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GHANA**

**Assessing the Impact of Work Environment on Employees' Productivity in Electricity
Company of Ghana**

by

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MASTER OF SCIENCE

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DECLARATION

I hereby declare that this submission is my own work towards the MSc Project Management and that, to the best of my knowledge, it contains no material previously published by another person, nor material which has been accepted for the award of any other degree of the University, except where due acknowledgement has been made in the text.

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ABSTRACT

The workplace environment is a major asset and has a great influence to the success of an organization. It has a long-term effect on employee's productivity and performance. The research study seeks to assess the impact of the working environment of the Electricity Company of Ghana on employee's productivity within the Jomoro Municipality. Three objectives were set for this work, which are (1) To identify workplace factors affecting employee's productivity ; (2) To explore the relationship between employees' productivity and their work environment; (3) To examine the influence of the physical work environment on employees 'performance and productivity. After review of the relevant literature, a descriptive survey research design was adopted using quantitative methods. The study targeted eighty six (86) respondents by the use of a structured questionnaire as a research instrument, but only eighty (80) respondents returned the survey questionnaires, indicating a response rate of 93% per cent. Purposive sampling was used to select the respondents for the study. Data analysis involved descriptive statistical tools, frequencies, percentages and inferential statistics such as mean scores were determined through the Statistical Package for Social Science (SPSS) IBM version 23. Findings revealed that employees' performance was influenced by several physical workplace environmental factors such as spatial layouts, lighting and noise levels. However the study also revealed that job aid and the physical working environment are having a significance relationship towards employee's performance and productivity. The study recommends that ECG needs to put in place better reward systems that motivate the employees to work better for increased productivity. It is therefore important for management to ensure that the working environment and organizational culture are good enough to ensure employee performance and productivity in the Company.

Keywords: Employee Productivity; Working Environment and Employee's Performance

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LIST OF ABBREVIATION

ECG

Electricity Company of Ghana

DEDICATION

This dissertation is dedicated to the Almighty God for his abundant Grace and guidance upon me for making it possible for me to reach this far, to my family; Father, Mr. Angofi Attobrah Ackah; Mother, Miss Francisca Eluku Essomah and Children, Joshua Attobrah Ackah, Jeremiah Angofi Ackah and Francisca Attobrah Ackah and my Wife, Naomi Sobretey for their immense contribution, prayers and their support that encouraged me to do my research thoroughly.

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CHAPTER ONE

INTRODUCTION

1.1 Background to the study

An institution is set up for the provision or production of services and products with the help of their workforce to undertake a particular assignment within a specific working environment for a proper performance of their duties. It means that the level of productivity within an organization or institution is determined by the quality of the environment where employees operate, since productivity remains important to any serious institution within this competitive era, it is therefore the responsibility of employers to create a conducive working environment that allows workers or employees to help achieve targeted goals.

Working environment is seen as a place where one works or undertakes his or her daily activities of work; it involves the internal and external environment in which workers operate in an organization. According to Kirch (2008), working environment is defined as the surrounding's, conditions and influence at work that affect an employee. As a result of this Brainer (2000), believes that working environment is a very broad category that involves the physical s settings (e.g. heat, equipment), characteristics of the work in question (e.g. workload, task complexity). He believes that, it also involves broader organizational features (e.g. culture, history) and some aspects of the external organizational settings (e.g. local market labor conditions, industry sector, and work life balance).

The work of creating positive and favorable work environments can be challenging, yet this hard work may lead to significant dividends for leaders and employees alike (Shuck, et al., 2018). Since productivity results from both the employer and employee, then creating an enabling workplace on the other hand should not be underestimated by the employer given its importance in the success of an institution. As a matter of fact, how productive an organization becomes is mostly dependent on the quality of employees and these employees will give out their best in an organization when they work in a conducive environment. As a result of this that Raziq and Maubalakhsh (2015), believes that conducive workplace can increase employee level of commitment to the institution in which they work, the level of productivity and this can also lead to an increase in effectiveness of employees in the organization in which they work by reducing the cost associated with employee who are not satisfied with their work environment and as a result of this cannot put up their maximum effort to achieve the desired outcome in the organization.

Naharuddin and Sadegi (2013), support the idea that a research study is to be organized in order to identify the main factors that contribute towards the performance of employees in an organization and to analyze how the work place environment in terms of job aid, supervisors support, and how the physical working environment affects employees performance in the organization. Since the employee performance level and the quality of work produced by employees is most largely determined by the environment and the condition of environment in which they work, for an institution to achieve the best out of their workforce there is the needed to provide the enabling environment for workers in the performance of their duties. Chandrasekar (2011), is of the view that Workplace environment plays a vital role in motivating employees to

perform their assigned work. Since money is not a sufficient motivator in encouraging the workplace performance required in today's competitive business environment.

It is upon this basis that Abdul and Awan (2015), believe that good working environment in an institution serves as a motivating factor for employees to put up their best in the performance of their duties so that productivity will be increase. When such is devoid from the environment employees will become destabilized and this will lead to low productivity hence there is the probability for the organization to run at a loss.

1.2 Problem Statement

Employees' performance in an organization is seen to be the most important aspect towards the sustainability and maintaining the profit made by the organization. It is evident that most organizations lack the right workplace environment and could affect the employees' health and thus gives a great impact towards the employees' performance. Noble (2009) as cited in Yassin et al., (2013) believes that more attention should be paid in identifying and dealing with working condition because when employees have negative perception to their environment they sometimes suffer from chronic stress.

Perry and Porter (1982) are of the view that certain special work environment considerations in public organizations appear likely to constrain motivational levels significantly even when individual and job characteristics are conducive to employee motivation to work. They believe that, the working environments of most institutions are not good enough for workers to perform their duties as a result of their insecure and harmful nature of the environment which poses as a threat to the health of workers. It is believed that the working environments in which employees perform their activities constitute an important element for job satisfaction. As a result of these,

employees under such hardship conditions of work always feel uncomfortable through this factor. Therefore to ensure the level of satisfaction of such employees under uncondusive work place environments, it is always important for management of these institutions to enhance their workplace conditions for employee's productivity.

As result of the risk associated in with environments in the performance of duties by workers, there is the need to investigate and establish if indeed it has an impact on the performance of workers' duties (Bakotic and Tomislav 2013). Working in an electricity company or the use of electricity has a serious potential of causing injury to workers when the right structures and environment are not in place. When this situation arises employees, are likely to face hazards like contacts with life parts which can cause burns, shocks and fire explosion where electricity could be the source of ignition in a potentially flammable or explosive atmosphere. Amusa et al. (2013) conducted a study on work environments and Job Performance of Librarians in Public Universities in South-West Nigeria. The findings revealed that there is a significant correlation between work environment and job performance in libraries. As a result of this there is the need to conduct a study on the Electricity Company of Ghana, Jomoro Municipal to assess the effect of their working environment on employee productivity.

1.3 Research Questions

It is the objective of this research to provide solution to the following questions.

1. What are the workplace factors that affect employee's performance?
2. What are the relationships between the work environment and employees' productivity?
3. To what extent does the physical work environment add towards employees' performance?

1.4 Aim and Objectives

1.4.1 Aim

This research seeks to assess the impact of the work environment of the Electricity Company of Ghana on employee's productivity.

1.4.2 Objectives

The following are the objectives of the study:

1. To identify workplace factors affecting employee's performance;
2. To explore the relationship between employees' productivity and their work environment;
and
3. To examine the influence of the physical work environment on employees' performance and productivity.

1.5 Significance of the Study

Working environment constitute an important factor for the development of every organization. Workers of the electricity company of Ghana faces a lot of challenges relating to the environment in which they work. Most of these challenges emanate from the clients that the organization serves, in times of service delivery some personnel of the organization are attacked and offices vandalized making it difficult for workers to perform their duties. However occupational accidents mostly occur in the course of delivering their services, sometimes leading to the death and injury of some workers as a result of the environment in which they find themselves. Since occupational accidents are caused by the interaction of unsafe environment and unsafe practices. As a result of the risk and hazards associated with the workplace environment of the electricity company, there

is the need for the employer to ensure a good workplace environment that will motivate employees to put up their best in the performance of their duties. It is believed that employers have a control over the work environment in which employees perform their duties; this can be ensured by ensuring that all process, equipment and layout of the organization are designed to the best health and safety standards. Since healthy work environment do not only promote efficiency of employees but also enhance higher productivity and quality service delivery by organizations.

It is the view of this that a research ought to be done to provide better understanding of the relationship between the workplace environment, employee performance and productivity. The findings of this study will assist management of the Electricity Company of Ghana to ensure that workers are protected by providing good working environment in order to achieve productivity. As a result of this the findings of this research study will pave the way for management to realize the conditions that hinder and affect workers workplace environment in performing their duties.

It is believed that most occupational accidents occur as a result of unsecure working environment, good environment do not only promote the performance of employees but it avoids the risk of accidents. The findings of this study will help the electricity company of Ghana on how to address issues and provide measures to improve the working environment of employees for better performance in the organization.

1.6 Scope of Work

This study intends to assess the working environment of the Electricity Company of Ghana, Jomoro Municipal within the western region. The company was chosen for this study because of

the **volatile** conditions under which employees perform their duties which has a direct bearing on their productivity. It implies that a good environment can enhance their performance while bad environment can lead to low productivity. It is upon this reason that the company has been chosen for this study. The population under consideration for the study is the entire staff of the electricity Company of Ghana within the Municipal. This is made up of Eighty six workers including all permanent and contract staff of the Company.

1.7 Methodology

This is a quantitative study, by using a descriptive research design. The study made use of a primary data by administering a questionnaire on the respondents. Respondents were asked to provide information relating to their demographic background, employee productivity and their work environment and information relating to the physical workplace environment. Purposive sampling strategy was used in the administration of the questionnaire on respondents to obtain the data for the study. Quantitative data obtained from the field survey was analyzed using descriptive statistical tools; Bar chart; Pie chart; Mean and Standard deviation. Data analysis was done through SPSS version 23.

1.8 Organization of the Study

This research study has been categorized into five chapters. Chapter one constitute the introduction of the background to the study, problem statement, aim and objectives of the research, research questions, scope of the study, limitations and the organization of the research study. Chapter deals with review of existing related literature. Chapter illustrates the methodology used

for the study while the fourth chapter constitutes the analysis of data and presenting of data. Chapter five contains the summary of findings, conclusion and recommendations.

1.9 Limitations to the study

In the course of the study, the researcher could not escape certain limitations. The selection of the work environment factors that influence employee performance is not exhaustive. There may be other factors that may influence employee performance that might provide more insight on employee performance. The used factors might not provide a clear image of the relationship between physical work environment factors and employee performance.

The researcher encountered several constraints due to time, resources to conduct the study, finance and materials for the research.

The study also limited itself to information and details that could be discussed without compromising any part of the electricity company business aspects due to the competitive and dynamic nature of the company. However these limitations did not affect the study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter discusses sources of information that are related to working environment and its impact on employee productivity. It seeks to identify the gaps that have been left by various researchers on similar subject in order to justify the relevance of this research and as a motivation for further research. This literature review is expected to bring a new insight into the problem studied.

2.2 Conceptual Definition

These subsections provide definitions of some key terms and concepts used in this research study namely working environment, employee productivity and employee performance.

2.2.1 Working Environment

Abdul and Awan (2015), define working environment as "is the environment where people work together for achieving organizational objectives. It means systems, processes, structures and tools and all those things which interact with employees can affect in positive or negative ways on employee's performance". However, Raziq and Maulabakhsh, (2015) are of the view that working environment is of two major dimensions which involves work and context. It is explained that work involves all the different characteristics of the job such as the manner in which the job is done and completed, including the functions such as task activities training, control on one's own job related activities, a sense of achievement from work, variety in tasks and the intrinsic value for

a task. They further explained the second dimension of job satisfaction as context which is made up of the physical working environment and the social working conditions.

It is upon this basis that Moncarz et al., (2009) believes that the right work place environment in which jobs are performed can sometimes be more effective than compensation packages as a basis for employee retention. This is due to the fact that when an employee becomes satisfied and committed and has a good experience of the work place environment, then there is the likelihood that such employees will stay with their current employer for longer period than leaving to join other organization.

2.2.2 Employee Productivity

According to Tangen (2002), the term productivity is most often vaguely defined and poorly understood. In practice, this lack of knowledge results in productivity being ignored by those who influence production processes. Empirical investigations confirm that there is no consensus in industry of what the term productivity actually means and this absences of productivity definition within a company were also found to cause problems. The term productivity is mostly used to describe the rate at which output, such as goods or service, are produced compared to the input, such as labor and capital. According to Heizer and Render, (2014) the reason for checking labor productivity is because the more productive the employees are, the more value is added to the organization.

It is therefore important that for an organization to achieve the level of productivity it deserves, and then employees must be given the necessary tools and provision of the right environment for

them to give out their best in terms of production. Strubler and York (2007) suggest that collaboration in an organization can lead to an enhancement of productivity. According to Krugman (1994), an increase in productivity of an organization remains a key component for managing and directing the productive level of most organizations or economies, most analysts base on this to establish the capacity utilization of an organization. Which paves the way for one to forecast the stand or the position of economies in the business life cycle and determine the economic growth of an economy or organization.

2.2.3 Employee Performance

According to Aguinis (2009), defining the performance of a worker in an organization must not involve the output or results of workers' behaviors but only the behaviors themselves. Aguinis (2009), believes that performance concerns the behavior or what workers do and not about employee's output level or the outcome of their work. Campbell (1990) also defines performance as behavior. It is something done by the employee. This concept differentiates performance from outcomes. Outcomes are the result of an individual's performance, but they are also the result of other influences.

Aguinis (2009), is of the view that performance is made up of three elements combined that allows employees to do their work to a higher level as compared to others: these factors or elements are (1) declarative knowledge, (2) procedural knowledge, and (3) motivation. Aguinis (2009), believes that Declarative knowledge is information and issues about facts and things, involving information concerning the requirements of a given job or task's labels, principles, and goals. However Procedural knowledge is a combination of knowing what to do and how to do it and includes

cognitive, physical, perceptual, motor, and interpersonal skills. Finally, motivation involves three types of choice behaviors: Choice to expend effort, Choice of level of effort, Choice to persist in the expenditure of that level of effort.

2.3 Theoretical framework of the study

Different theories have been developed by people to analyze and explain the relationship between workplace environment and productivity of employee. These theories developed assess why people sometimes behave in in certain way and the reason behind their actions and tries to help with a strategies' to solve their problems. Campbell (1990), defines theory as the collection of assertions, both verbal and symbolic, that identifies the kind of variables that are important for a particular reasons, specifies how they are interrelated and why, and identifies the conditions under which they should be related to each other or not. Notwithstanding this assertion by Campbell, Sutton and Staw (1995), believes that theory is about the connections among phenomena, a story about why acts, events, structure, and thoughts occur. It emphasizes the nature of causal relationships, identifying what comes first, as well as the timing of events.

For the purpose of this study, two factors will be taken into consideration to analyze and understand why people sometimes behave the way they do and the best possible solution that can be offered to move the organization forward.

2.3.1 Herzberg's motivation-hygiene theory

In order to be acquainted with the relevance of motivation towards employees and satisfaction towards the sustainability of an organization several, theories have been developed to direct and guide employees while they are performing their duties. Herzberg was the one who developed this

theory to help employers on how to handle the workforce in their organizations. Herzberg et al., (1959) established a motivational model for job satisfaction. In his study conducted on the good feeling and bad feeling of workers, he categorized the factors that affect the job satisfaction into two (Hygiene aspects and motivation aspects).

According to Robbins (2001) as cited by Tan and Waheed (2011), motivation is a needs-satisfying process which means that when an individual's needs are satisfied or motivated by certain factors, the individual will exert superior effort toward attaining organizational goals. The things that motivate employees to perform their duties (job satisfiers and motivators) are linked to the job content of employees while job dissatisfaction of employees (Hygiene factors) is related to the job context of workers in an organization. This theory believes that things that motivate employees are similar or related to the job contents of workers like Achievement, Recognition, Work to be performed itself, Responsibility and Advancement). On the other hand, the hygiene factors in an organization do not encourage workers but rather ensures the satisfaction of employees. These factors relate to the context of the job such as, Company policy, Administration, Supervision, Salary, Interpersonal relations, Supervisor, and Working conditions (Herzberg et al., 1959).

According to Baah and Amoako (2011), upon critical analyses of the Frederick Herzberg's two-factor theory and assessment of its application on the job and its importance in understanding the essential factors that encourage the employees in Ghana. It was realized that the theory does not only take motivators factors to motivate employees, and to discourage dissatisfaction at work also cannot only be done by the hygiene factors at the work place. Therefore to encourage employees

to perform better at work there is the need for managers to effectively combine all the factors to meet the needs and concerns of their employees at the workplace.

According to Baah and Amoako (2011), the best way for the Ghanaian manager to practice is to weigh the two options or strike a balance between the two factors of motivation, the motivating factors and hygiene factors by considering or laying more emphasis on the hygiene factors since that will be of more value to the Ghanaian worker. In the study it was observed that, there is an adage in Ghana that ‘a hungry man is an angry man. This implies that a hungry and an angry man’s performance and commitment to work in an organization will be adversely or negatively affected and invariably reduce organizational performance. As a result of this there is the need to manage these factors of motivation well to achieve efficiency and effectiveness in Ghanaian organizations.

Hygiene aspects can alter the dissatisfaction of employees into short run motivation but it cannot originate satisfaction. These include work surroundings, administration, and company strategy, excellence of supervision, interpersonal relationships, job security, and salary. However, the motivational aspects have long term effects. These aspects elevate optimism for the job and transform no dissatisfaction into satisfaction. Herzberg also indicated that absence of hygiene factors may enhance the dissatisfaction of the employees.

2.3.2 Expectancy Theory

According to Locke and Lathan (1990), this theory was developed by Atkinson, Lewin, Peak and others, but became known in industrial-organizational psychology by Vroom (1964). It stipulates that the performance of employees is a multiplicative function of expectancy (the belief that effort

will lead to performance), instrumentality (the belief that performance will lead to rewards) and valance (the perceived value of the rewards or outcomes of performance).

According to this theory, Valance is the ability of an employee's preference (or value, incentive, attitude, and expected utility) for a particular output level. Expectancy refers to the likelihood that a particular effort put in by an employee will lead to a particular first-level outcome. On the other hand instrumentality is the extent to which a first-level outcome will lead to an expected second-level outcome. For instance, according to Luthans (2005), a person would be motivated (motivational force or effort) toward superior performance (first-level output) to realize promotion (second-level output).

Parijat and Bagga (2014) argue that employees have personal goals which are to be achieved and for this reason they work in organizations. These personal goals can be fulfilled by organizational rewards or work outcomes. Therefore, the relationship between organizational rewards or work outcomes and personal goals is important, that is to what extent organizational rewards fulfill an employee's personal goals and how attractive are those rewards to the employee.

Vroom theory of expectation believes that employees are encouraged to meet a specific target or goal only when the managers of the organization believes in that goal or target and if there is the likelihood that the measures being put in place will assist the employee to achieve the set target or goals (Wehrich and Koontz 1999).

2.4 Empirical Literature

This literature analyzes the various researches that have been conducted in Nigeria, Tanzania and Pakistan on the working environment and its effect on productivity or performance of employees to determine the research gaps that are of concern to this study.

2.4.1 Empirical Analysis in Nigeria

In order to assess the working environment and its impact on employee productivity, several researches have been conducted in Nigeria to analyze this situation. According to a study conducted in government agencies of Ondo State, Nigeria to analyze the influence of workplace environment on workers' welfare and productivity by Ajala (2012), it is believed that the working conditions of workers in these organizations are very bad and not promising enough for better employees' performance and productivity as well as the achievements of organizational goals.

It implies that the convenience and satisfaction of the working environment, the higher the employees' performance towards productivity. This means that, if other factors remain constant then good environment is directly proportional or related to performance by employees. This confirms Hughes (2007) assertion that nine out of ten workers believed that a workspace quality affects the attitude of employees and increases their productivity.

This association suggests that, when the working environment of workers is improved, then it is likely that the comfort workers enjoy in the environment will also increase their performance. Because of this scenario it is recommended that industrial social workers must be advocating with management to create a conducive working environment and good communication network that will attract, keep, and motivate its workforce for healthy living and improved productivity and

guarantee virile employees, enthusiastic employers and sustainability of the organization (Ajala 2012). It was observed in the study that a better lighting at the workplace will help prevent accidents, the organization will also realize some kind of intangible benefits that are likely to be associated with better employee morale and reduction in accident rates. It is upon these bases that Hameed Amjeed (2009) recommends that accomplishing daily task with dim light by employee's causes eyestrain, headaches and irritability and must be avoided in organizations.

As a result of this, the studies concluded with evidence that bad and unsafe working environment, result in significant losses for workers, organizations, families, and national economy. A convenient working environment that aids in the performance of will work automatically improves productivity.

In another research conducted by Noah and Steve (2012), to find out if there is a relationship or a linkage between the workplace and the attitudes of employees towards their job in a study on a service-oriented work institution in Nigeria. The study revealed that out of one hundred and twenty (120) respondents from the work organization, there is a significant relationship between work environment and respondents' attitude to job.

The working environment of the organization detected to be socially and physically challenging, which leads to misbehaving of some employee, behaviors such as absenteeism, low commitment and apathy leading to low productivity in the organization. This is in line with an opinion by Akinyele, (2007) that good workplace environment ensures the well-being of employees in the organization and will motivate employees to put up their maximum effort when performing their duties to ensure that targeted goals or productivity is achieved. It was recommended by the research

irrespective of the need for good workplace environmental factors an introduction of financial rewards, good communication system, and better leadership style must be ensured by management in the organization.

2.4.2 Empirical Analysis in Jordan

It is believed that the nature of certain workplace environment and some other physical working conditions of most organization are considered as the most important factors that affect the daily operation and life of the employees therein. However most of these challenges can be controlled if the organization creates a conducive environment for the study and discussion of the appropriate solutions. According to Assaf and Alswalha (2013) in a study conducted in Jordan on some paint manufacturing industries, the study highlighted some tangible related problems faced by majority of the industries relate to the nature of their physical working environment, which does not help the work flow of these organizations. According to Arrelano (1991) as cited by Assaf and Alswalha (2013), improving the overall workplace has been of concern for instance an essential agenda of the European Union, during the establishment of the consolidated version of the Treaty establishing the European Community.

The relation amongst these factors affects the internal and external environmental working conditions on workers of the Jordanian paint manufacturing industries, in terms of the degree of satisfaction on the part of employees have been in this study and the findings are as follows:

The study showed that the working environmental conditions have an effect on all the personnel groups with an average of 49%, 36 % in the administration level, 53 % by the technical official's

level and 57 % among other workers. The study therefore attributed this kind of variations to the administration level who receives much better working conditions than the other working group levels. This situation results in their feeling of good conditions considering them normal for administrators, in contrast to the daily suffering of other working group levels, especially workshop personnel's of the organization. This confirms Schulze and Steyn ,(2003) opinion that in order to understand people's behavior at work, managers or supervisors must be aware of the concept of needs or motives, which will help 'move' their staffs to act.

The study of the Jordan paint industries indicated that there is a strong correlation between the work environments; employee satisfaction and the case of the internal conditions on productivity were not strong. This affirms Kyko, (2005) assertion that toxic work environment gives unpleasant experiences and at the same time, de-actualize employees' behavior. This environment reinforces low self-actualizing behaviors and it leads to the development of negative traits of the employees' behavior.

2.4.3 Empirical Analysis in Pakistan

The study of Ahmad et al., (2014) to investigate and test a model base on some five dimensions of working environment and its effect on performance and productivity of employees. Upon analysis of the data received from 115 employee of the company it was realized that the performance of employees mostly depends on physical working conditions of the company, training and development of employees and good communication practices by employees. This is in line with the study conducted by Junaida et al., (2010) on the physical workplace environment toward employee performance and productivity. With 152 respondents received from the survey amongst

the civil servants in the Ministry of Youth and Sports in Malaysia, the study revealed the same results as indicated by Junaida et al., (2010).

Ahmed et al., (2014) therefore suggested that the work environment has an impact on an individual's ability to work safely, competently and in compliance with operational performance targets. It is necessary to train the employees to efficiently and effectively handle the work overload. Other research works conducted in Pakistan have always been specific on elements and factors inherent in the working environment of organizations. It is upon this scenario that, Awan (2015) upon realizing that the working environment plays an important role in an organization conducted a study on banks and insurance organization to measure the effects of working environment on productivity of employees. It was observed that the factors such as supervisors support, relations with co-workers, training and development of employees, attractive incentives and recognition plans, adequate work load to employees at the work place are all helpful in developing a working environment that has positive impact on employee's level of performance towards productivity in an organizations. Awan (2015) therefore indicated that good working environment is helpful in increasing employees' level of productivity. This indicates that by developing the work environment, the level of employees' productivity can be increased and maintained.

2.5 Conceptual Framework of Working Environment

With reference to the existing literature as indicated in the linkage between the work environment and employee productivity can there be conceptualized and depicted in Figure 1. This conceptualized framework explains the set of workplace elements that are perceived to have impacts on the productivity of employees.

Figure 1:

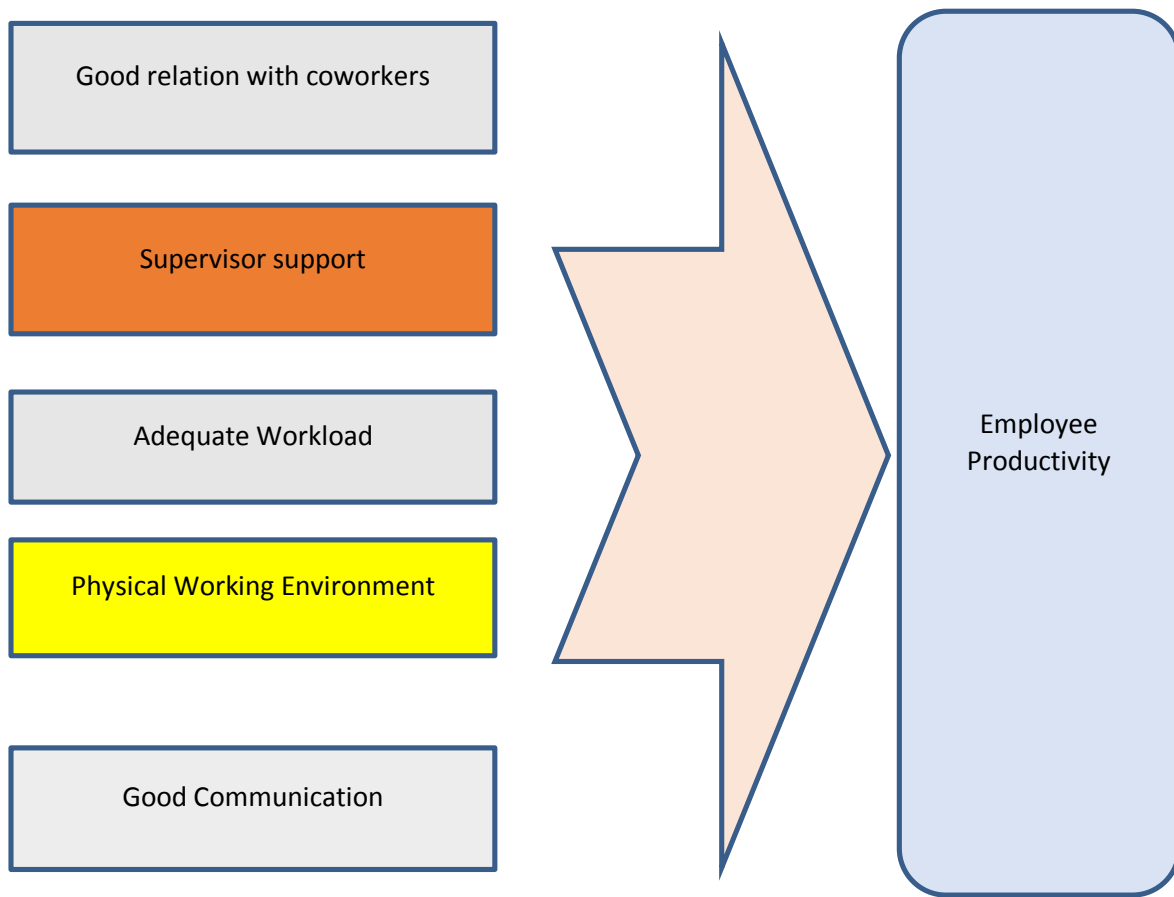


Figure 1: Conceptual Framework, Source Author (2018)

2.6 Components of Work Environment

Briner (2000), as quoted by Oludeyi (2015) is of the opinion that work place environments of institutions have several properties, components and elements that may affect both physical and psychological well-being of employees. Most workplaces and organizations are faced with a lot of factors that affects the performance of employees and as a result of this, researchers and writers have attributed the challenges to various components or factors. In this era most organizations are faced with the challenge of retaining their work force as a result of certain environmental factors.

2.6.1Physical Environment

The physical work environment has an influence on an organization's performance of duties by its employees; it impacts positively or negatively on the conduct of employees' duties. The physical workplace environment involves the internal and external office layout, temperature level and also office work setting in an organization.

Amir (2010) is of the opinion that there are two major elements that relate to the physical environment such as the office layout plan and the office comfort level of employees. He further explained that the physical workplace is an area in an organization that is being arranged so that the objectives of the organization could be realized or achieved. The physical working environment can always determine whether an employee will be able to fit within the environment of the workplace or not. However, Boyce et. al., (2003) in their research into lighting effects on people at work believe that, there are several factors in the workplace that could affect employees' performance in terms of the physical working environment such factors includes the lighting system of the workplace.

However, McCoy and Evans (2005), argue that the elements of physical work environment have to be good enough so that employees would not be stress while undertaking their duties. The performance of the employees is mostly dependent on the kind of environment in which they work; the working environment has an impact on the productivity level of employees and well-being of organizations. Similarly, the office design also has an impact on the performance of employees and environmental factors are considered as source of motivation for them as indicated by the study of (Amina and Shehla 2009).

2.6.2 Socio-Cultural Environment

The socio-cultural environment in an organization has to do with the norms, code of ethics, traditions, and habits that an organization has adopted. It has to do with the values of the people where the business operates. This consists of the organizations social working environment, management policies and practices, how culture in the organization is preserved, employee's interactions towards the performance of their duties. Rossiter *et al.* (2000), in a study of the Canadian social workers report that the codes of ethics in organization are not used in practice and practitioners are often only dimly aware of their existence. The study pointed that social workers do not use ethical decision-making models.

Individuals who identify as liberal tend to view the validity of rules based on how those regulations affect one's outcome and advocate for social justice so all are treated fairly and equally (Rosik et al., 2013). This confirms Graham et al., (2009) that liberals see themselves as having an optimistic outlook on people and believe people should be as free as possible to direct themselves. Conservatives, on the other hand, describe themselves as having a more responsive approach and view people as largely individualistic, seeing the need for regulations to ensure a proficient society.

An organization without a corporate culture or code of ethics to guide its workforce while performing their duties is likely to face challenges as workers will have to behave and react within the job environment the way they like. Organizations are to ensure that proper guiding principles are put in place to direct the behavior and conduct of workers in the performance of their duties.

Many of the internal challenges currently faced by organizations – the retention and attraction of staff, the appropriate work–life balance and the future cost-effectiveness of decision making – would be met by a branded workplace: a workplace that fully expresses the culture, beliefs and values of the organization (Clements-Croome 2018). It implies that if a company put the proper branding measures in place it will attract a lot of benefits such as, a critical opportunity to realize and leverage the intrinsic value of a company's brand, help in reinforcing a consistent internal and external presentation of the company and giving a focus to disparate parts and connecting individuals to groups. Smrita et al., (2010) found that the development of good culture in the organization affects employees' level of motivation.

The branded workplace is a physical expression of an organization's corporate values, ethos, beliefs and behavioral codes. It makes tangible those things typically expressed by the intangible. In the best examples, the brand does not exist solely as a point of identification on the shop window, the forecourt or the headed paper: it permeates the organization's whole way of doing business.

2.7 Work environment and job performance factors

The work environment in an organization has an impact on the performance of employee's activities; it has the potential of impacting positively or negatively in an organization. According to Al-Anzi (2009) in a research work submitted to the University of Malaysia, the main environmental factors that tend to affect employees' productivity and performance are grouped into two categories:

2.7.1 Factors that arise from premises, offices or factory design

Al-Anzi (2009) identified the followings as the key premises or office factors that tend to affect employee productivity and performance, furniture, workspace availability, light intensity, weather/temperature, ventilation/humidity, noise/vibration and premises hygiene/welfare facilities. This is in line with Rowan and Wright (1995) as cited by Saleem et al., (2012) that physical environmental factors like temperature, noise, flow of air, humidity, and furniture affects the employees' productivity. Therefore, ergonomics should be considered as part of the indoor environment. The workplace environment design has a significant impact on workers' attitudes and productivity; it can influence workers either to put in maximum effort when performing their duties. Saha (2016) indicates that the productivity of people in their workplace can be greatly influenced by the design and physical work space they occupy on a daily basis.

According to Naseem et al., (2012) in a study to measure the impact of favorable working environment, good office design and motivations on employees' performance, observed that favorable workplace environment, good office design and high motivations increase employees' performance. Kneeling and Kallus (1996) as cited by Saleem et al., (2012) believe that the choice of furniture and equipment for an office should be paid attention to by managers given that the quality and quantity of work generated by employees are influenced by the office environment.

2.7.2 Management driven factors

According to Al-Anzi (2009) in a study conducted, found these factors as emanating from managerial level or management driven factors that are likely to affect employee's productivity and performance: Plans of the organization, such as the allocation of responsibilities or jobs at all

levels of organizations, details of job descriptions and administrative support needed by employees to undertake their tasks as well as health and safety policies issues , training and development for employees, development of code of ethic, working practices and the adequate supply of protective clothing and equipment.

According to Opperman, (2002) as quoted by Yusuf and Metiboba (2012) study, workplace environment has components of three major sub-environments, such as technical environment in the organization, the human environment and the organizational environment. The technical environment is made up of the tools, equipment's, technological infrastructure of the organization and other physical or technical components. Opperman, (2000) believes that the technical environment creates elements that enable employees to undertake their respective duties and activities. The human environment concerns the relation amongst peers, others with whom employees relate teams and work groups of employees, the leadership and management. This environment is designed in such a way that it encourages informal interaction among employees in the work place so that the opportunity to share to knowledge and exchange ideas could be promoted in the organization, this can help as a basis to attain maximum productivity.

According to Robertson and Huang (2006) workplace environment has a positive relationship with job performance. To them employees' greater satisfaction with the layout of their work environment is related to higher job performance and increased collaboration with coworkers. Kyko (2005) as quoted in Assaf and Alswalha (2013) talks of two main types of working environments such as conducive working environment and toxic work environments. This is in line with the Hameed and Amjad (2009) study that better workplace environment produces good results and that employees are more concerned about their workplace surroundings.

2.8 Consequences of Ineffective Work Environment

Ineffective working environment experienced in an organization has major effect on performance and the sustainability of the organization in business, employees working in a conducive and ineffective work environment always exhibit differences in their performance and output. It is assumed that most employees spend about half of their lives within certain environments, which have a greatly influence or impact on their families, actions taken by them, abilities and performance of such people (Sundstrom, 1994). However, better achievements and an increased productivity is assumed to be the result of better working environment and better physical environmental factors of office or the organization which can lead the boosting of the employees' confidence and ultimately improving their productivity level.

According to Pech and Slade (2006), as quoted by Leblebici (2012), argued that the employee disengagement is increasing and it has becomes more necessary for institution to improve their workplaces that will influence the workforce positively. According to the study, the focus is on symptoms of disengagement such as distraction at the workplace, lack of interest, poor decisions by management and high absenteeism instead of dealing with the root causes of the problems. As a result of this research conducted, Roelofsen (2002) suggested that improving working environment results in a reduction in a number of complaints and absenteeism and an increase in productivity.

However, Levert, Lucas and Ortlep ,(2000) as cited in (Yassin *et al.*, 2013) conducted a research study on South African nurses and found high burnout on three levels: emotional exhaustion, depersonalization and low personal accomplishment. The study attributed the nursing burnout to

a high workload and other organizational factors within the hospital. A study conducted by Bornstein, (2007) states that in organizations where employees are always exposed to a stressful environmental working conditions, the productivity becomes low and that there is a negative impact on the delivery of service within the organization. However, when the working condition becomes good enough, productivity increases and there is a positive impact on the delivery of services in the organization.

2.9 Supervisor support and employees' performance

The support of the supervisor can lead to the employees' performance and achievement of higher productivity in an organization, but if there is lack of support on the part of the supervisor towards employees in the performance of their duties, then there is the probability that production will be decreased as expected in the organization. According to Eisenberger *et al.*, (1986) as cited by Kuvaas and Dysvik, (2010) in an organizational support theory, employees view their supervisor's orientation towards them as indicative of the organization's support because the supervisor acts as an agent of the organization

A study conducted by Nijman (2004), believes that if the supervisor is has a very good communication strategy for instance during the training and development program, to direct and coach well then certainly the employees will probably increase their competency and job performance will increase. This support the assertion that employees develop general views concerning the degree to which their immediate manager values their contributions and cares about their well-being (Kottke and Sharafinski 1988). For organizations to gain from the employee's performance, then both parties between the employees and supervisor need to play their role, which is there must be a proper relationship amongst the two with a high level of commitment. When full

commitment is given, it will definitely lead to positive results to the performance from the employees in the institution. According to Landry and Vandenberghe (2012), on a research conducted to study the effect of supervisor's commitment on the influence of employees commitment towards the job performance, it was realized that the supervisor's positive commitments generally correlate significantly with the employee's positive commitments towards job performance in an organization.

However, the study showed that supervisor commitment moderated the relationship of employees' affective commitment to job performance, such that when the supervisor's affective, normative and continuance-sacrifices commitments were high, the relationship between employee affective commitments and performance was weaker. According to Naharuddin and Sadegi (2013) on a study conducted at Miyazu (Malaysia) to research into the effect of working environmental factors towards employees' productivity. It showed that, supervisors support only is not significant enough towards the employees' performance and productivity in the organization. However, factors such as job aid and the physical work environment are having a significant relationship towards the employees' performance and productivity.

2.10 Workload and Productivity of Employees

Looking at the amount of work and its consequences on the worker's health and safety and the sustainability of organizations, it is important that employers have to develop a deeper understanding of workload in their organizations. The concept of workload was generally defined as the intensity of the effort made by workers to meet the demands of their jobs under defined physical conditions, taking into account their own condition and the various mechanisms at play in their jobs (Teiger, et al., 1973; Tort, 1974). According to (Champoux and Brun, 2000; Cloutier,

et al., 2005; Gauthier and Bourbonnais, 2006) as cited in Fournier and Brun, (2015) Workload constitutes a major risk factor for workers' well-being while also affecting organizations' profitability.

However, according to DiDomenico and Nassbaum (2008), the work to be done by an employee or workload can be determined by the level of relationship between the work demand, the condition under which the work is to be performed, the actions, skills that is needed to do the work as required and the expertise of the employee undertaking the duty. The work demand can involve the physical activities and different factors required to perform the task. Which means the workload concerns the relationship that exist between the job demand and the employees resources available including, his skills, expertise level, attitudes towards the work to be done and the perceptions towards the work (Young et al., 2008; DiDominico and Nussbaum, 2008). According to Patterson and Armets (1998) an increase in the workload is likely to increase the productivity level of an organization in the short run; but may lead to an increase in the cost of production in the long term, low productivity and stress on the part of the employees performing the task in the organization. As a result of this when the workload is increased there is an in increase in productivity in the short term, but can lead to a reduction in the long term productivity level of an organization.

2.11 Well- being and employees' performance in the work Place

This is to ensure whether the concept of job-related well-being could be a useful indicator towards employees' performance at the work place, the understanding of how job-related well-being is related to productivity has to be a concern of all organizations. Employee well-being represents

the physical, mental, and emotional facets of employee health, synergistically acting to affect individuals in a complex manner (DeJoy and Wilson, 2003).

The well-being of employees at the workplace is a major factor that employers must ensure in their organizations in order to derive the maximum level of productivity from their employees in the organization. Green (2010) is of the opinion that employees who are not satisfied with their subjective work environment quit from their job. According to Harter et. al, (2003) Well- being in the workplace is, in part a function of helping employees do what is naturally right for them by freeing them up to do so- through behaviors that influence employee engagement and therefore that increase the frequency positive emotions. Bryson et. al, (2014) believes subjective wellbeing of an employee has three major causal mechanisms that can lead to a higher job performance and productivity in an organization. Firstly the affecting employees' cognitive abilities and processes by allowing employees to more creative whiles undertaking their duties and to be more effective at problem solving in their organization. The second is by affecting employees' behavior to perform their work by allowing them to cooperate with one another, socialize and become collaborative. The third is by improving upon employees' physiological level and their general health conditions that can lead to performance on the job.

Hassan et al., (2009) suggest that it is prudent for an organization to invest in the health of its workers and their wellbeing. The reason being that good investment made in the health and wellbeing of workers are likely to save an institution more terms of productivity lost than the actual investment or the original investment. This can be evidenced by several case studies, notably in some large United Kingdom industries. Addressing issues on employee's well-being in an

organization is a major determinant in the success of the organization as employees will always be motivated without grumbling to give out their best in performing of their duties. It is upon this basis that Black (2008) study realized and recommended that there is positive and growing evidence that there exist a relationship between the works to be performed, health and wellbeing and is closely and powerfully linked together and need to be addressed together.

2.12 Communication and employee's performance

Before an organization can achieve its goals in its work environment there must be a proper communication system in place to direct activities of workers. Management always has to deliver information and direction on duties to be performed to subordinates and subordinate report back all in the form of communication. According to Matin et al., (2010) as cited in Imran (2011), bad communication strategy can lead to a problem that cannot be easily resolved in an organization or a relationships. When this happens the performance level, productivity, trust and moral to work in an organization will be affected.

However, Femi (2014) in a study conducted in Nigeria revealed that effective communication creates mutual understanding between management and workers which helps in building genuine relationship among both parties in the organizations. The study observed that poor communication can affect workers' performance therefore, organizations must regularly articulate their policies, goals and objectives to their workers in order to improve work performance.

Certo (2000), believes that most leaders understand that their jobs becomes more easier when they are able to access and have a constant flow of information arising from their employees, as well as all stakeholders of their institution, both positive and negative feedback, as well as ideas and

observations. Communication has become the lifeblood of every organization and without it, things will not get done well. It is therefore important that management of organizations find all possible means of eliminating barriers that hinder the flow of disseminating information to members of their organizations to enhance productivity. An effective system of communication procedure in an organization leads to a positive effect on the performance and productivity of an employee in the organization, as a result of this it is important for organizations to ensure that their communication systems and procedures are well managed in order to enhance the employee's job performance (M. Imran Malik, 2011).

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The previous sections presented the detailed research background and the conceptual framework for this study on the impact of the working environment on employees' productivity in government agencies using Electricity Company of Ghana as a case study. This chapter illustrates the methodology used for the primary research about the research paradigm, research design, and data collection methods employed in the study. The first section begins with a theoretical discussion of the importance of the research paradigm in orienting research and argues for the selection of a critical realist paradigm in this research. The next section discusses the motivation for selecting a descriptive survey approach as the research design for this study and explains the relevance of interspersing a quantitative method for more rigorous results. The third section describes the measures used in the quantitative questionnaire. The last section contains notes on the sampling technique and ethical procedures applied in this study before the process of data collection and the analysis employed in the quantitative phase of the research.

3.2 Research Paradigm

This section presents the philosophies ascribed to research: the existing paradigms. The paradigms are presented as a discussion, from which the model attributed to this study is drawn. The section therefore briefly considers the epistemologies and methodologies relevant to each model and the evolution of these concepts. The primary research paradigms are positivism, post-positivism, social constructivism, and critical realism (Alvesson and Sköldbberg, 2009). Every change

illustrates a paradigm shift (Kuhn & Hacking, 2012). Positivism, a system where research study can be assessed and proven was very important and powerful paradigm during the 20th century and procedure or exercise and most of the data collection activities, presentation, education, statements that seems to be immutable, verification and generalization of some findings. As a result of this debate, the paradigm of social constructivism came into existence or emerged. As its name suggests, Alvesson and Sköldbberg (2009) explain this system as disclosure of how social situations are constructed. It is believed that social constructivism is linked with feminism, and critical theory.

Critical realism tries to be an alternative to social constructivism and is aligned with some important theories and has some characteristics that can be felt. (Alvesson and Sköldbberg, 2009). Critical realism, came into being by Bhaskar (2011), believes that “both positivism and social constructivism are too superficial, unrealistic and anthropocentric” (Alvesson and Sköldbberg 2009, p.16). Positivism depends on a single set of data or issues for all information, ideas, and proven theories merely link the sets of data, while social constructivism came into existence from social constructions and must not be replaced or imbued with meaning beyond those concepts. According to Kempster and Parry (2011), Constructivists embrace different realities in a situation while the critical realist believe that the reality is only one but only interpreted in different ways. Because constructivist and interpretivist do not accept certain facts about a situation as result of that they deny themselves by acknowledging the truth and realities in some cases, therefore the interpretation they sometimes give is without facts. “Critical realism asserts that there is a world independent of human beings, and also that there are deep structures in this world that can be represented by scientific theories” (Alvesson and Sköldbberg 2009, p.16).

Critical realism is generating methodological implications and is used to explore dynamic mixed-methods research design. In a study conducted by Zachariadis et al., (2013) to determine the ontological beliefs of critical realism concerning epistemological situations like causation. They explained the importance of a critical realism with mixed-methods research approach in the financial sector, therefore finding value in this research design, more importantly in solving issues of the workplace environment, employee productivity and proper inferences.

Ryan, et al., (2012) applied critical realism in a study of business relationship processes and providing a model to guide researchers about process changes. In the public service, Mutiganda (2013) analyzed the impact of governance issues and budgetary policies and strategies on accountability from a critical realism view of point in Finland, finding more widespread effects than the budgetary information alone showed. To sum up, critical realism is useful for social research with ethnographic content, offering an empirical research design; that is, using a theoretical model to collect and analyse data relevant to the attitudes and opinions of the study participants. As a paradigm, critical research is therefore selected for this study.

3.3 Research Design

The research designs that are good to critical realism, according to Robson (2011), include case studies, grounded theory studies and ethnographic studies. Easton (2010), believes that selecting a case study in a research work creates some issues of insufficient data in a positivistic approach. A case study is less appropriate to research on individuals' actions and behavior, or the investigation of situation in quantitative terms such as perceptions and attitudes of employees. In a public sector research, according to McNabb (2013), is a diverse and constantly changing field of inquiry, applicable to this study on the impact of the working environment on employees'

productivity. The purpose of this study is to assess the impact of the working environment on employees' productivity in government agencies. Irrespective of the introduction of several analytical methods and structured pluralism, the attention now is still on applied or empirical research for the resolution of practical issues and problems (McNabb 2013). While seeking motivation in the government agencies, Wright and Grant (2010), noted several studies on a range of topics, involving job satisfaction, absenteeism of employees, intention to leave, organizational commitment by employees, job performance, and organizational performance.

3.3.1 Quantitative Design

When using quantitative design, Mujis (2011) believes that the use of a survey to collect numerical data that can be easily and systematically analyzed by the researcher, mostly with the use of statistical t. The data to be collected from respondents for this study concerns some of the models on the existing literature previously presented, such as job satisfaction surveys used by Abdulla, et al., (2011), Al-Rubaish et al. (2012), and Ellickson and Logsdon (2001) among many others. These surveys are presented quantitatively, where numerical data are obtained in through Likert scales or similar quantitative data gathering. The collection of data for descriptive study or statistics, according to Mujis (2011), is about numbers and totals, and some changes within numeric data. However according to Bryman (2012) quantitative collections of data for study may fail to answer research questions fully. Bryman (2012), believes that quantitative data explore breadth-gathering data from several numbers of respondents, records, or events.

3.3.2 Selection of Research Design

According to Kothari (2004), research design is the arrangement of conditions for collections and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. He is of the view that research design is the conceptual structure within which research is conducted; it constitutes the blue print for the collection, measurement and analysis of data. For the purpose of this study a descriptive research survey will be used to assess the impact of the workplace environment on employee's productivity. This design has been adopted as a result of Robson (2005), assertion that a survey research involves a cross-sectional design in relation to which data is obtained predominately by questionnaire or structured interview.

This research aims to assess the impact of the workplace environment of the Electricity Company of Ghana on employee's productivity within the Jomoro Municipality. The variables to study the research problem include working environment, job satisfaction, and employee productivity. To explore if there is a relationships between these factors, this research design selection was based on Creswell and Plano Clark's (2007), assertion that qualitative data collection is involved in the overall quantitative data collection. This is appropriate because the study starts with a pre-established theoretical concept of employee productivity and the research seeks to measure the level and effects of the situation by gathering numerical data that can be analyzed with aid of statistical methods.

3.5 Quantitative Survey

Questionnaires to collect data are mostly self-administered in order to save time and resource constraints. Data are collected and analyzed by entry into a computer program, such as Statistical Package for the Social Sciences (Version, 23). McNab (2013) states that there are two major forms of analysis mostly used for quantitative data are descriptive and statistical. The descriptive analysis of data is made up of totals, measures of central tendency and measures of spread. However the statistical measures mostly involve hypothesis testing by using measures such as correlation analysis and regression analysis.

3.5.1 Questionnaire design

This study uses models of research to measure the experiences, behaviors, and expectations of government agencies to assess the impact of the working environment of the Electricity Company of Ghana on employee's productivity within the Jomoro Municipality. Three sets of questionnaires will be used as measures in this study. The first scale was the working environment of the Electricity Company of Ghana on employee's productivity within the Jomoro Municipality Questionnaire. The second is the general job satisfaction scale of three items which were adapted from Mottaz (1985) and was used by the Meyer and Allen's (1991) in their organizational commitment questionnaire used by Karim and Noor (2006).

3.5.2 Pilot study

The designed questionnaire were distributed to 15 employees in the target population of the company to answer as part of the pilot study to ensure that the wording was clear and unambiguous and to measure the Reliability and Internal Consistency.

3.6 Population

According to Kumar (2011), population is a full set of cases from whom the required information to find answers to your research question is obtained. This study aims to assess the impact of the working environment of the Electricity Company of Ghana on employee's productivity within the Jomoro Municipality. To refine the focus of the study, the target population consisted of personnel's of the company, including management members, Engineers of the company, contract staff and staff from the various offices of the company within the Jomoro municipality and other supporting staff.

3.7 Sample Size and Sampling Procedure

Kothari, (2004) defines sample as small group of respondents drawn from a population about which a researcher is interested in getting the information so as to arrive at a conclusion. The researcher decided to use all the target population of the company for the study as a result of the limited number of the population, which is eighty-six personnel. As a result of this a purposive sampling strategy was used in determining the samples for the study by the use of a structured questionnaire.

3.8 Data Analysis Procedure

According to Sharma (2005), the process of collecting, modeling and transforming data to receive meaningful information, making suggestions, conclusions and supporting decision making. The researcher obtained the data for the study by the use of questionnaires, the data collected was critically examined and checked for completeness and clarity to ensure accurate results. Quantitative data obtained was then analyzed using descriptive statistical tools and presented using bar chart,

pie chart in addition to the mean and standard deviation by the help of SPSS. The data was then presented by the use of frequency tables, bar graphs, and pie charts.

3.9 Ethical Procedures

According to Creswell and Plano (2000), believe that in the cases of a mixed strategy for research work, ethical issues is mostly about the concerns of respondents who are involved in this research and their approval to respond to the questionnaire for the research work. The request to conduct the survey was sent to the company for consideration and approval to the study, which was accepted by the institution.

Mujiis (2011), believes that in social research study some ethical issues are treated as matters of concern with informed consent and confidentiality.

3.10 Chapter Summary

The processes, procedures and methods to be used in the research on the impact of the working environment of the Electricity Company of Ghana on employee's productivity within the Jomoro Municipality. Firstly, a critical realism paradigm adopted selected to pave way for greater rigor to the study which is attainable under constructionist or a positivist paradigm. This strategy supported the research design of a mixed methods approach to this study.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

Chapter four covers data analysis, results, response rate, and demographic characteristics of the respondents and discussions of the study with reference to the research objective and research methodology.

4.2 The Response Rate

A total number of 86 questionnaires were given out to respondents. Out of these questionnaires 80 were returned duly completed. This represents 93% response rate. This was considered a representative sample for further studies according to Mugenda and Mugenda (2003) who report that a rate of 50% and above is acceptable.

4.3 Demographic Characteristics

This part sought to identify the demographical characteristics of the respondents. The characteristics considered in the study were gender, age and job role.

4.3.1 Gender of Respondents

The study identified the gender composition of the respondents to determine the extent of disparity in gender in the organization and to ensure that the study was representative. The results are presented in Table 4.1 and Figure 4.1 respectively.

Table 4.1 Gender of Respondents

Characteristics	Category	Frequency	Percentage
1. Gender	Male	56	70%
	Female	24	30%
	Total	80	100%

Source: Field Survey (2018)

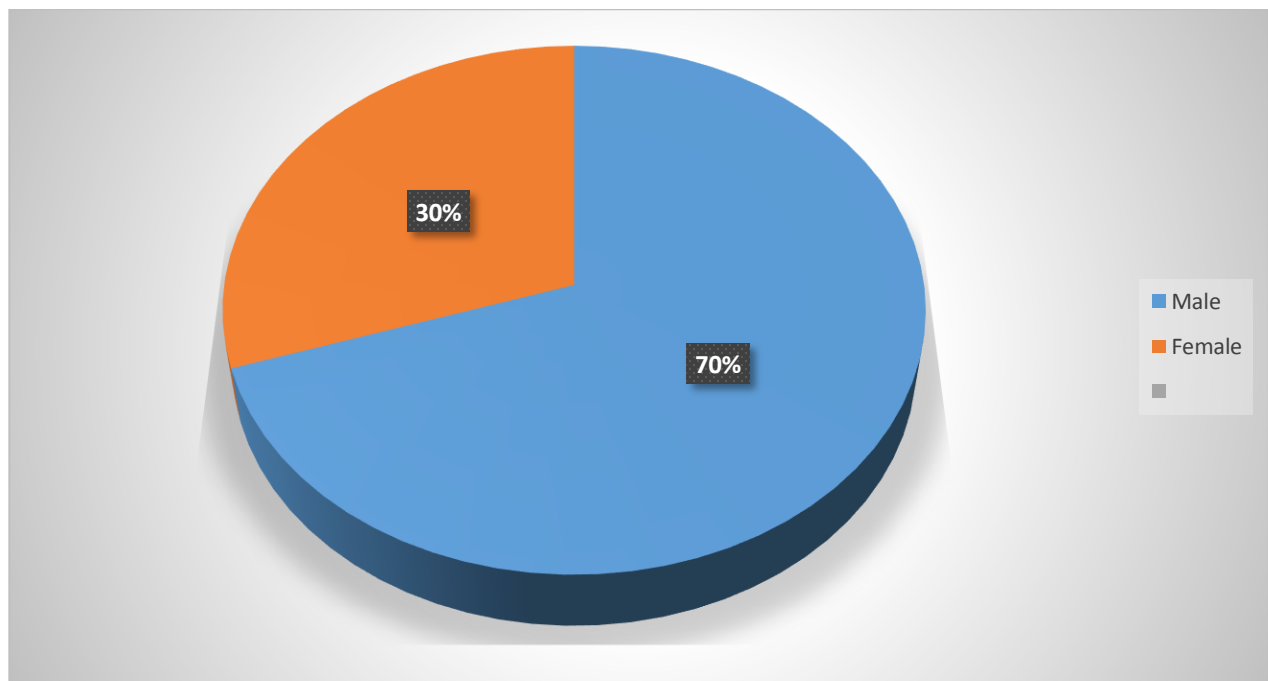


Figure 1Figure 4.1: Gender of Respondents

The result indicates that 70% of respondents were male, while 30% were female, which indicates that majority of the respondents were males as compared to the females. This could be due to the fact that certain aspect of the job needs to be performed by men.

4.3.2 Age of Respondents'

The study sought to establish the ages of the respondents to ensure that the view of different age range are taken into consideration. The results are tabulated below in the table in Table 4.2

Table 4.2: Respondents' Age

Characteristics	Category	Frequency	Percentage
Age	20-30	16	20%
	30-40	40	50%
	40-50	11	13.7%
	50-60	10	12.5%
	Above 60	3	3.8%
	Total	80	100%

Source: Field Survey (2018)

As shown in Table 4.2, 20% were between 20-30 years; 50% were found in the age bracket 30 – 40 years while 13.7% were between 40 – 50 years of age. 12.5 were found in the age bracket of 50 – 60 years and 3.8% were above years 60. This is an indication that most of the respondents or employees are below the age 40 years.

4.3.3 Highest Level of Education

The study sought to know the educational level of the respondents. The level of education encompasses knowledge and skills which assisted the researcher to understand the level of perception of the respondents. Figure 4.2 shows the results.

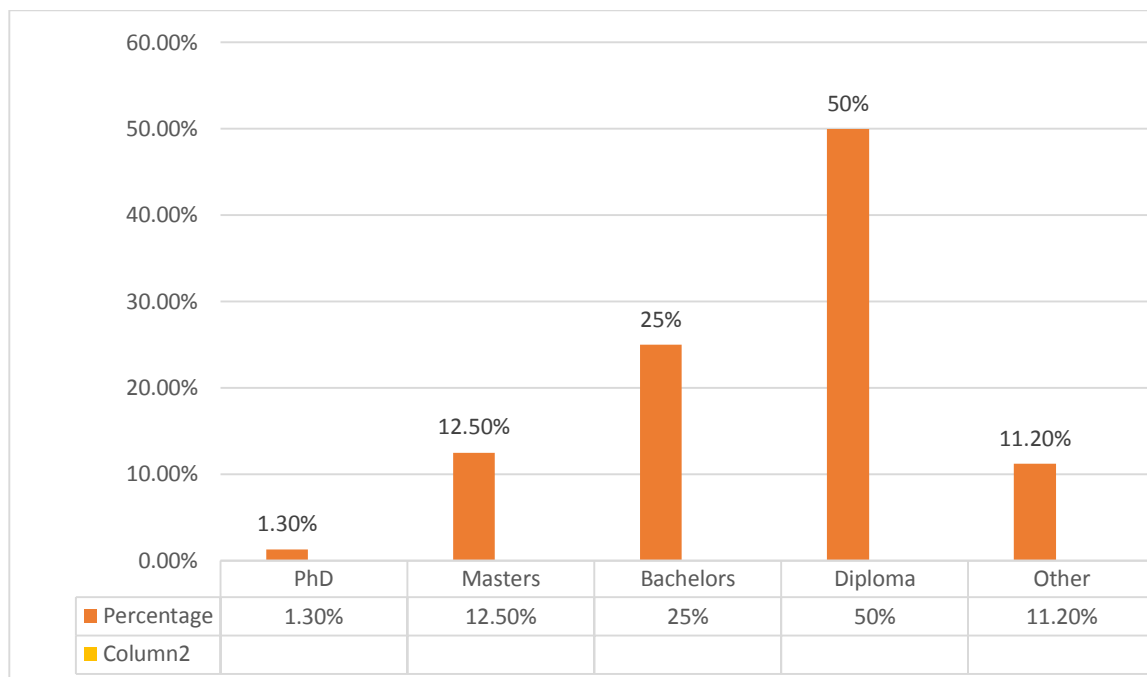


Figure 4.2: Educational Level

It can be observed from the findings of the respondents that 50% had diploma; 25% had degree; 12.5% had masters; 11.2% had other qualification and 1.3% PhD. It was concluded that a majority of the respondents had degrees and diploma certificates.

4.3.4 Years of Experience

The study sought to establish the years of experience of the respondents whether they had attained adequate experience to provide accurate and reliable information. Table 4.3 below outlines the results.

Table 4.3 Years of Experience

Characteristics	Category	Frequency	Percentage
Years of Experience	Less than 5 years	14	17.5%
	5-10 years	31	38.7%
	10-15 years	19	23.8%
	15-20 years	13	16.3%
	Above 20 years	3	3.7%
	Total	80	100%

Source: Field Survey (2018)

The results indicated that 17.5% of the workers had worked with the ECG for less than 5 years; 38.7% of the respondents had worked with the ECG between 5 – 10 years. 23.8% of the respondents had worked with the ECG between 10 – 15 years; 16.3% of the respondents between 15-20 years and 3.7% had worked for more than 20 years.

4.4 Findings of the Main Objectives

Respondents were asked to indicate their degree of agreement or disagreement on statements relating to their workplace environment in relation to their performance. The Likert-type scale was used to rate their responses on a 5 – point scale ranging from 5 = Strongly Agree to 1 = Strongly Disagree.

4.4.1 Workplace factors affecting employee's performance

The objective of the study was to analyze workplace factors affecting employee's performance. The respondents were asked to respond to a number of statements regarding workplace factors

affecting their performance using a five-point Likert scale of SD=Strongly Disagreed, D=Disagreed, N – Not decided, A=Agreed and SA = Strongly Agreed as shown in Table 4.4. The responses are summarized in the table below;

Table 4.4 Workplace Factors

	Mean	Standard Deviation	Rank
Workplace Factors	M	Std.	R
Manager's attitude	4.2	1.02	1st
Self-organizing teams	4.2	1.02	2nd
Organizational culture	4.1	1.01	3rd
Personal Problems	4.1	1.01	4th
Financial rewards	4.1	1.01	5th
Training and Development	4.1	1.01	6th
Job Satisfaction	4.01	1.00	7th
Stress	4.0	1.00	8th
Job content	3.8	0.97	9th
Organizational communication	3.8	0.97	10th

Source: Field Survey 2018

From the findings indicated above the respondents strongly agreed that manager's attitude is a major factor that can affect the performance of their work in the organization, with a mean of (Mean =4.2). If the managers' behavior towards employees in the performance of their duties is not favorable, then is likely that performance will be adversely affected in the organization. This is in line with the assertion by Kottke and Sharafinski, (1988) that employees develop general views concerning the degree to which their immediate manager values their contribution and cares

about their well-being. It is upon this basis that Landry and Vandenberg (2012), believe that supervisor's positive commitments generally correlate significantly with employee's positive commitments towards job performance in an organization. However employees believe that self-organizing teams is another factor that affects their performance at work, from the findings above with a mean of (mean= 4.2), it is believed that when employees are united and well organized it will affect the level of productivity thereby achieving the goals of the organization. Nonaka (1994), believes that self-organizing teams can foster organizational knowledge creation. This has made employees believe that self-organizing teams can affect their performance at work. Self-organizing teams according to Takaeuchi and Nonaka (1986), are to be considered as a cross-functional and have multi learning skills. The employees gain, share and maintain knowledge through (a) multi learning: learning across multiple levels (individuals, groups, and organization) and multiple functions, and (b) transfer of learning: learning across other units of the organization. With a mean of (Mean = 4.2) employees believe that if they are empowered in teams the goals of the organization can be achieved, it is important that employees are allowed to use the full amount of their expertise, not just to execute their work but to monitor and control themselves, make their own decision and even design their processes.

Organizational culture is another major factor that can affect their daily operations at work; from the findings majority of the respondents strongly agreed that organizational culture can affect their performance in the organization. With a mean of (mean = 4.1), employees believe that when culture in the organization promotes productivity then there will be higher performance by employees. According to Clements-Croome (2018), many of the internal challenges currently faced by organizations are the retention and attraction of staff, the appropriate work-life balance

and the future cost effectiveness of decision making which would be met by a branded workplace: a workplace that fully expresses the culture, beliefs and values of the organization. It can be evident from the analysis that majority of the respondents agreed that Personal problem (mean = 4.1); Financial reward (mean=4.1) and Training and development (mean=4.1) are the major factors affecting the performance of their job in the organization. These factors have a long term effect on their performance and productivity. This analysis can therefore be interpreted that workplace factors are of great importance to performance of employees because when they have a conducive workplace, they can focus and perform better.

4.4.2 Relationship between the Work Environment and Employees' Productivity

The objective of the study was to determine the relationship between employees' productivity and their work environment at the ECG. The employees were requested to respond to a number of statements regarding the relationship between employees' productivity and work environment by indicating their agreement using a five-point Likert scale of SD= Strongly Disagree, D=Disagree, N- Not decided, A= Agreed and SA =Strongly Agreed. The findings are summarized in Table 4.5.

Table 4.5 Work Environment and Employee's Productivity

	Mean	Standard Deviation	Rank
Employees' productivity and the work environment	M	Std.	R
Good culture at the work place	4.4	1.05	1 st
ECG operates in a socially responsible manner	4.2	1.02	2 nd
Senior managers visibly demonstrate a commitment to quality	4.2	1.02	3 rd
ECG positively impacts people's life	4.1	1.01	4 th
Job security	4.0	1.00	5 th
Overall, I am satisfied with my job	3.9	0.99	6 th
I have the tools and resource to do my job well	3.8	0.97	7 th
My job makes good use of my skills and abilities	3.6	0.95	8 th
Safe work environment	3.6	0.95	9 th
Diversity and inclusiveness	3.5	0.94	10 th

Source: Field Survey 2018

The results in Table 4.5 indicate that the respondents strongly agreed that good culture at the work place help them to perform their job well (mean = 4.4). The respondents believe that the cultural environment in which they find themselves help them to do better on the job. This is in line with Smrita et al., (2010), that the development of good culture in the organization affects employee's level of motivation to perform their job well; they are of the view that branded workplace is a physical expression of an organization's corporate value, ethos, beliefs and behavioral codes. It makes tangible those things typically expressed by the intangible; the brand does not exist solely as a point of identification on the shop window, the forecourt, but it permeates the organizations' whole way of doing business. Senior managers visibility demonstrate a commitment to quality

(mean = 4.2). Majority of the respondents believe that the presence of their managers while performing their work gives them the moral to do better on the job. Opperman (2002), believes that the human environment concerns the relation among peers, others with whom employees relate in teams and work groups of employees, the leadership and management. This environment is designed in such a way that it encourages informal interactions among employees in the work place so that the opportunity to share knowledge and exchange ideas could be promoted in the organization. This can help as a basis to attain maximum productivity. ECG operates in a socially responsible manner (mean= 4.2). Respondents believe that because of good relations they have with their clients while performing their duties, it increases the level of their productivity in the organization. As a result of this their work has a great impact on the lives of their clients (mean= 4.1); this means that clients need ECG to perform their day to day activities. However, from the finding above it can be observed that majority of workers at ECG have the requisite tools and materials to perform their job well with a mean of (mean=3.8); as a result of this they are satisfied with their work and this can be evident with a mean of (mean = 3.9). Because of this majority of the respondents feel there is job security in the organization with a mean of (mean=4.0). It is upon this basis that Green (2010), believes that employees who are not satisfied with their subjective work environment quit their job. Harter et al., (2003), argue that well-being in the workplace is in part a function of assisting employees to do what is naturally right for them by freeing them up to do so, through behaviors that influence employee engagement and which will also increase their positive emotions.

Safe work environment (mean= 3.6) would make them better perform in the organization. By and large it should be noted that the physical work environment can spur employee's performance.

4.4.3 Physical Work Environment on Employee's performance and Productivity

The study sought to examine the influence of the physical work environment on employee's performance and productivity. The respondents were asked to respond to a number of statements regarding workplace factors affecting their performance. The findings are summarized in Table 4.6 below.

Table 4.6 Employees Physical Work Environment

	Mean	Standard Deviation	Rank
Employees' Physical Environment	M	Std.	R
Indoor Climate	4.3	1.04	1 st
Awkward body postures	4.3	1.04	2 nd
Ergonomic condition	4.2	1.02	3 rd
Chemical Hazards	4.1	1.01	4 th
Risk of Accident	4.0	1.00	5 th
General Work environment	3.9	0.99	6 th
Noise	3.8	0.97	7 th
Vibration	3.6	0.95	8 th
Biological Conditions	3.6	0.95	9 th
Poor Lighting	3.5	0.94	10 th

Source: Field Survey 2018

The results in Table 4.6 depict that the respondents strongly agreed that indoor climate in their work environment helps them to perform better on the job; this can be evident with a mean of (mean = 4.3). This means that good indoor climate with better atmosphere, fresh air has a good relationship with the performance of workers. However, bad atmosphere will lead to the discomfort of workers. This view of respondents is in line with Rowan and Wright (1995), that

physical work environment like temperature, noise, flow of air, humidity and furniture affects employees' productivity. Ergonomic condition (mean = 4.2), majority of respondents believe that the design of their work environment helps them to do better on their job. This belief by the respondents is in line with Saha's (2016), assertion that the productivity of people in their workplace can be greatly influenced by the design and physical work space they occupy on a daily basis. Awkward body postures (mean = 4.3); majority of respondents believe that awkward body postures has an influence on the performance of their work; it means that performance will be adversely affected leading to low productivity. This must be avoided by altering the design of the work environment and work practices to be in conformity with a good ergonomic design of the workplace. The respondents also agreed that the risk of accident (mean = 4.0) and chemical hazards (mean=4.1) are high in the organization and can influence their performance. This perception of employees concerning the work place environment, makes Yassin et al., (2013) believe that more attention should be given in identifying and dealing with working conditions because when employees have negative perception on their environment, they sometimes suffer from chronic stress. From the findings above, it can be observed that many of the respondents believe that, Noise (mean=3.8); Vibration (*mean* =3.6); and Poor lightening (mean=3.5) has effect on their performance and productivity. These responses from respondents goes to support Al-Anzi's (2009) assertion that the key premises or office factors that tend to affect employee productivity and performance are furniture, workspace availability, light intensity, weather/temperature, ventilation/humidity and noise/vibration. Generally, respondents feel that their general workplace environment (mean=3.9) has a lot of influence on employees' performance and productivity; they believe that the working environment is good enough for them to perform their duties. The findings show that majority of the respondents strongly agree that a

better work environment with enough space and proper lighting would make them better perform at their job. On this score, it should be noted that the physical work environment can spur employee's performance.

4.5 Discussion of Results

It is believed that employees are to be considered as the most important asset to any institution. In light of this, the success of an institution depends on the performance of its employees. Therefore whatever that affects the employees' performance will definitely affect the organizational performance and output level. The finding from this study indicates that some factors of the physical working environment plays a major role by positively influencing the employees' performance. The study indicated that comfortable furniture, stable work environment devoid of noise and good office space with better lighting system would boost the employees' performance. These results found in the research are in line with McCoy and Evans (2005) who observed that the factors of the physical working environment need to be good enough so that the employees would not be stressed up while undertaking the routine activities or work.

The study also observed that good organizational culture helps the employees to perform better on the job. When the culture and values of the organization are not good enough employees will not be encouraged to put up their maximum effort in performing their duties. This confirms Graham et al., (2009), assertion that an organization without a corporate culture or code of ethics to guide its workforce while performing their duties is likely to face challenges as workers will have to behave and react within the job environment the way they like. Organizations should therefore ensure that proper guiding principles are put in place to direct the behavior and conduct of workers in the performance of their duties.

Findings from the study indicated that a supervisor's or manager's attitude in the work environment enhances the performance of the employees at work. This is in support of the assertion by Nijman (2004) that if the supervisor has a very good communication strategy, for instance during training and development program, to direct and coach well then certainly the employees will probably increase their competency and job performance will increase in the organization.

The findings from the study revealed that, training and development and financial rewards play a major role in the development of the organization, the training given to workers makes them perform better on their job. Majority of the workers believe that trainings and development activities in the organization are of good standard. This is in support of Ekot (2010), who believes that the quality of any institution's training will definitely affect its value; he is of the view that an untrained worker costs significantly more to assist than a well- trained worker. The study also revealed that good financial reward system in the organization encourages them to perform better. These findings reflect Ajila and Abiola (2004), who believe that a good reward package can influence employee's performance.

From the findings above, it can be observed that senior managers demonstrate a visible commitment towards quality work in the organization, they provide the necessary assistance to employees to perform their work. According to Al-Anzi (2009), management driven factors such as plans of the organization, allocation of responsibilities, details of job descriptions and administrative support needed by employees to undertake their duties are likely to affect employee's productivity and performance.

The study revealed that the general working environment of the organization is conducive enough for employees to perform their activities to attain the level of productivity expected in the

organization. All the elements of the physical workplace environment play an important role in positively influencing the employee's performance and productivity. This finding is in line with Abdul and Awan's (2015) assertion that comfortable workplace environment in an institution serves as a motivating factor for employees to put up their best in the performance of their duties so that productivity can be increased. When such is devoid from the environment, employees will become destabilized which will lead to low productivity hence there is the probability for the organization to run at a loss.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This last chapter deals with the findings, conclusion, limitations and recommendations of the study as well as suggestions for further research.

5.2 Summary of the Research Findings

The findings of the study point out that majority of the respondents are males at Jomoro ECG. The study recorded 70% male and 30% female. This shows that male workers dominate in the institution than their female counterparts. A sizeable number is between the ages of 30-40 years. At this age majority of them take matters of performance seriously because they want to build their careers and prepare for their retirement. Majority of the respondents hold diploma and degree, which symbolizes the acquisition of skills, knowledge and capability to perform their duties. It further indicates that ECG hires qualified employees; this will ensure better performance at work.

The research revealed that employees' performance was influenced by factors that are related to work environment. The study found out that employees were satisfied with their physical work environment aspects such as furniture, spatial layouts, lighting and noise levels. These aspects of the physical work environment help improve employees' performance. They also felt that a better physical work environment would encourage them perform better. Furthermore, the reward system of the ECG appears to be more financial than non-financial. They provide promotion opportunities for high performance. This practice happens to be a motivation for increasing employees'

performance. It must be noted that majority of the respondents feel that they are fairly compensated for the work they do. However, it is worth saying that, the pay is only an extrinsic motivator to work; a comprehensive compensation package that is all inclusive motivates employee performance.

5.3 Conclusion

Human resource-employees and how to manage it, is key to the success of every organization. Employees do make innovative and creative contributions to an organization which calls for a special attention to be paid to them. The agenda of every organization can only be achieved if the employees therein perform well. As a matter of fact, employees will strive to give their outmost best when they feel that their workplace environment is conducive for the discharge of their duties. The kind of work environment in which they work will determine the level of their performance. The conditions at the workplace will therefore determine the employees' commitment to work and increase productivity.

The good performance of the employee stems from the motivation he or she receives which positively affects their ability to work. The foregoing depicts the importance of reward as a source of motivation for employees to give out their best. Employees always feel happy when their efforts are recognized and rewarded. This crucial practice from organizations will always motivate employees to help their organizations achieve expected results. In this context, the reward system at ECG are financial and extrinsic.

At this juncture, one should note that the leadership style of management can highly influence performance of employees as demonstrated in this study; any decision from management therefore becomes crucial to employees' performance. However, despite the efforts made by organizations in terms of provision for training and workshops so as to attain their various goals and objectives, there is still room for improvement. As one can conclude, the above findings clearly indicate that a conducive and enabling workplace environment determines the success of an organization in this twenty first century where competition is fierce. On the flip side, a poor workplace environment will negatively affect productivity.

5.4 Recommendations

The following recommendations arise from the study:

- ECG should come up with a more enticing way of rewarding employees in order to make them always give their best. Transformational leadership style is therefore needed from management for employees' full satisfaction at the ECG in Jomoro. This leadership style to a larger degree would motivate employees to work.
- ECG in Jomoro should ensure that the workplace environment is comfortable enough to support employees' performance by improving the working conditions. Improving the working environment will increase employees' performance. When the environmental supports are sound, employees always do what is expected of them. This will help them achieve organizational goals.
- Since the workplace environment is at the core of influencing employees' performance, organizations should therefore work hard to provide every needed resource in making sure that the work environment supports their employee performance.

5.5 Suggestions for future work

The challenges with time and other resources confined the research study to only the Jomoro Municipal. It will therefore be necessary for further studies to be carried out across the country for a broader perspective on the relationship between employee performance and their physical work environment. Researchers in this same area should therefore consider reviewing the literature so as to point out other factors that were not captured in this study due to the limitations. This would help identify more work environmental factors so as to better organizations in that direction.

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APPENDIX 1

**KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY
COLLEGE OF ART AND BUILT ENVIRONMENT
DEPARTMENT OF BUILDING TECHNOLOGY**

SURVEY QUESTIONNAIRE

**“ASSESSING IMPACT OF WORKING ENVIRONMENT ON EMPLOYEES’
PRODUCTIVITY IN GOVERNMENT AGENCIES: A CASE STUDY OF THE
ELECTRICITY COMPANY OF GHANA JOMORO MUNICIPAL”**

Dear Sir/ Madam

I am an MSc. student at Kwame Nkrumah University of Science and Technology, Department of Building Technology currently undertaking an **“assessment of impact of working environment on employees’ productivity in government agencies: a case study of the electricity company of Ghana Jomoro municipal”**.

The research is ongoing under the supervision of Professor Joshua Ayarkwa and requires a questionnaire survey to be undertaken to collect data from employees of the electricity company of Ghana in the Jomoro municipal. Your experience and knowledge in the area of the research is very important and much appreciated. Information on the relationship between employees’ productivity and their work environment, the influence of the physical work environment on employees’ performance and productivity and analyzing workplace factors affecting the employee’s performance will be obtained from the research. The information you shall provide shall be **STRICTLY CONFIDENTIAL** and for academic purposes only and findings from this research will be made available to you on request.

I know you have a very busy schedule and this will take some time off you, I will plead that you help me with your knowledge as it means so much to the achievement of this research. I appreciate your effort and time very much in advance.

Yours faithfully,

Stephen Attobrah Ackah, MSc. Project Management Student, KNUST

Professor Joshua Ayarkwa, Project Supervisor, (KNUST)

SECTION A: DEMOGRAPHIC BACKGROUND OF RESPONDENTS

Please, kindly respond to the questions by ticking (✓) the appropriate box for each item.

1. Gender: ☐ Male ☐ Female
2. Age: ☐ 20-30 ☐ 30-40 ☐ 40-50 ☐ 50-60 ☐ Above 60
3. Highest level of education: ☐ HND ☐ BSc ☐ MSc ☐ PhD ☐ other
4. Years of experience: ☐ Less than 4 years ☐ 4-8 years ☐ 8-12 years ☐ 12-16 years
☐ Above 16 years
5. How would you best describe your role? ☐ Management ☐ Engineer ☐ Technician ☐ Mechanic ☐ Project Engineer ☐ Other.....

SECTION B: EMPLOYEE PRODUCTIVITY AND WORK ENVIRONMENT

Kindly, indicate your level of the agreement or disagreement with the following statement on the relationship between employees' productivity and their work environment.

[1= Strongly disagree; 2= Disagree; 3= Neither agree nor disagree; 4= Agree; 5= Strongly agree]. Please tick (✓) in the space provided.

Employee productivity and work environment	1	2	3	4	5
1. I have the tools and resources to do my job well.					
2. My job makes good use of my skills and abilities.					
3. Diversity and inclusiveness					
4. Good culture at the work place					
5. ECG operates in a socially responsible manner					
6. ECG positively impacts people's lives					
7. Job Security					
8. Safe work environment					
9. Senior managers visibly demonstrate a commitment to quality.					
10. Overall, I am satisfied with my job.					
Others (please identify any not in list)					

SECTION C: INFLUENCE OF PHYSICAL ENVIRONMENT ON PERFORMANCE

Kindly, indicate your level of the agreement or disagreement with the following statement on the influence of physical environment on employee performance.

[1= Strongly disagree; 2= Disagree; 3= Neither agree nor disagree; 4= Agree; 5= Strongly agree]. Please tick (✓) in the space provided.

Employees' Physical Environment	1	2	3	4	5
1. Noise					
2. Vibration					
3. Poor lighting					
4. Indoor Climate					
5. Ergonomic condition					
6. Chemical Hazards					
7. Risk of Accidents					
8. Biological Conditions					
9. Awkward body postures					
10. General workplace environment					
Others (please identify any not in list)					

SECTION D: WORKPLACE FACTORS AFFECTING EMPLOYEE'S PERFORMANCE

Kindly, indicate your level of the agreement or disagreement with the following statement on workplace factors affecting employee's performance.

[1= Strongly disagree; 2= Disagree; 3= Neither agree nor disagree; 4= Agree; 5= Strongly agree]. Please tick (✓) in the space provided.

Workplace Factors	1	2	3	4	5
1. Manager's attitude					
2. Organizational culture					
3. Personal problems					
4. Job content					
5. Financial rewards					
6. Organizational communication					
7. Self-organizing teams					
8. Training and Development					
9. Stress					
10. Job Satisfaction					
Others (please identify any not in list)					

End of questionnaire. Thanks for your valuable contribution