Management*, 17(11), 58-67.
- Awang, A. H., Ismail, R., & Mohd Noor, Z. (2010). Training impact on employee's job performance: a self evaluation. *Economic research-Ekonomska istraživanja*, 23(4), 78-90.
- Bartram, S., & Gibson, B. (2000). *Training needs analysis toolkit: a resource for identifying training needs, selecting training strategies, and developing training plans*. Human Resource Development.

- Bassi, L., & McMurrer, D. (2016). Four lessons learned in how to use human resource analytics to improve the effectiveness of leadership development. *Journal of Leadership Studies*, *10*(2), 39-43.
- Becker, G. S. (1964). *Human capital*. New York: Columbia University Press.
- Bergeron, D. M., Shipp, A. J., Rosen, B., & Furst, S. A. (2013). Organizational citizenship behavior and career outcomes: The cost of being a good citizen. *Journal of Management*, *39*(4), 958-984.
- Blanchard, P. N., & Thacker, J. W. (2010). *Effective training: Systems, strategies, and practices* (4th ed.). Upper Saddle River, NJ: Pearson Education, Inc.
- Blume, B. D., Ford, J. K., Baldwin, T. T., & Huang, J. L. (2010). Transfer of training: A meta-analytic review. *Journal of Management*, *36*(4), 1065-1105.
- Boafo, E. K. (2011). *The role of staff training and development in the risk management programme of the inspection and control services Ltd, Accra*. (Doctoral dissertation, University of Cape Coast).
- Bohlander, G., Snell, S., & Sherman, A. W. (2007). *Human resource management*. USA: South–Esetern College Publishing Thompson Learning, 27-54.
- Bolino, M. C., Klotz, A. C., Turnley, W. H., & Harvey, J. (2013). Exploring the dark side of organizational citizenship behaviour. *Journal of Organizational Behaviour*, *34*(4), 542-559.
- Borate, N., Gopalkrishna, D., Shiva Prasad, H. C., & Borate, S. (2014). A case study approach for evaluation of Employee Training effectiveness and

Development program. *The International Journal Of Business & Management*

- Bratton, J., & Gold, J. (2015). Towards critical human resource management education (CHRME): a sociological imagination approach. *Work, employment and society*, 29(3), 496-507.
- Brown, E. A., & Arendt, S. W. (2010). Perceptions of transformational leadership behaviours and subordinates' performance in hotels. *Journal of Human Resources in Hospitality & Tourism*, 10(1), 45-59.
- Brunt, C. (2016). Implications for INGO Management Process. In *Human Resource Management in International NGOs* (pp. 117-143). Palgrave Macmillan, London.
- Budhwar, P. S., & Debrah, Y. A. (Eds.) (2013). *Human resource management in developing countries*. Routledge.
- Burch, N. (2015). *Learning a new skill is easier said than done*. Solana Beach, CA: Gordon Training International.
- Bynum, Y. P. (2015). The power of informal mentoring. *Education*, 136(1), 69-73.
- Byrne, B. M. (2016). *Structural equation modeling with AMOS: Basic concepts, applications, and programming*. Routledge.
- Cardy, R., & Leonard, B. (2014). *Performance Management: Concepts, Skills and Exercises: Concepts, Skills and Exercises*. Routledge.
- Caruso, S. J. (2018). Toward Understanding the Role of Web 2.0 Technology in Self-Directed Learning and Job Performance. *Contemporary Issues in Education Research*, 11(3), 89.

- Cekada, T. L. (2010). Training needs assessment: Understanding what employees need to know. *Professional Safety*, 55(03), 28-33.
- Chase, J. A., Houmanfar, R., Hayes, S. C., Ward, T. A., Vilaradaga, J. P., & Follette, V. (2013). Values are not just goals: Online ACT-based values training adds to goal setting in improving undergraduate college student performance. *Journal of Contextual Behavioral Science*, 2(3-4), 79-84.
- Chen, M. (2014). The effect of training on employee retention. In *2014 International Conference on Global Economy, Commerce and Service Science (GECSS-14)*. Atlantis Press.
- Chin, W. W. (2010). How to write up and report PLS analyses. In *Handbook of partial least squares* (pp. 655-690). Springer, Berlin, Heidelberg.
- Clarke, N. (2010). The impact of a training programme designed to target the emotional intelligence abilities of project managers. *International Journal of Project Management*, 28(5), 461-468.
- Cole, S. (2014). *Global models and the international economic order: a paper for the United Nations Institute for Training and Research Project on the Future*. Elsevier.
- Cooke, F. L. (2013). *Human resource management in China: New trends and practices*. Routledge.
- Creswell, J. W. (2012). Educational research. *Planning, conducting, and evaluating quantitative and qualitative research*.
- Creswell, J. W., & Clark, V. L. P. (2017). *Designing and conducting mixed methods research*. Sage publications.

- Cummings, T. G., & Worley, C. G. (2014). *Organization development and change*. Cengage learning.
- Curado, C., & Martins Teixeira, S. (2014). Training evaluation levels and ROI: the case of a small logistics company. *European Journal of Training and Development*, 38(9), 845-870.
- Cohen, W. B., Powell, S. L., Healey, S. P., Kennedy, R. E., Moisen, G. G., Pierce, K. B., & Ohmann, J. L. (2010). Quantification of live above ground forest biomass dynamics with Landsat time-series and field inventory data: A comparison of empirical modelling approaches. *Remote Sensing of Environment*, 114 (5), 1053-1068.
- Connor, H., & Shaw, S. (2008). Graduate training and development: current trends and issues. *Education+ Training*, 50(5), 357-365.
- Daniels, S. (2003). Employee training: a strategic approach to better return on investment. *Journal of Business Strategy*, 24(5), 39-42.
- Dannelly, B. D., Otey, S. C., Croy, T., Harrison, B., Rynders, C. A., Hertel, J. N., & Weltman, A. (2011). The effectiveness of traditional and sling exercise strength training in women. *The Journal of Strength & Conditioning Research*, 25(2), 464-471.
- De Mel, S., McKenzie, D., & Woodruff, C. (2012). *Business training and female enterprise start-up, growth, and dynamics: Experimental evidence from Sri Lanka*. The World Bank.
- Decenzo, A. D., & Robbins, P. S. (2000). *Personnel / Human Resource Management* (4<sup>th</sup> e.d.) Prentice-Hall, New Delhi, India
- DeCenzo, D. A., & Robbins, S. P. (2007). *Fundamentals of Human Resource Management*. Hoboken, New Jersey: John Wiles & Sons.



- Decenzo, D. A., & Robbins, S. P. (2002), *Personnel/Human Resource Management*, (3<sup>rd</sup> e.d.). New Delhi, Prentice-Hall.
- DeCenzo, D.A. and Robbins, S.P. (2005), *Fundamentals of Human Resource Management*. Wiley, New York, NY.
- Degraft-Otoo, E. (2012). *The effect of training and development on employee performance at accra polytechnic* (Doctoral dissertation).
- Delice, A. (2010). The Sampling Issues in Quantitative Research. *Educational Sciences: Theory and Practice*, 10(4), 2001-2018.
- Dessler, G. (2008). Strategic Human Resource Management and the HR Scorecard. *Human Resource Management*, 11(3).
- Dessler, G. (2010). *Human resource management: The strategic role of human resource management*. New Jersey: Pearson Prentice Hall
- DeVellis, R. F. (2016). *Scale development: Theory and applications* (Vol. 26). Sage publications.
- Devi, V. R., & Shaik, N. (2012), “Training and development: A jump starter for employee performance and organizational effectiveness”. *International Journal of Social Science and Interdisciplinary Research*,
- Dorri, S., Akbari, M., & Sedeh, M. D. (2016). Kirkpatrick evaluation model for in-service training on cardiopulmonary resuscitation. *Iranian journal of nursing and midwifery research*, 21(5), 493.
- Drolet, A. L., & Morrison, D. G. (2001). Do we really need multiple-item measures in service research? *Journal of service research*, 3(3), 196-204.

- Elnaga, A., & Imran, A. (2013). The effect of training on employee performance. *European Journal of Business and Management*, 5(4), 137-147.
- Esia-Donkoh, K., Bampoh-Addo, H., & Afful, D. (2013). Making Employee Training and Development a Tool for Efficiency and Effectiveness in Ghanaian Universities. *Journal of Education and Practice*, 4(24), 88-93.
- Farjad, S. (2012). The Evaluation Effectiveness of training courses in University by Kirkpatrick Model (case study: Islamshahr university). *Procedia-Social and Behavioral Sciences*, 46, 2837-2841.
- Farrell, A. M. (2010). Insufficient discriminant validity: A comment on Bove, Pervan, Beatty, and Shiu (2009). *Journal of Business Research*, 63(3), 324-327.
- Field, A. P. (2005). *Discovering Statistics Using SPSS* (2nd ed.). London: Sage.
- Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of Marketing Research* 18, 3, 382-388
- Geisser, S. (2017). *Predictive inference*. Routledge.
- Gilley, J. W., Shelton, P. M., & Gilley, A. (2011). Developmental leadership: A new perspective for human resource development. *Advances in Developing Human Resources*, 13(3), 386-405.
- Griffin, R. (2011). Seeing the wood for the trees: workplace learning evaluation. *Journal of European Industrial Training*, 35(8), 841-850.

- Groebner, D. F., Shannon, P. W., Fry, P. C., & Smith, K. D. (2011). *Business statistics: A decision making approach*. Prentice Hall/Pearson.
- Grossman, R., & Salas, E. (2011). The transfer of training: what really matters? *International Journal of Training and Development*, 15(2), 103-120.
- Grossman, R., Heyne, K., & Salas, E. (2014). Approaches to training. *The Wiley Blackwell handbook of the psychology of training, development, and performance improvement*, 205.
- Gubbins, C., Corrigan, S., Garavan, T. N., O'Connor, C., Leahy, D., Long, D., & Murphy, E. (2012). Evaluating a tacit knowledge sharing initiative: a case study. *European Journal of Training and Development*, 36(8), 827-847.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing theory and Practice*, 19(2), 139-152.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2013). Partial least squares structural equation modeling: Rigorous applications, better results and higher acceptance. *Long range planning*, 46(1-2), 1-12.
- Sarstedt, M., Ringle, C. M., Henseler, J., & Hair, J. F. (2014). On the emancipation of PLS-SEM: A commentary on Rigdon (2012). *Long range planning*, 47(3), 154-160.
- Hair Jr, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2016). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Sage Publications.

- Hasan, H. A. (2013). Promoting organizational citizenship behavior among employees-the role of leadership practices. *International Journal of Business and Management*, 8(6), 47.
- Haslinda, A. (2009). Evolving terms of human resource management and development. *The journal of International social research*, 2(9), 180-186.
- Heathfield, S. M. (2012). Training: Your investment on people development and retention. *Human Resource Journal*, 56(2), 12-17.
- Henseler, J., & Chin, W. W. (2010). A comparison of approaches for the analysis of interaction effects between latent variables using partial least squares path modeling. *Structural Equation Modeling*, 17(1), 82-109.
- Henseler, J., & Fassott, G. (2010). Testing moderating effects in PLS path models: An illustration of available procedures. In *Handbook of partial least squares* (pp. 713-735). Springer, Berlin, Heidelberg.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the academy of marketing science*, 43(1), 115-135.
- Howard, M. C., & Jacobs, R. R. (2016). The multiphase optimization strategy (MOST) and the sequential multiple assignment randomized trial (SMART): two novel evaluation methods for developing optimal training programs. *Journal of Organizational Behavior*, 37(8), 1246-1270.

- Iacobucci, D. (2010). Structural equations modeling: Fit indices, sample size, and advanced topics. *Journal of Consumer Psychology*, 20(1), 90-98.
- Imran, M., & Tanveer, A. (2015). Impact of training & development on employees' performance in banks of pakistan. *European Journal of Training and Development Studies*, 3(1), 22-44.
- International College of Economics and Finance (ICEF) – 2015. Demand for work skills heating up in Africa.
- Jex, S. M., & Britt, T. W. (2014). *Organizational psychology: A scientist-practitioner approach*. John Wiley & Sons.
- Johari, J., & Yahya, K. K. (2016). Job characteristics, work involvement, and job performance of public servants. *European Journal of Training and Development*, 40(7), 554-575.
- Katcher, S., & Snyder, T. (2003). *Organisational commitment*. USA: Atomic Dog, 90.
- Kim, W. G., & Brymer, R. A. (2011). The effects of ethical leadership on manager job satisfaction, commitment, behavioral outcomes, and firm performance. *International Journal of Hospitality Management*, 30(4), 1020-1026.
- Kirkpatrick, D., & Kirpatrick, J. D. (2011). *The Kirkpatrick Four Levels*. Kirkpatrick Partners.
- Koopmans, L., Bernaards, C. M., Hildebrandt, V. H., de Vet, H. C., & van der Beek, A. J. (2014). Measuring individual work performance: Identifying and selecting indicators. *Work*, 48(2), 229-238.
- Koopmans, L., Bernaards, C. M., Hildebrandt, V. H., Schaufeli, W. B., de Vet Henrica, C. W., & van der Beek, A. J. (2011). Conceptual frameworks

of individual work performance: a systematic review. *Journal of occupational and environmental medicine*, 53(8), 856-866.

Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and psychological measurement*, 30(3), 607-610.

LePine, J. A., Hanson, M. A., Borman, W. C., & Motowidlo, S. J. (2010). Contextual performance and teamwork: Implications for staffing. In *Research in personnel and human resources management* (pp. 53-90). Emerald Group Publishing Limited.

Lievens, F., & Sackett, P. R. (2012). The validity of interpersonal skills assessment via situational judgment tests for predicting academic success and job performance. *Journal of Applied Psychology*, 97(2), 460.

Loy, D. (2012). Score a Facilities Hat Trick: Strategic Goals for Successful Hiring, Training, and Team Commitment. *Facilities Manager*, 28(3), 14-18.

MacKinnon, D. (2012). *Introduction to statistical mediation analysis*. Routledge.

Malhotra, N., & Birks, D. (2012). *Marketing research : an applied approach*. Harlow, England : Pearson

Marimuthu, M., Arokiasamy, L., & Ismail, M. (2009). Human capital development and its impact on firm performance: Evidence from developmental economics. *Journal of international social research*, 2(8).

- Mbiya, D. N., Egessa, R., & Musiega, D. (2014). The effects of training practices on employee's productivity in the public service: A case of the Ministry of Interior and Co-ordination of National Government, Kakamega Central Sub County. *International Journal of Social Sciences and Entrepreneurship*, 1(11), 636-649.
- Mezue B. (2014). Africa's companies need to become more like training schools. *Harvard Business Review. International Business Article*.
- Mohamed, R., & Alias, A. A. S. (2012). Evaluating the effectiveness of a training program using the four level Kirkpatrick model in the banking sector in malaysia. 3rd International conference on Business and Economic Research proceeding 12 - 13 March, pp-1-15.
- Mollahoseini, A., & Farjad, S. (2012). Assessment Effectiveness on the job training in Higher Education (case study: Takestan University). *Procedia-Social and Behavioral Sciences*, 47, 1310-1314.
- Monappa, A & Saiyadain, M. (2008). *Personnel Management* (2nd ed). Tata McGraw-Hill, New Delhi.
- Mullins, L., & Christy, G. (2013). *Management & Organizational Behaviour*. Pearson Education.
- Mwangi, S. (2017). *The Influence of Training and Development on Employee Performance: A Case of Somalia Non-Governmental Organization Consortium in Nairobi*. Doctoral dissertation, United States International University-Africa.
- Mwesigwa A. (2010). *The impact of training on employee work performance behaviour-a case study of government aided secondary schools in Ibanda District*. Uganda. (Unpublished thesis)

- Neagu, O., Lazar, V., Teodoru, M., & Macarie, S. (2016). Human Capital Quality and Development: An Employers' and Employees' Comparative Insight. *Studia Universitatis „Vasile Goldis” Arad–Economics Series*, 26(3), 62-73.
- Neeraj, B., Abhishek, K., Abhilash, C., Rubia, C., & Rajni, B. (2014). A Review on Immediate Release Drug Delivery System. *International Research Journal of Pharmaceutical and Applied Sciences (IRJPAS)*, 4 (1), 78-87.
- Niazi, A. S. (2011). Training and development strategy and its role in organizational performance. *Journal of public Administration and Governance*, 1(2).
- Noe, R. A. (2010), *Employee Training and Development*, (5th ed). Singapore: McGraw - Hill International Edition.
- Novia, C. (2013). Management and Development of Human Resources Functions at Kapin Restaurants in Surabaya. *Agora*, 1 (1), 315-325.
- Ober, U., Ayroles, J. F., Stone, E. A., Richards, S., Zhu, D., Gibbs, R. A., & Simianer, H. (2012). Using whole-genome sequence data to predict quantitative trait phenotypes in *Drosophila melanogaster*. *PLoS genetics*, 8(5), e1002685.
- Obi-Anike, H. O., & Ekwe, M. C. (2014). Impact of training and development on organizational effectiveness: evidence from selected public sector organizations in Nigeria. *European Journal of Business and Management*, 6(29), 66-75.
- Ojoh, J., & Okoh, L. (2015). The Impact of Training on Employees Job Performance: An Empirical Study of Selected Organizations in Warri,



Delta State. *Journal of Policy and Development Studies*, 289(1851), 1-15.

Onyango, J. W., & Wanyoike, D. M. (2014). Effects of training on employee performance: a survey of health workers in Siaya County, Kenya. *European Journal of Material Sciences*, 1(1), 11-15.

Organisation for Economic Co-operation and Development (OECD) (2001). *The Well- Being of Nations: The Role of Human and Social Capital*. Paris: OECD.

Osman, I., Ho, T. C., & Carmen Galang, M. (2011). The relationship between human resource practices and firm performance: an empirical assessment of firms in Malaysia. *Business Strategy Series*, 12(1), 41-48.

Peters, L., Baum, J., & Stephens, G. (2011). Creating ROI in leadership development. *Organizational Dynamics*, 2(40), 104-109.

Phillips, P. P. (2010). *ASTD handbook for measuring and evaluating training*. American Society for Training and Development.

Pineda, P. (2010). Evaluation of training in organizations: a proposal for an integrated model. *Journal of European Industrial Training*

Poropat, A. E. (2011). The role of citizenship performance in academic achievement and graduate employability. *Education+ Training*, 53(6), 499-514.

Punia, B. K., & Saharan, T. (2011). Management approach and conditions of training: a relative study of service and manufacturing industries. *Vision*, 15(3), 239-250.

- Quartey, S. H. (2012). Effect of employee training on the perceived organizational performance: A case study of the print-media industry in Ghana. *Human Resource Management (HRM)*, 4(15).
- Rafiq, M. (2015). Training evaluation in an organization using Kirkpatrick model: a case study of PIA. *Journal of Entrepreneurship & Organization Management*.
- Rehmat, W., Aaltio, I., Agha, M. H., & Khan, H. R. (2015). Is training effective? Evaluating training effectiveness in call centers. *EJBO: Electronic Journal of Business Ethics and Organization Studies*, 20(1).
- Rikkua, R., & Chakrabarty, N. (2013). Training Needs Analysis: A Case Study of Loco Pilots. *Procedia-Social and Behavioral Sciences*, 104, 1105-1111.
- Ringle, C. M., Sarstedt, M., & Straub, D. (2012). A critical look at the use of PLS-SEM in MIS Quarterly.
- Robson, C. (2011). *Real world research: A resource for users of social research methods in applied settings* (3rd edition). Chichester, John Wiley & Sons
- Salas, E. & Stagl, K. C. (2009). 'Design Training Systematically and Follow the Science of Training', in E. Locke (ed.), *Handbook of Principles of Organizational Behavior: Indispensable Knowledge for Evidence-Based Management*. Chichester: John Wiley & Sons, 59–84.
- Salas, E., Shuffler, M. L., Thayer, A. L., Bedwell, W. L., & Lazzara, E. H. (2015). Understanding and improving teamwork in organizations: A scientifically based practical guide. *Human Resource Management*, 54 (4), 599-622.

- Sarkodie, G. W. (2011). *Training and development and employee performance in District Assemblies in Ghana (Bosomtwe District Assembly)* (Doctoral dissertation).
- Sarantakos, S. (2012). *Social research*. Macmillan International Higher Education.
- Sarvadi, P. (2005). The Importance of Employee Development.  
[http://www.entrepreneur.com/article/0,4621\(321261\),00](http://www.entrepreneur.com/article/0,4621(321261),00).
- Saunders, M. N. (2011). *Research methods for business students*, (5<sup>th</sup> ed). India: Pearson Education.
- Schultz, T.W. (1961). *Investment in Human Capital*. New York. The Free Press.
- Shaheen, A., Naqvi, S. M. H., & Khan, M. A. (2013). Employees training and organizational performance: Mediation by employee's performance. *Interdisciplinary journal of contemporary research in business*, 5(4), 490-503.
- Sharif S. (2015) Training Needs Analysis. How to define training needs in our Organisation. *Linkedin Publication*.
- Spector, P. E., & Fox, S. (2010). Theorizing about the deviant citizen: An attributional explanation of the interplay of organizational citizenship and counterproductive work behavior. *Human Resource Management Review*, 20(2), 132-143.
- Sporis, G., Harasin, D., Bok, D., Matika, D., & Vuleta, D. (2012). Effects of a training program for special operations battalion on soldiers' fitness characteristics. *The Journal of Strength & Conditioning Research*, 26 (10), 2872-2882.

- Steensma, H., & Groeneveld, K. (2010). Evaluating a training using the “four levels model”. *Journal of Workplace Learning*, 22(5), 319-331.
- Sultana, A., Irum, S., Ahmed, K., & Mehmood, N. (2012), “Impact of training on employee performance: A study of telecommunication sector in Pakistan”. *Interdisciplinary Journal of Contemporary Research in Business*, 4(6), 646-661.
- Swart, J., Mann, C., Brown, S., & Price, A. (2012). *Human Resource Development*. Routledge.
- Tabassi, A. A., Ramli, M., & Bakar, A. H. A. (2012). Effects of training and motivation practices on teamwork improvement and task efficiency: The case of construction firms. *International Journal of Project Management*, 30(2), 213-224.
- Ternni A. S. Abdulai I. A. & Mohammed, A. (2014) Employee Training and Development: What Trade-offs for the Public Sector in Ghana? *European Journal of Business and Management* ISSN 2222-1905 (Paper) ISSN 2222-2839 (Online) 6,22,
- Tooksoon, H. M. P. (2011). Conceptual framework on the relationship between human resource management practices, job satisfaction, and turnover. *Journal of Economics and Behavioral Studies*, 2(2), 41-49.
- Wang, S., & Noe, R. A. (2010). Knowledge sharing: A review and directions for future research. *Human resource management review*, 20(2), 115-131.
- Williams, R. S. (2002). *Managing employee performance: Design and implementation in organizations*. Cengage Learning EMEA.

**APPENDICES**

**APPENDIX A**

**INTRODUCTORY LETTER**

Our Ref: SB.DHRM/12

15<sup>th</sup> January, 2018.

The Director  
Directorate of Human Resource  
University of Cape Coast  
Cape Coast

Dear Sir,

**INTRODUCTORY LETTER – KWABENA NIMADE OWUSU**

The bearer of this letter, Kwabena Nimade Owusu, is a Master of Commerce (Mcom), Human Resource Management student of the School of Business; he is conducting a research on the topic **“Training and Job Performance of Administrative Senior Staff at the University of Cape Coast.”** The student would want to use your establishment as his unit of study.

We would be grateful if you could help him with the necessary assistance he may need.

We appreciate your co-operation. Thank you.

Yours faithfully,

Dr. Felix Opoku  
**(Head)**

**APPENDIX B**  
**UNIVERSITY OF CAPE COAST**  
**COLLEGE OF HUMANITIES AND LEGAL STUDIES**  
**SCHOOL OF BUSINESS**  
**DEPARTMENT OF HUMAN RESOURCE MANAGEMENT**  
  
**TRAINING AND JOB PERFORMANCE OF ADMINISTRATIVE**  
**SENIOR STAFF**

Dear Sir/Madam,

I am a student of University of Cape Coast, offering Master of Commerce (Human Resource Management) programme at the Department of Human Resource Management, School of Business. This questionnaire is for the collection of data for my thesis work on the topic, *“Training and Job Performance of Administrative Senior Staff”*. This research is in partial fulfilment of the requirement for the award of a Master of Commerce (Human Resource Management) Degree at the University of Cape Coast.

I will be very grateful if you could kindly provide responses to the questions as fairly as possible for the purpose of my academic work. Please, be assured that your responses will remain very confidential and participating in this study is voluntary.

Thank you.

**KWABENA NIMADE OWUSU**

**SECTION A: Demographic Information**

Please tick the appropriate answer.

1. **Sex:** a. Male [ ] b. Female [ ]

2. **Age**

a. 20-25 years [ ] b. 25-30 years [ ] c. 30-35 years [ ]

b. d. 35-40 years [ ] e. 40 years and above [ ]

3. **Years of work experience as an administrator** .....

4. **Educational level:** a. Diploma [ ] b. Degree [ ] c. Masters [ ]

**SECTION B: Evaluation of Training**

5. Please, has the Directorate of Human Resource offered you any training to improve your job performance?

a. Yes [ ] b. No [ ]

6. Please, indicate your rank by ticking appropriately

a. Administrative Assistant [ ]

b. Senior Administrative Assistant [ ]

c. Principal Administrative Assistant [ ]

d. Chief Administrative Assistant [ ]

**Instruction:** Please evaluate the effectiveness of training organised for you by the **Directorate of Human Resource** at the **University of Cape Coast** by ticking the most appropriate answers to the questions below.

**Key:** SA=Strongly Agree, A=Agree N=Neutral, D=Disagree, SD=Strongly Disagree

Where 5 = **Strongly Agree**, 4 = **Agree**, 3 = **Neutral**, 2 = **Disagree**, 1 = **Strongly Disagree**

<b>Reaction</b>		<b>SA</b>	<b>A</b>	<b>N</b>	<b>D</b>	<b>SD</b>
		<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>
7.	My training needs were assessed before I attended the training programmes					
8.	The training programmes were appropriate to my competency needs					
9.	Facilitators for the training programmes were competent and delivered to my expectation.					
10.	I am satisfied with the time interval between the various training programmes					
11.	I am satisfied with the overall training programmes					
<b>Learning</b>		<b>SA</b>	<b>A</b>	<b>N</b>	<b>D</b>	<b>SD</b>
		<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>
12.	The training programmes have equipped me with new knowledge, skills and attitudes for my current job					
13.	The content of the training programmes was useful and met my learning goals					
14.	After the training programmes, there has been an assessment of the knowledge and skills I was imparted with at the training					
15.	Appropriate learning aids or materials were used during the training programmes to enhance my learning					
<b>Behaviour</b>		<b>SA</b>	<b>A</b>	<b>N</b>	<b>D</b>	<b>SD</b>
		<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>
16.	The training programmes have enabled me to adopt new/better methods of doing my work					
17.	I have been able to apply the new knowledge and skills I gained from the training programmes to my current job					
18.	The training programmes have					



	empowered me to take the necessary initiative to achieve my work goals					
19.	The training programmes have improved my attitude in taking challenging tasks					
<b>Results</b>		<b>SA</b>	<b>A</b>	<b>N</b>	<b>D</b>	<b>SD</b>
		<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>
20.	The quality of my Departmental work output has improved as a result of the training programmes					
21.	The training programmes have made me aware of the statutory administrative regulations for my work.					
22.	After the training programmes I obey the statutory administrative regulations in performing Departmental duties					
23.	Due to the training programmes, Departmental documents I draft contain little or no errors.					
24.	My problem-solving skills related to my job have improved due to the training programmes					

**SECTION C: Evaluation of Job Performance**

**Instruction:** Please, based on the training you have been given, assess your job performance in carrying out the following duties by ticking the most appropriate answers to the questions below.

**Key:** U = Unsatisfactory    N = Development Needed    S = Successful    A = Above Expectation    E = Exceptional

Where 1 = **Unsatisfactory**, 2 = **Development Needed**, 3 = **Successful**, 4 = **Above Expectation**  
5 = **Exceptional**

<b>Task Performance</b>						
		<b>U</b>	<b>N</b>	<b>S</b>	<b>A</b>	<b>E</b>
<b>Organising and Planning</b>		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
25.	Prioritising multiple activities and assignments effectively and adjusting as appropriate					

26.	Determining tasks and securing appropriate resources to get things done					
27.	Using time effectively and staying focused to ensure work is completed					
28.	Meeting commitments and deadlines consistently					
<b>Quality of Work</b>		<b>U</b>	<b>N</b>	<b>S</b>	<b>A</b>	<b>E</b>
		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
29.	Accurately and carefully following process/procedures for completing work					
30.	Ensuring a high-quality output of work (resulting in minimal acceptable/zero errors)					
31.	Attentiveness to all details and aspects of the job or process to ensure a complete, high quality output					
<b>Work Habits</b>		<b>U</b>	<b>N</b>	<b>S</b>	<b>A</b>	<b>E</b>
		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
32.	Conducting work within the established (and accepted) department's practices					
33.	Conducting work according to the established and approved work schedule					
34.	Demonstrating professionalism and workplace etiquette					
35.	Applying knowledge and skills to meet job requirements					
<b>Contextual Performance</b>						
<b>Interpersonal Communication</b>		<b>U</b>	<b>N</b>	<b>S</b>	<b>A</b>	<b>E</b>
		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
36.	Relating well to all people – up, down and across – internally and externally in the School/Department					
37.	Establishing rapport; building and maintaining effective working relationships					
38.	Practicing attentiveness and active listening skills					
39.	Using diplomacy and tact; ability to diffuse high-tension situations comfortably					
<b>Initiating Action</b>		<b>U</b>	<b>N</b>	<b>S</b>	<b>A</b>	<b>E</b>
		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
40.	Readily acting consistent with Departmental objectives					
41.	Looking for and taking advantage of					

	opportunities to act beyond what is required					
42.	Taking independent action when appropriate					
43.	Volunteering readily					
44.	Suggesting methods and procedures to improve Departmental operation					
<b>Adaptive Performance</b>						
<b>Decision Making</b>		<b>U 1</b>	<b>N 2</b>	<b>S 3</b>	<b>A 4</b>	<b>E 5</b>
45.	Identifying issues, problems and opportunities and determining that action is needed					
46.	Probing all relevant sources to better understand problems, issues or opportunity					
47.	Choosing appropriate action by evaluating options and considering implications in a timely manner					
48.	Involving others as needed to ensure quality and commitment of decision					
<b>Composure</b>		<b>U 1</b>	<b>N 2</b>	<b>S 3</b>	<b>A 4</b>	<b>E 5</b>
49.	Maintaining effective performance under pressure					
50.	Coping effectively and developing effective approaches to deal with pressure or stress					
51.	Presenting a positive disposition and maintaining constructive interpersonal relationships when under stress					

**Thank you very much.**

Krejcie and Morgan's sample size determination table

N	S	N	S	N	S
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	1000000	384