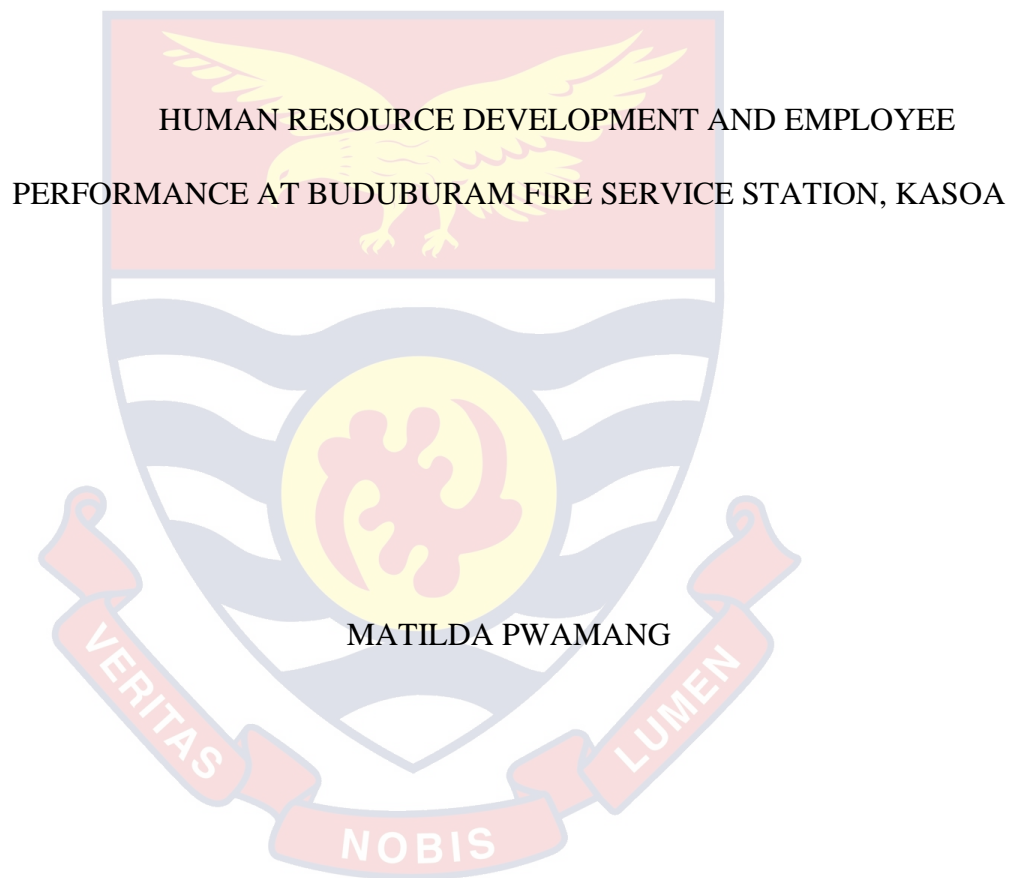


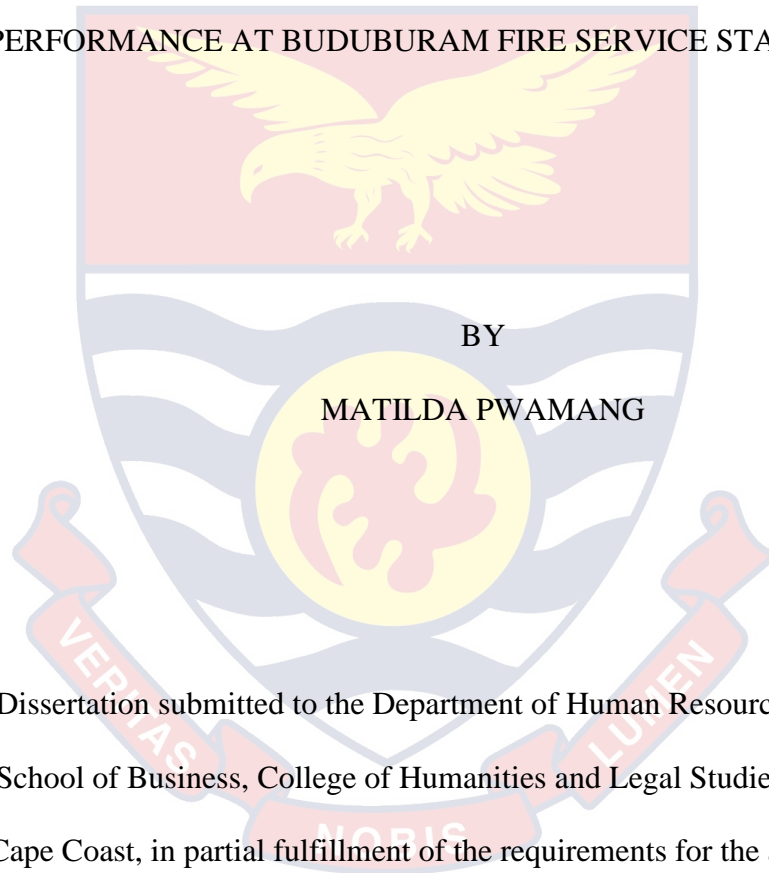
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HUMAN RESOURCE DEVELOPMENT AND EMPLOYEE  
PERFORMANCE AT BUDUBURAM FIRE SERVICE STATION, KASOA



BY

MATILDA PWAMANG

Dissertation submitted to the Department of Human Resource Management,  
School of Business, College of Humanities and Legal Studies, University of  
Cape Coast, in partial fulfillment of the requirements for the award of Master  
of Business Administration Degree in Human Resource Management

SEPTEMBER 2020

## DECLARATION

### Candidate's Declaration

I hereby declare that this dissertation is the result of my own work and that no part of it has been presented for another degree of this university or elsewhere.

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

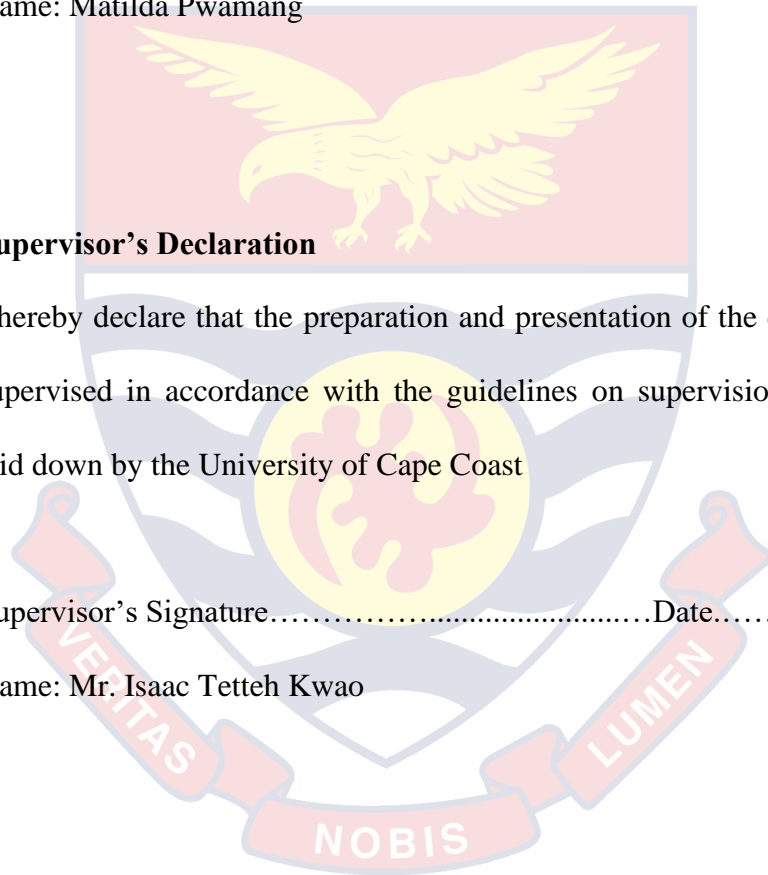
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### Supervisor's Declaration

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

Supervisor's Signature.....Date.....

Name: Mr. Isaac Tetteh Kwao



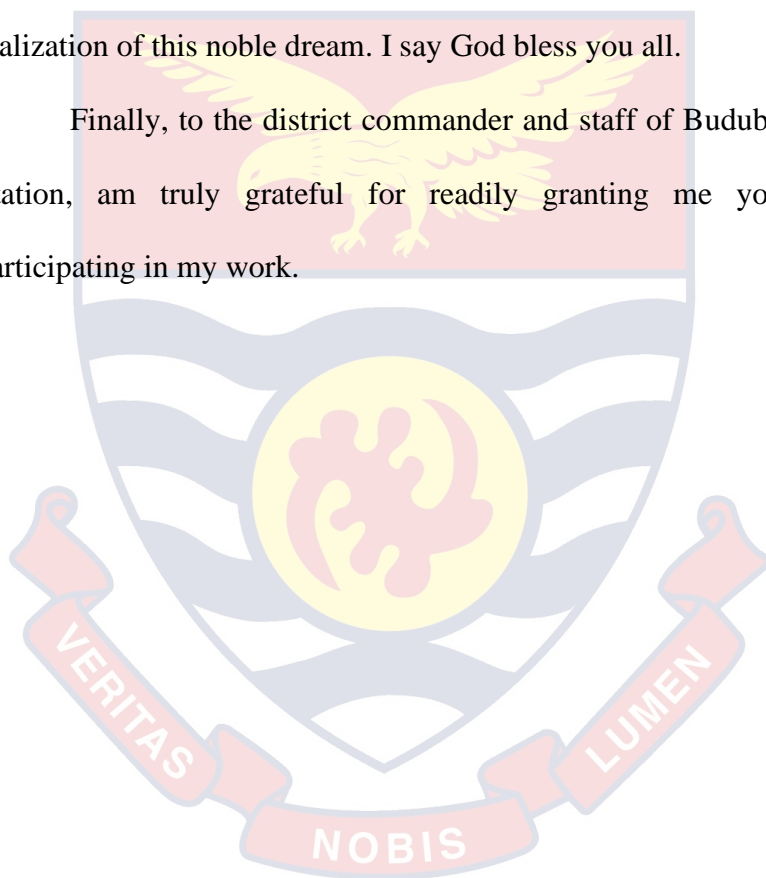
## ABSTRACT

The purpose of the study was to examine the effect of human resource development on employee performance at Buduburam Fire Service Station, Kasoa. Specifically, it sought to assess the influence of Training and development on employee performance, examine the effect of organizational development on employee performance and evaluate the effect of career development on employee performance at Buduburam Fire Service Station, Kasoa. The research approach was a quantitative approach and design was explanatory research design. The study adopted a census survey of which all members of the population of fifty-six (56) were included. A structured questionnaire was the main instrument of the study and was administered to the respondents to gather quantitative data. It was also found that these indicators in composite impact on employee performance and that training and development and employee performance are positively correlated. Also, the study found that the organizational structure and culture at Buduburam Fire Service Station, Kasoa were less favourable as respondents indicated. The study concluded that in order to develop human resource of an organisation, training and development of the staff is key and that training and development enhance employees' performance. The study further concluded with confirmation to other studies and assertions that organizational development is statistically significant and positively related to employees' performance. The study recommended that management should enhance their structure such that it would outline how activities are directed in order to achieve the goals of an organization.

## ACKNOWLEDGEMENTS

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Finally, to the district commander and staff of Budubram Fire Service Station, am truly grateful for readily granting me your support and participating in my work.



## DEDICATION

To my beloved brother Mr. Thomas Kaba Pwamang



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## CHAPTER ONE

### INTRODUCTION

Human resource development is a relatively new concept that combines several HRM tasks to better prepare people and organizations based on activities (organizational development, career development, and training and development) (Nolan & Garavan, 2016). Thus, human resource development is a component of human resource management, and it is one of the company's most significant strategies since it helps to improve employee behavior and overall performance for both individuals and organizations.

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

Today's economic environment has placed increasing pressure on firms to accomplish more with limited resources. Most notably the human resource, rising from budgetary limitations put on wage bill budget as a recurrent expense in the face of constant inflations and recessions expressed globally, have made firms realized that the most important strategies are those that increase worker productivity through human resource development (Anantharaman, 2003). Behavioral scientists have thus contended with the issue of job enrichment for years. Moreover, it is evident that the success of any activity in a firm largely depends on the know-how of the personnel. All staff members should thus have the necessary skills, attitude and experience to efficiently and effectively carry out their tasks, which is ascertained through human resource development which is a process of developing and unleashing expertise for the purpose of improving individual, team, work process, and organizational system performance (Nolan & Garavan, 2016).

Human capital theory shows the determinants of a firm's willingness to invest in employee development by asserting that a firm would only be willing to invest in employee development where the skills imparted would be firm specifically applicable within the firm and no transferable to other firms within the industry, (Becker, 1964). As a result, the theory suggests that human resource development is mostly targeted at organizational culture, organizational specified tasks, career planning and succession planning. The theory also shows that where the skills developed would be widely applicable to other firms as well, the organization and the individual share the responsibility of the human resource development exercise especially where it comes to training and professional development (Bartlett, 2001).

This process has had impacts on various aspects of the security industry such as the human capital, performance and customer satisfaction as well as challenges such as lack of capital, regulatory policies, cultural and socio-economic factors which have posed high labour cost, slow business growth and delay in the implementation of restructuring (Madivenga, 2012). The effectiveness in the security industry in Ghana is thus solely dependent on performance of the employees. As a result, the industry has heavily invested on organizational performance through human resource development. It is for this reason that the industry will provide the context for the study.

Human resource development involves a process of observation, planning, action and review to manage the cognitive capacities, capabilities and behaviors needed to enable and improve individual, team and organizational performance in work organizations (Walgenbach, Kabst & Beck, 2009). It has multiple dimensions, covering educational attainment,

workforce skills, population health and the set of employment policies that provide businesses with workers with appropriate skills and the ability to adapt quickly to new challenges. Each of these areas is a key driver in creating a favourable environment for investment. Because human resource development policies are all closely inter-related and must be consistent with a broader development and investment policies, they cannot be framed in isolation. Low human resource development needs to be tackled through a coherent and comprehensive strategy that takes full account of the policy linkages and an implementation capacity (Jessica, 2002).

Besides, human resource development policies concern the quality of the labour force and the regulation of the labour market. Quality in turn is a function of basic and higher education, training programs and the overall health of the population. The quality and adaptability of the labour force is a key driver in creating a favourable environment for both domestic and foreign enterprises to grow through new investment and to adapt quickly to changing circumstances. Their relative roles and the overall importance of human resource development depend on individual country circumstances, particularly the economic structure Walsh (2007).

Moreover, development was distinguished from education and training but also seen as a process and outcome associated with both. Development was about the change of the whole person, not just the academic or vocational pieces of knowledge or skill needed for work. Development occurred during a person's experience and growth throughout a career and lifespan. In the context of work and organizations, development was usually used to describe training for managers and professionals. Employees had to be trained;

managers and professionals had to be developed. Development therefore signified superior and more elaborate learning. However, now that personal development is becoming an integral part of life for all employees, the concept of development is being applied more broadly to learning. HRD as a process is about more than the provision of training courses in workplaces.

More and more organizations are investing in human resource as a means to increase their competitiveness (Jones, 2002). Human resources development plays a vital role in achieve sustainable competitive advantage and enhance organizational effectiveness. Human resource development is a systematic process aimed at improving competences of the individual and group through training and development, career development, and organizational development practices to achieve superior performance (Garavan, 2007; Nadler, 2012). According to Simonds and Pederson (2006), HRD is a set of structured and unstructured learning and performance-based activities which improve individual and organizational competencies to address the changes in the business environment.

The fruits of human resource development are evident in the much-publicized rapid development achieved over a short period of time by Singapore, Hong Kong, the Republic of Korea, Taiwan China, and earlier by Japan. The World Bank studies of East Asian development have identified the investment in human capital as one important factor accounting for the rapid development, enabling it to periodically upgrade labor skills and the economy (Akinyi, 2014). Government investments were mostly in primary and secondary education, with tertiary education being largely left in private hands, (Rahmah & Jacobs, 2012).

According to Giese and Thiel (2014), employee performance refers to the outcome, accomplishment of work as well as the results achieved, which is linked to the strategic goals of the organisation, customer satisfaction and economic contributions. They continue to indicate that performance has to be managed by taking systematic action to improve organisational, team and individual performance; where individual performance management process is associated with equity in payment. The authors concluded that organisations are obliged to meet the needs of their stakeholders, in this case employees, by helping them develop themselves.

According to Cloutier and Lamarche (2015), performance is also seen as the result of the interaction between individual ability and development opportunities and these go hand in hand with performance goals. Takeuchi, Lepak, Wang and Takeuchi again stipulated that it is worth nothing that the higher the employee development and drive, the greater the chances that an organisation will not only keep the best employees but will also motivate talented employees to performance at optimum levels. Development of employee has its magnitude of contribution to performance and productivity (Seo, Gamache, Devers & Carpenter, 2015). Belman, (2015) also asserts that performance management is a joint process that involves both the management and the employee who identify common goals which correlate to the higher goals of the organisation. They further states that when employees developed, then the organisations will experience increased performance and improved quality of output. Similarly, when people are valued, shown trust, listened to and encouraged to do better, they reciprocate by being responsible and productive.



## Statement of the Problem

Human resource development has grown out of the realization that it is vital for the survival of any organization. This is particularly because the hastily implemented performance related pay and appraisal systems were not delivering the results that people were expecting from them (Armstrong, 2000). This makes it primary to the success of any organization given the global competition and turbulence in the business arena. According to Armstrong and Baron (2004), the benefits of human resource development are therefore manifold. It is on this note that Freeman (2003) clarifies that it is concerned with satisfying the needs and expectations of an organization's stakeholders - owners, management, employees, customers, suppliers and the general public. Practices relating to people, human resource development and organizational results also show association with employee organizational performance. Besides, given that the security industry in Ghana has made tremendous adjustments aimed at improving the industry. Most of these adjustments are aimed at the human resource given the frequent fire calamities and safeties of corporate businesses. This therefore means that employee performance is vital for the fire service in addition to the fact that the government heavily invest in other aspects of their service like gadget, van, etc.

It is however surprising that most of the studies conducted on the effect of human resource development practices on employee performance have been in other industries other than the security industry (fire service to be précised). For instance, Yap (2010) also conducted a study on relationship between diversity training, performance and career satisfaction. The study

found a high relationship between the elements of human resource development and employee performance. Flatt and Jacobs (2018) also used a case study methodology in their study on developing employee expertise through human resource development which found reward scheme to impact more on employee organizational commitment than any other variable. The case Study was conducted in Kuwait's national oil company. Ssesanga and Garrett (2015) conducted a study on employee performance among university lecturers in Uganda and found out that on career planning was one of the factors leading to performance among the respondents. It is thus clear that the few studies done on the areas are mostly based in manufacturing industries and other blue-collar and white-collar employees.

A number of studies also focused on specific aspects of human resource development such as on the job training (Bartlett, 2011), Career planning (Ssesanga and Garrett, 2005) and reward scheme (Flatt & Jacobs, 2018). Amin, Ismail, Rasid, and Selemani (2014) emphasize that if the organisations want to achieve superior performance, they should emphasis more on human resource development practices such as training and development, employee participation and organizational development. Due to the socio cultural and economic differences between Ghana and other countries as well as the differences between education industry and security industry, a study is thus needed to determine if the findings would be the same if a study is carried out on the security industry in Ghana. Therefore, the study seeks to examine the effect of human resource development on employee performance at Buduburam fire service station, Kasoa.

### **Purpose of the Study**

The purpose of the study is to examine the effect of human resource development on employee performance at Buduburam Fire Service Station, Kasoa.

### **Research Objectives**

The following specific objectives were set in order to achieve the purpose of the study:

1. To assess the influence of Training and development on employee performance at Buduburam Fire Service Station, Kasoa.
2. To examine the effect of organizational development on employee performance at Buduburam Fire Service Station, Kasoa.
3. To evaluate the effect of career development on employee performance at Buduburam Fire Service Station, Kasoa.

### **Research Questions**

To achieve the research objectives, the following research questions were set to guide the study:

1. What is the influence of Training and development on employee performance at Buduburam Fire Service Station, Kasoa.
2. What is the effect of organizational development on employee performance at Buduburam Fire Service Station, Kasoa.
3. What is the effect of career development on employee performance at Buduburam Fire Service Station, Kasoa.

### **Significance of the Study**

The study would be of importance to the decision makers Buduburan Fire Service Station who from the findings of the study will change their HRD practices in line with the practices that was shown by the study to be of highest effect on the employee performance. The study would also be important to government who would able to derive policies more favorable to human resource development practices in term of prioritizing HRD and aligning the HRD practices with desired objectives, one of which was attaining optimal employee performance. The study would also be important to theory as it was of use to the future scholars and researchers who will get the much-needed empirical evidence for their future studies as well as suggestions for future studies.

### **Delimitation**

The study covers two variables – human resource development and employee performance. Human resource development in this study is the independent variable while employee performance is the dependent variable. Also, the study should have been conducted in all fire service station across the country. However, time and other resources would not permit the researcher. As such the study covers only Buduburam Fire Station at Kasoa and all other Fire Stations are excluded from this study. However, they can adopt the recommendations.

## Definition of Terms

*Human resource development* as used in this study covers practices in relation to training and development, career development and organizational development.

*Employee performance* also relates to the outcome, accomplishment of work as well as the results achieved, which is linked to the strategic goals of the organisation, customer satisfaction and economic contributions.

## Organisation of the Study

The study would be organised in five chapters. These are chapter one: the introduction; it is made of the background to the study, statement of the problem, objectives of the study, research questions, significance of the study, scope and the organisation of the study. Chapter two would be devoted to the conceptual and theoretical approaches relevant to the study. It will also comprise the review of related literature around the topic under investigation and a summary of major findings of the literature review. Chapter three would contain the description of methodology and procedure for conducting the study. Chapter four would deal with the actual analysis of data and discussions of data. Chapter five would be made up of the summary of findings, conclusions, recommendations and areas for further research.

## CHAPTER TWO

### LITERATURE REVIEW

#### Introduction

The study sought to examine Human Resource Development (HRD) on employee performance at Buduburam fire service station, Kasoa. This chapter presents a review of literature related to HRD, training and development, organizational development and career development; theoretical, conceptual and empirical. The theoretical review focused on the theory human capital. The relationship between HRD and employee performance was further depicted on a conceptual framework.

#### Human Capital Theory

The human capital theory was formulated by Adam Smith in 1776 (Fitzsimons, 1999) and has been explained by two schools of thought. While the first school of thought distinguished between capital as capacities and incapable human beings, the other school of thought classified human beings as capital. The theory stipulates that human beings behaviour is based on the economic self-interest they operate within freely competitive markets. The theory considers all human abilities as natural or acquired attributes which are valuable and can be augmented by appropriate investment Schultz (1961). The theory emphasise on the added values employees can contribute to the organisation. It regards employees as assets, that when organisations invest in, high returns will be generated (Armstrong, 2015). For this, human capital is developed and treated like other assets which can be utilized to gain competitive advantage.

It is regarded by Wilson (2015) as the most important component of intellectual capital. The intellectual capital, for him, comprises human capital, social capital, and organisational capital. This implies that all stakeholders of organisations acquire, develop, use and retain knowledge, skills, and abilities, which improves through interactions to gain organisational knowledge. Armstrong (2005) defined the components of intellectual capital as follow. While the human capital consists of SKA's of employees in organisation, social capital looks at the stocks, and flows from knowledge derived from network of relationships within and outside the organisation, which includes; networks and norms, that hold institutions together, to achieve a common objective. An organisational capital is the institutionalized knowledge owned by the organisation, which is stored in databases and manuals.

With this, human capital combines generating, investing and consumption of the outcome of SKA's to its success and competitive advantage. Investment also implies the acquisition of assets (talents), which generates long term benefits, while consumption entails procurement and utilisation of the outcome that yields benefits (Schultz, 1981). This implies organisations can invest in individual employees through training and development for utilization and creation of an enabling environment. Davenport (1999), emphasise that individuals have innate abilities, behaviours and personal energy, which makes up the human capital. Organisations expect the return on investment in human capital to be an improvement in performance, productivity, flexibility and capacity to innovate that enlarges the skills base and increases levels of knowledge and competence (Armstrong, 2005).

The relevance of the theory to the study is that, employers who invest in their employees in the form of training and career development would also expect a high return from the investment they make. Therefore, investment in the form of training and development, career and organizational development would develop employees to increase their performance (Armstrong, 2016). Human capital theory stipulates that, to have the benefit of choice in the workplace, the organisations have to leverage employee skills and capacities by encouraging investing in individual and promote organisational learning. They also have to create a supportive environment, in which knowledge can be created, shared and applied through developing the employee (Stiles & Kulvisaechana, 2018). This is important because an organization's financial value is significantly dependent on the quality and performance of its employees and returns achieved on human capital. Therefore, investing in human capital (talents) is a critical success factor.

### **Concept of Human Resource Development**

The term Human resource development is combining to some HRM functions, so it is a relatively modern term as the best means to prepare staff and organization based on activities (organizational development, career development, and training and development (Nolan & Garavan, 2016). Thus, human recourse development is a part of human resource management, and it is the important strategies of the company due to playing role in improving employees' behaviors, and general performance to individuals and organization. Many authors used term Human resource development (HRD) to indicate training and development, career development, and organization development as an organization's investment in the learning of its people as



part of an HRM approach (Bratton & Gold, 1999; Swanson & Holton, 2001; Vinesh, 2014). HRD is based on the beliefs that organizations are human-made entities that rely on human expertise in order to establish and achieve their goals and that HRD professionals are advocates of individual and group, work processes and organizational integrity (Hassan,2017).

HRD is the process of optimizing the production and utilization of the workforce. HRD is concerned with: (a) Staffing issues: employment, mix and number of personnel, deployment by region, by level of care, by type of establishment, by gender; (b) Education and training: coherence between competencies and needs of the services, programs and curricula, learning strategies, availability of competent teachers and trainers, of adequate infrastructures; (c) Performance management: maintenance and improvement of the quality of services, setting of standards, information and management systems, management practices; (d) Working conditions: recruitment and posting, job and workload definition, promotions and career mobility, incentives, mode and level of remuneration, other conditions of service, management of personnel and labor relations (Dussault, 2018). Human resource development (HRD) is a process of developing and unleashing human expertise through organization development (OD) and personnel training and development (T&D) for the purpose of improving performance (Swanson & Holton, 2017).

### ***Training and Development***

Training and development are essential for all organizations to achieve their objectives. Many researches have been done in this area for understanding the importance of training and development. Training is the

learning process that is the indispensable part of human resource development. According to Abbas (2014) training as an essential element to an employee for the development of the companies because some of the employees have lack of knowledge skills and competencies and failed to accomplish task on timely basis. Besides, Training is a learning activity directed towards the acquisition of specific knowledge and skills for the purpose of an occupation or task. The focus of training is the job or task for example, the need to have efficiency and safety in the operation of particular machines or equipment, or the need for an effective sales force to mention but a few (Cole, 2002).

According to Saleem (2011) training is an organized increase from the know-how skills and sensations needed for staff members to execute efficiently in the offered process, as well as, to operate in underling situation. Furthermore, training also increases the abilities of employee's very effective way by motivating them and converting them in to well organize and well-mannered, that ultimately affects the performance of organization. However, Laing (2009) training is defined as an indicator to enhance superior skills, knowledge, capabilities and outlook of the employees that results in effective performance of the workers. Moreover, he adds one more thing, that is, training extends the production of the organization. In line with this is the believe that training is important mean to improve the employees' productivity which ultimately affects the organization performance and effectiveness (Singh & Mohanty, 2012).

According to Nunvi (2006), training programs are directed towards maintaining and improving current job performance while development seeks to improve skills for future jobs. Besides Armstrong (2016), emphasized that

training should be developed and practiced within the organization by appreciating learning of theories and approaches, if training is to be well understood. Training is a type of activity which is planned, systematic and it results in enhanced level of skill, knowledge and competency that are necessary to perform work effectively (Gordon,1992). On the other hand, development is a broad ongoing multi-faceted set of activities (training activities among them) aimed at bringing someone or an organization up to another threshold of performance, often to perform some job or a new role in the future (McNamara, 2018).

While Singh and Mohanty (2012) explained in their research that training is an important tool for the purpose of enhancing the workforce performance and it will ultimately increase the worth of an organization but organization ought to be balance amongst training worth and training disbursement. Besides, Chris (2011) employee training is essential for the organization to develop the performance of the employees and the organization should evaluate the training program as per the objectives and missions. Training may take the form of orientation, safety training, soft skills development training - communication skills, problem-solving skills, emotional intelligence, time management and ethics (Noe & Kodwani, 2018).

On the other hand, development means those learning opportunities designed to help employees to grow. Development is not primarily skills oriented. Instead it provides the general knowledge and attitudes, which will be helpful to employers in higher positions. Development programs are regarded as specific framework for helping employees to develop their personal and professional skills, knowledge, attitudes, behavior and

consequently improve their abilities to perform specific task in the organization. It provides knowledge about business environment, management principles and techniques, human relations, specific industry analysis and the like is useful for better management of company. Manpower development focused on turning out human resource that is needed for effective performance in the organization (Drucker, 1999). Moreover Lawal (2006) said that it is updating system of new techniques or skills associated with the performance of their jobs.

According to Adeniyi (2015) employee development methods includes under study, job rotation, self-development and self-assessment. Despite, Aswathappa (2010) also suggested that if the training and development function is to be effective in the future and yields all expected returns, it will need to move beyond its concern with techniques and traditional roles. On the other hand, development focuses on building the knowledge and skills of organizational members so that they will be prepared to take on new responsibilities and challenges. (McKenna & Beech, 2012) On the other hand Employee Training and Development strikes a balance between research and real company practices which provide background in the fundamentals of training and development such as needs assessment transfer of training, learning environment design, methods, and evaluation (Noe, 2010). Basically, employee development includes training, education, and career development. It also includes exchange of knowledge and experience.

### ***Career Development***

According to Werther and Davis (2016), career development constitutes the increase in one's personality to achieve an intended career.

According to Dubrin (2012), career development is employees' activity which help them plan their future career in a certain company so that both the employees and the company can develop maximally. Rivai (2014) points out that career development is a process in an organization to increase individual capability of attaining the expected career. A person who accepts an offer for a job for the first time will have different knowledge of the job, compared with a person who has worked for a long time. Those who have worked for long time will have wide and meaningful insight. Their perception on the job will change along with the passing time. The job is considered not only as the source of earnings but also something which makes someone satisfied with other demands such as appreciation from other people, competition with authority and higher position, and so on (Ivancevich, 2001). Career development entails the management of a person's growth and progress in his or her own career.

Career development involves various alternatives such as developing abilities, preserving current skills and getting ready for the future ahead of just receiving promotion (Çiğdem & Belgin, 2014). In the words of Amah (2006), career development is the building of organisational members' knowledge and skills to prepare them for new opportunities and challenges. Byars and Rue (2004) contended that "career development is defined as "an ongoing, formalized effort by an organization that focuses on developing and enriching the organization's human resources in light of both the employees' and the organization's needs". Agba, Festus and Ushie (2010) elucidates that "career development involves concerted efforts directed towards assessing a workers' potentials identifying likely career paths for that employee and designing and

implementing various forms of training and experience to prepare that person for more advanced job”.

Yishu (2009) examined the influences of career identity on career development in China and in the Netherlands. Yishu’s results show that work centrality leads to the content-oriented career development and the desire for upward mobility leads to the process-related career development. Zulkarnain (2013) investigated an integrative of quality of work life in public service employee. Zulkarnain’s results shows that career development was related to quality of work life of employee. Finally, career development is established to enable employees match their needs for personal growth and development with the needs of the organization (Amah, 2006). For employees to move to the next level in the organization certain factors need to be considered. These include career planning, career advancement and mentoring (Amah, 2016). It is in this backdrop that career planning, career advancement and mentoring were used in this study as dimensions of career development.

### ***Organization Development (OD)***

Organization development is any process or activity, based upon the behavioral sciences that either in the short-term period or the long-term period have the potential to develop in an organizational setting. Enhanced knowledge, expertise, productivity, satisfaction, income, interpersonal relationships, team spirit, and other desired outcomes such as goodwill are the factors that are meant to prove to be advantageous to the individual, group, team, society, region, nation or the whole humanity. Organization development’s primary emphasis has been laid upon the relationships between individuals and groups, so that there is cooperation and mutuality between

them so that they can work together in harmony towards the progress of the organization.

The meaning and the definition of organizational development is very comprehensive, hence from the definitions of organizational development desired outcomes have been identified by McLean (2015) by advanced organizational renewal, engage organization culture change, enhance profitability and competitiveness, ensure health and wellbeing of organizations and the employees, facilitate learning and development, improve problem solving, increase effectiveness, initiate and/or manage change, strengthen system and process development and support adaptation to change.

Organization development is a planned effort, which is organization wide, it is managed from the top most level in the hierarchy with the main aim to increase organization effectiveness and health through planned interventions in the organization's processes using behavioral sciences knowledge, set of values that are largely humanistic, and open systems theory (Pocklington & Weindling, 2017). Overall organization effectiveness is aimed at improvement by way of improving the organizational dimensions such as the external environment, mission, strategy, leadership, culture, structure, information and reward systems, and work policies and procedures.

According to Gazaryan (2016), there have been some concepts and principles which are important to be aware of for understanding the organizational development. These have been stated as follows by (Gazaryan, 2016) – chaos, coherence, structure, emergent features, substructures, synergy and self-emerging order. Chaos has to do with the description of the performance of certain nonlinear dynamical systems that under assured

conditions exhibit a phenomenon known as chaos, which is characterized by sensitivity to initial conditions. As a result of this feeling, the actions of systems that exhibit chaos appear to be random, even though the model of the system is well defined and contains no random parameters. Chaotic behavior is considered to be more stable, structured and deterministic; chaos in an organization is what management and the members influences everyday but find no means to control.

Coherence is always a mode of coordinated behavior, oriented in a single direction, harmonized, or associated in any other sense of elements. Coherence comes directly from both freedom and interdependence (Vargas-Hernández, Jiménez & Campos, 2017). Where no elemental freedom exists, there is no opportunity for correlated behavior. Where interdependence does not exist, there is similarly no possibility for connection. Each element does not see and does not need to see or feel others, and does whatever it wants on its own (Coetzee & Nkosi, 2019). Elements interact in this case also, but casually, and such an interaction causes a causal effect. In such systems, elements may be kept together only by some third external force.

According to Gazaryan (2016) It is also reasonable to state the structure of processes, or the dynamic structure of an organization. In contrast to the static structure that usually defines formal subordination in work relations, the dynamic structure defines how elements interact in a widespread process and generate a common result. The correlation of behaviors and attitudes of interrelated components means that their independence is limited and bounded by acceptable models of coordinated actions. These models



depend on results that are expected to be achieved. In this way, the providence of an organization determines the structure of the organization.

Substructures are often seen as informal relations between members of an organization and/or with outsiders. The formal relations and means of communication are not always particularly strong or defined within the organizational structure. When some formal relations are weak and apparent only in particular circumstances, they should be considered as a part of substructure. On the other hand, some informal relations may be obviously crucial for organizational survival and may determine the basic qualities of an organization (Odor, 2018). Therefore, substructures should be viewed not in terms of formal versus informal, but in terms of essential versus non-essential.

Synergy or synergism most often refers to the phenomenon of two or more discrete influences or agents acting in common to create an effect which is greater than the sum of the effects which each are able to create independently (McDermott, 2018). Thus, synergy is the evolving superiority of a system. In Greek, synergy means collective action, working together and team work. Synergy also means that the actions and performance of the whole organization structure may not necessarily be predicted by the actions of their parts taken independently. Synergetics as a discipline that addresses self-organizing processes within the organizational structure and society has been in existence for 35 years and has become extremely accepted.

The basic preconditions for a particular self-emerging order to appear in a group are: 1) interdependence, and 2) unpredictable interaction. The unpredictability supposes a certain freedom of interaction. At the same time, if elements are not interdependent – meaning each one depends on another –

there is no clue to build a system. The group will remain a set of odd, isolated pieces without any communication between them; hence for the effective functioning of the organization, interdependence is essential (Gazaryan, 2016).

### **Employee Performance**

According to Dessler (2013), performance constitutes the comparison between employee performance and basic standard. Almost the same as this definition, Rivai (2014) defines employee performance as a person's real behavior in his work performance according to his role in a company. In reference to the two researchers above, Byars and Rue (2018) point out that employee performance is referred to what extent an employee in a certain organization carries out his tasks as his responsibility according to what has been expected by the company. Bernardin and Russell (2013) define performance as an outcome record yielded by a certain work or an activity within a certain period. Mangkunegara (2019) defines employee performance as a qualified and quantified performance of an employee in doing his job according to his responsibility as an employee. Quantity is the outcome which can be measured how far a person can be successful in achieving his goal, while quality is how a person makes many mistakes, disciplined, and punctual. Working time is referred to the amount of a person's attendance, his lateness, and his length of service in the previous year.

Maher (2019) provides a complex range of services for the community. These covers responding to fires, providing 'insurance' to the community in the form of a capacity to respond to a wider range of potential disasters. It also includes undertaking activities to reduce the probability of fires and other emergencies occurring in the first place; helping the community to

recover in the aftermath of events such as flooding and protecting the integrity of the environment. All these factors make it difficult to measure and compare outcomes and outputs of service delivery and therefore adequately judge success.

The performance information collected should follow the 'FABRIC' idea for performance information: Focused on the organisation's aims and objectives; Appropriate to, and useful for the stakeholders who are likely to use it; Balanced, giving a picture of what the organisation is doing, covering all significant areas of work; Robust in order to withstand organisational changes; Integrated into the organisation, being part of the business planning and management process; and Cost Effective - balancing the benefits of the information against costs (Jahnke, Haddock, Jitnarin, Kaipust, Hollerbach & Poston, 2019).

In the fire service sector, Poplin, Roe, Burgess, Peate and Harris (2016) mentioned that performance measures may split into two main areas to form the basis of further contextual headings for the measures to be placed; effectiveness and efficiency. Effectiveness is divided into two broad areas of outcomes and outputs. According to them outcomes covers the actual consequences of the work. It is essentially what has happened as a result of an emergency or the work that has been undertaken to deal with these emergencies. The second part of the effectiveness (outputs) is further subdivided into four categories namely; prevention, preparedness response and recovery.

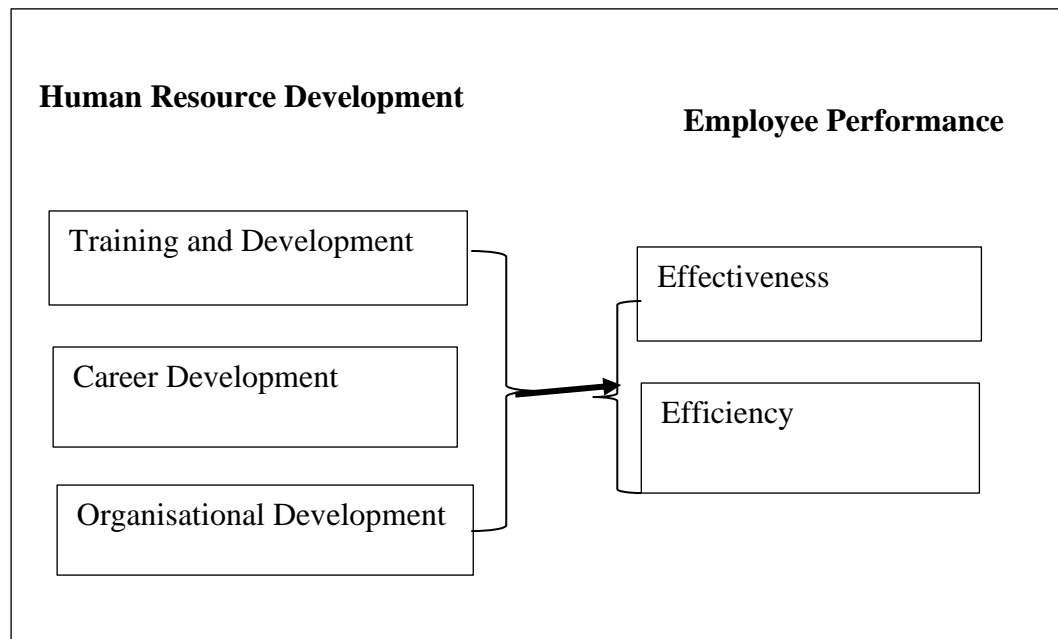
Prevention covers the activities undertaken by the service to first of all educate the community and secondly monitor compliance with the Regulation

given. Preparedness are to measure to some extent how well the community is ready for emergency events and the operational capabilities of the service. Response covers the demand side of the service or in other terms strategies and services to control, limit or modify the emergency to reduce its effects. Recovery deals with as a consequence of any emergency both the community and service have to return to normal arrangements. The community may need to recover a flood or a business from arson attack and the service will need to have its own continuity arrangements.

The next performance measure is efficiency. According to Poplin, Roe, Burgess, Peate and Harris (2016) this deals with two separate elements; the technical efficiency of the service by directly relating its inputs to outputs, this will be similar to how the service is measured in the national accounts but would include a method of measuring capability to respond. The second element relates inputs to outcomes at the highest level and as such measures the cost effectiveness (Value for Money) of the service.

### **Conceptual Framework**

Based on the logic obtained after literature review and the central theme of the study, it is inferred that there is positive relationship between HRD and employee performance. Also, the researcher proposes that training and development, career development and organisational development significantly predicts positive variances in employee performance. These relationships are presented pictorially on Figure 1.



Source: Author's Construct (2020)

### Figure 1: Conceptual Framework

The conceptual framework depicts the relationship between human resource development and employee performance. The dependant variable is the employee performance while the independent variable is human resource development. training and development, career development and organisational development are the key determinants of human resource development. Training and development may be measured using safety training, soft skills development training - communication skills, problem-solving skills, emotional intelligence, time management and ethics, job rotation, self-development, and self-assessment. Career development would be measured using career planning, career advancement, career guidance and mentorship. Lastly, organisational development would be measured using external environment, mission, strategy, leadership, culture, structure, information and reward systems, and work policies and procedures.

Arshad, Masood and Amin (2013) noted that tracking employee performance is important. They asserted that attendance is definitely worth tracking and its data for company is used to measure growth. But employee effectiveness can be a useful performance metric as well. Also, employee's efficiency is key in measuring performance and that they need to be able to complete their work on time and must be cost effective. They should have a good handle on the limitations provided by the time and resources available, and should be able to prioritize to get things done as efficiently as possible (Jillo, 2016).

### **Empirical Review**

Armah-Ansah and Quartey (2019) examined the effect of HRD on employee performance in Ga East Hotels. Data were collected among selected hotel employees and questionnaires were administered among 100 randomly selected respondents. The data analyse with SPSS version 21. The study revealed that most employees were trained and developed and the most methods used were orientation, demonstarion and mentorship. One hundred percent of the respondents revealed that training and development which is a subset of HRD helps improve the overall skills and knowledge needed to perform current and future job.

Also, Manggis, Yuesti, and Sapta (2018) examined the effect of career development on employee performance in Denpasar city, Bali Province. The study adopted a quantitative approach and primary data were obtained from the use of questionnaire. The population was 85 people where proportionate stratified random sampling technique was used to select 50 respondents. Data analysis technique used was Structural Equation Modeling (SEM) based on

Partial Least Square (PLS) using SmartPLS 3.0 program. The result of the research showed that career development has positive and significant effect to employee performance.

Similarly, Nasution, Mariatin and Zahreni (2018) conducted a study on the influence of career development on employee performance at Bank Pembangunan Daerah. The study used quantitative approach which involved 242 permanent employees of Bank Pembangunan Daerah. The result of statistical analysis showed that career development had positive and significant influence on employee performance.

Again, Onwumelu and Dialoke (2018) investigated the impact of human resource development on employee performance: a study of selected oil service firms in Rivers State, Nigeria. The study examines the impact of training on employee performance it also determines the impact of organizational development on employee performance. The population of the study was 150, out of which 109 was determine as sample size through the use of Taro Yamane sample size determination table. Finding revealed that training has a positive impact on employee performance. Also, organizational development impact positively on the performance because of the  $X^2$  values is 70.862 greater than the tabulated value of 9.49. Finally, the recommendations were made that human resource development elements like training and organizational development should be the focus point of the management.

Laghari, Akhtar and Ayub (2016) researched on the determinants of organizational development as the key developers of employee soft skills in Pakistani industry context. This research used explanatory approach; incorporating secondary data extracted under the light of existing school of

thoughts paired with quantification through data collected from respondents in Pakistani corporate sector. Hypotheses are tested using structural equation model (SEM) technique. The determinants were organizational learning, chaos management, leadership, culture, structure, information and reward systems, and work policies and procedures. Results showed an affirmative link between determinants of organizational development and development of soft skills in employees. Finally, the study proposes enriching insights on few missing links that can be researched and triggered achieving maximized outcomes.

Oduro-Danso (2013) studied human resource development practices in Mining Department of Goldfields Ghana Limited – Tarkwa Mine. A descriptive survey research design was used in the study and questionnaire was used to elicit information from the workers of Tarkwa Mining Department. The simple random sampling method was used to select the 200 respondents as the sample for the study. The data collected were analysed by the use of the Statistical Product and Service Solution (SPSS) version 16.0. The finding of the study indicates that; first, though Goldfields Tarkwa Mining Department had well defined policies that guided its human resource development practices, some of the workers were not aware of such policies. Secondly, the Company conducted in service training programmes to improve upon the skills and knowledge of its workers. However, some of the workers felt the training programmes were helpful.



## CHAPTER THREE

### RESEARCH METHODS

#### Introduction

This chapter explains the research procedure adopted for the study. It describes the research design, population and the sampling techniques used for the study. Other components of the chapters include the development of research instrument for collecting the data, fieldwork, ethical consideration and the plan for analysing the data collected.

#### Research Approach

The research approach was a quantitative approach. This approach to research is specific, well structured, have been tested for their validity and reliability, and can be explicitly defined and recognised (Gefen, Rigdon & Straub, 2011). It is argued that human behaviour, like physical phenomenon, the natural social sciences can be quantified in attributes (Stage & Manning, 2015) and this is done through the quantitative research approach. This approach is considered apt because it enables the researcher to generate data through the standardized collection procedures based on highly structured research instrument(s) and well-defined study concepts and related variables. Quantitative approach was chosen due to the objectives of the study which was analysed using statistical tools.

#### Research Design

Explanatory research design was used for this study. Explanatory design was used to explain the cause and effect of the variables under study. Explanatory study sets out to explain and account for the descriptive

information. Explanatory research looks for causes and reasons and provides evidence to support or refute an explanation or prediction. It is conducted to discover and report some relationships among different aspects of the phenomenon under study. It is clear that the objectives of the study depict cause and effect relationships.

### **Study Area**

The research area covers Buduburam Fire Service Station, Kasoa. It is located at Gomoa Buduburam on the Kasoa-Winneba high way in the Central Region. Its vision is to prevent and manage undesired fires, thereby reducing loss of lives and properties by enforcement of fire safety measures in national strategic installation and responding promptly to fire disasters. The mandate of Buduburam Fire Service Station includes organizing public fire education programmes, provide technical advice for building plans with regard to machinery and structural layout to facilitate escape from fire, rescue operations and fire management. Also, it is their mandate to inspect and offer technical advice on fire extinguishers and train and organize fire volunteer squads at the community level. It is therefore imperative to development the human resource so as to achieve the mandate and realise the vision if the noble institution.

### **Population**

The staff of the Buduburam Fire Service Station, Kasoa were the target population for the study. This population is deemed appropriate because of their efficient and effective service delivery and also because they represent the key players. Creswell (2014) posit that study population is the group or

community that a researcher intends to carry out a research on for the purpose of generalisation. Prockl, Teller, Kotzab and Angell (2017) refers to a study population as the entire group of respondents or elements relevant to a research. The study targeted a population of fifty-six (56) employees consisting of senior and junior staff.

### **Sample and Sampling Procedure**

According to Etikan, Musa, and Alkassim (2016), a sampling frame is a list of elements from which the sample is actually drawn from and is closely related to the population. Sample constitutes a certain portion of the population or universe and sampling technique refers to the procedure the researcher adopts for selecting items for the sample from the population or universe (Guetterman, 2015). Bambale (2014) emphasized that a sample of a population consists of that proportion of the number of units selected for investigation. Yin (2017) described sampling as the deliberate choice of a number of people who are to provide the data from which conclusions about those people can be drawn.

However, the study adopted a census survey where each member of the population participated in the study. A census survey collects complete information from all participants in the population (Kindermann, Nunan, Hinde & Chipperfield, 2017). In other words, a census is often construed as the opposite of a sample as its intent is to count everyone in a population rather than a fraction (Lee, Farrell, Reardon & Matthews, 2019).

## Data Collection Instrument

Research instrument is any type of written or physical device which is used to measure variables (Thomas, Silverman & Nelson, 2015). The type of instrument used for data collection depends on the data and the type of data to be collected. A choice of instrument would depend on many factors including validity and reliability, ease of administering, ease of acquisition of response, and ease of interpretation (Engel & Schutt, 2012). A structured questionnaire was the main instrument of the study and was administered to the respondents to gather quantitative data. The researcher preferred to use this method (questionnaire) because of its ability to solicit information from respondents within a short time as supported by Frankfort-Nachmias and Nachmias (2007). Moreover, respondents would be given time to consult records so that sensitive questions could be truthfully answered as supported by Sandelowski (2010).

The questionnaire was closed questions. Close questions were relevant for the reason that they were easy to ask and quick to answer. This is significant since data had to be collected quickly to meet the time frame for the research (Creswell & Clark, 2017). Another reason was that analysis of closed-ended questions was easy and straight forward (Zuur, Ieno, & Elphick, 2010). A closed-ended question generates a limited set of responses that can be coded easily in a database with some number or symbol that represents a response (Gravetter, 2012). Multiple-choice, ordinal, interval and ratio questions generate closed-ended responses. Closed-ended questions should not always be thought of as simple questions that anyone can quickly answer merely because they require a yes or no answer (Bryman, 2016).

Close-ended questions can also be very complicated. But they are easier to analyze than open-ended questions. However, the potential for the closed ended questions to introduce bias was duly recognized. The questionnaire would comprise of two parts. Part 1 contains the demographic issues while Part 2 will cover HRD practices and part 3 will cover employee performance. This researcher strictly used the close-ended items to collect the required data. In this technique the respondents were only to tick the correct option to the question according to their opinions using a Likert scale of 1-5 for the employees.

### **Reliability and Validity**

Reliability and validity are two key components to be considered when evaluating a particular instrument. Reliability, according Gravetter (2012) is concerned with consistency of the instrument, and an instrument is said to have high reliability if it can be trusted to give an accurate and consistent measurement of an unchanging value. A test of reliability was run using SPSS software and the Crobach Alpha coefficient was .847 which was greater the required threshold .70. The validity of an instrument, on the other hand, refers to how well and instrument measures the particular concept it supposed to measure (Saunders and Lewis, 2012).

Saunders and Lewis (2012) further argue that an instrument must be reliable before it can be valid, implying that an instrument must be consistently reproducible; and that once this has been achieved, the instrument can then be scrutinized to assess whether it is what it purports to be.

Table 1 shows the results of the reliability test conducted at the Buduburam Fire Service Station, Kasoa

**Table 1: Reliability Statistics**

No.	Construct	Cronbach's Alpha	No. of items
1	Career Development	0.841	04
2	Organizational Development	0.741	08
3	Training and Development	0.821	07
	Overall scale	0.847	19

Source: Field survey (2020)

To ensure validity of questionnaires, the researcher reviewed other relevant literature that served as evidence and support the answers that would be found using the questionnaire, relevance being determined by the nature of their research question and their own judgement (Saunders, Lewis & Thornhill, 2016). Further, the designed questionnaire was submitted to the project supervisor for vetting, correction and approval before distributing it to the respondents.

#### **Data Collection Procedure**

An introduction letter (Appendix A) from the researcher's head of department was presented to the participants to enable them understand the research as academic and provide the researcher with the needed assistance. The purpose of the study was explained to the respondents and this will pave way for the retrieval of the questionnaires from respondent without difficulty. The questionnaires were self-administered to the qualified respondents who would be first stratified before randomly selected to participate in the study. This mode of primary data collection would provide the opportunity for the researcher to establishing rapport with the respondents, thereby ensuring higher recovery rate (Leedy & Ormrod, 2010).

## **Data Processing and Analysis**

Collected questionnaire had to be managed properly if decision-making is to be made of it (Hair, Wolfinbarger, Money, Samouel & Page, 2015). Consequently, it is important that raw data is handled properly so as to transform it into information for the purpose of decision making (Aalst, La Rosa & Santoro, 2016). The questionnaire that was retrieved was first sorted out to find out those that were not answered and to check for consistency, clarity and accuracy of recording. Each of the questionnaires was be given an identification number to avoid double entry or data loss. The questionnaire was coded using the SPSS Version 22.0 template. Both descriptive statistics and regression analysis were used to analyse the data collected. All specific objectives of the study were analysed using linear regression analysis.

## **Ethical issues**

Some of the ethical issues that were considered in the study include observing institutional protocol before carrying out the data collection exercise at the assembly (Bell & Bryman, 2015). An introductory letter was obtained from the Department of Human Resource Management to introduce the researcher to the respondents. The respondents would be informed about the purpose of the research and what objective it sought to achieve (Wallace & Sheldon, 2015). Again, the respondents were encouraged to be objective in answering the items on the questionnaire. They were also assured of their anonymity and confidentiality of information provided through management (Chell, Spence, Perrini & Harris, 2016). According to Bowie (2017), a research is expected to be free from any bias and it must be scientifically sound and reported honestly, thoroughly and completely.

## CHAPTER FOUR

### RESULTS AND DISCUSSION

#### Introduction

This chapter of the study presents the findings emanating from the data collected from the self-administered questionnaires. The discussions included the interpretation of the findings in reference to previous findings and theories. The chapter is organised into two main parts. The first part deals with the background characteristics of respondents and covers areas such as respondents' sex, age, and number of years served at the institution. The second part is devoted to responses given by the respondents in accordance with the purpose of the study. It tackles the specific research objectives based on data collected. Fifty-six (56) questionnaire were distributed and retrieved from the employees of Budubram Fire service station at Kasoa.

#### Demographic Characteristics of Respondents

Before the main analysis, information relating to gender, age, and work experience of respondents were captured. These are discussed below.



**Table 2: Demographic Characteristics of Respondents**

Variables	Sub-scale	N	%
Gender	Male	35	62.5
	Female	21	37.5
Age range	Below 30 years	33	58.9
	30-40 years	21	37.5
	41 - 50 years	1	1.8
	51years and above	1	1.8
Work Experience	less than 1 year	15	26.7
	1-5	21	37.5
	6-10	10	17.8
	10 years and above	5	8.9

Source: Field survey (2020)

Table 2 shows that, out of 56 respondents, 35 (62.5%) of the respondents are male while 21 (37.5%) are female. Table 2 also shows the age profile of the respondents in years, 33 respondents representing 58.9% were below 30 years, 21 representing 37.5% were aged between 30-40 years, 94 representing 30.7% were aged between 36 - 40 years and 1 representing 1.8 % aged 41 - 50 years. With respect to number of years served at the institution, Table 2 revealed that, 15 (26.7%) had spent less than 1 year, 21 (37.5%) had had spent 1-5 years, 10 (17.8%) had spent 6-10 years and 5 (8.9) had spent more than 10 years. This presupposes that the workforce is competent since at majority had spent more than a year.

Before analysing the of the objectives, it was imperative to examine human resource development practices and level of performance of the staff at Fire Service Station at Budubram. Twenty (20) items were used in measuring the human capital development practices while six (6) items were used to measure employee performance. The responses to the items were measured with five-point numerical scale such that one (1) represents strongly disagree and five (5) represent strongly agree. The main variables were evaluated in terms of descriptive statistics- mean and standard deviation. The mean showed the average responses to each item whereas the standard deviation showed the variation in the responses to each item.

On a scale of 1 to 5, the accepted midpoint is 2.9 such that any mean score below 2.9 is regarded as disagreement and mean score above 2.9 is regarded as agreement. According to Wan, Wang, Liu & Tong (2014), anytime measures of central tendencies are computed, there is the need to also compute the measure of variation. However, there is no threshold for acceptable variation but each variation can be compared with the variations of other items under the same construct. Table 3 therefore presents the descriptive statistics of human capital development practices at Budubram Fire Service Station.

**Table 3: Descriptive Statistics on Human Resource Development Practices**

<b>Constructs</b>	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>
<b>Training and Development</b>					
Safety	56	1.00	5.00	3.62	.90
Communication	56	1.00	5.00	3.58	1.07
Problem-solving skills	56	1.00	5.00	3.53	1.33
Time management	56	1.00	5.00	3.44	1.29
Ethics	56	1.00	5.00	3.51	1.41
Job rotation	56	1.00	5.00	3.58	1.31
Emotional intelligence	56	1.00	5.00	3.76	1.29
<b>Career Development</b>					
Career planning	56	1.00	5.00	3.91	.87
Career advancement	56	1.00	5.00	4.01	.75
Career guidance	56	1.00	5.00	3.89	.86
Mentorship	56	1.00	5.00	3.53	1.02
<b>Organisational Development</b>					
Coherence	56	1.00	5.00	1.98	1.21
Synergy	56	1.00	4.00	3.94	.40
Positive Working Environments	56	1.00	5.00	3.41	1.00
Strategy	56	1.00	5.00	3.98	1.01
Leadership	56	2.00	5.00	3.76	.85
Culture	56	1.00	5.00	2.66	1.04
Structure	56	1.00	5.00	2.46	1.17
Reward system	56	1.00	5.00	3.60	1.15
Work policies and procedures	56	1.00	5.00	3.55	1.15

Source: Field survey (2020)

From the results on Table 3, it can be inferred that almost all the indicators of human resource development were agreed upon. This is shown by the mean statistics equal or more than 2.9. However, indicators such as the culture and structure of the organization were less agreed by the

respondents. Overall, the descriptive statistics shows that human resource development practice at the institution is a good one.

Again, it is imperative to ascertain the level of employee performance as a result of training, career and organizational development practices enjoyed. As a result, Table 4 shows the level of performance of staff of Budubram Fire Service Station.

**Table 4: Descriptive Statistics on Employee Performance**

	N	Minimum	Maximum	Mean	Std. Deviation
Prevention	56	1.00	5.00	3.2500	1.40
Preparedness	56	1.00	5.00	3.3750	1.32
Responses	56	1.00	5.00	3.5893	1.37
Recovery	56	1.00	5.00	3.4821	1.43
Cost effectiveness	56	1.00	5.00	3.1250	1.26
favourable Input to output	56	1.00	5.00	3.3750	1.43

Source: Field survey (2020)

From Table 4 it can be observed that as a result of human resource developmental activities received by the employees, the level of performance is high. This is so because the mean values exceed the threshold 2.9.

***Test of Multicollinearity***

Before analysing the objectives using regression analysis, it was imperative to check for assumptions of regression. Among assumption is to test for multicollinearity. Multicollinearity is a state of very high intercorrelations or inter-associations among the independent variables (Sekaran & Bougie,

2018). It is a type of disturbance in the data, and if present in the data the statistical inferences made about the data may not be reliable. Again, the dependent variable needs to be measured using a continuous scale and a linear relationship must be assured before employing regression analysis.

The researcher computed for the variance inflation factor (VIF) and tolerance to test for multicollinearity. Lind, Marchal, and Wathen (2018) suggested that a VIF greater than 10 is considered unsatisfactory, indicating multicollinearity, thus, the independent variable should be removed from the analysis. Also, the value of Tolerance less than .10 indicates that the variable has high correlation with other variables in the model, suggesting the possibility of multicollinearity. It can be inferred from Table 5 that the VIF indicated 1.077, 1.140 and 1.471 for directed at oneself, directed at context, directed at regulation of CSM processes respectively. It can be concluded that the independent variables are not strongly correlated with each other given that all the VIFs values being less than 10. Again, the tolerance values from Table 4 were all more than .10 also indicating no possibility of multicollinearity.

**Table 5: Collinearity Statistics**

		Tolerance		VIF
1	(Constant)	.485		
	CD	.017	.976	1.025
	TD	.009	.930	1.075
	OD	.000	.909	1.100

*CD= Career development, TD= Training and development and OD= Organisational Development*

Source: Field survey (2020)

Also, it is imperative to check another assumption of linearity. That is, there should be linear relationship between the independent and dependent variable. The linearity assumption can best be tested with a histogram where it should be a bell shaped. It can be observed that the data is a bell-shaped hence a linear relationship between the dependent and independent variable.

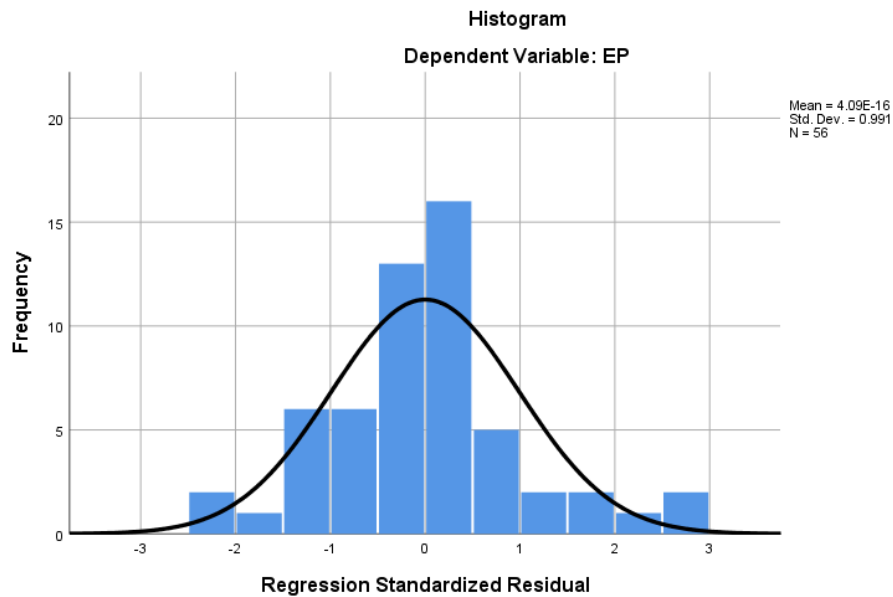


Figure 2: Histogram on linearity of the dependent Variable

### **Influence of Training and Development on Employee Performance at Buduburam Fire Service Station, Kasoa**

A regression analysis was employed to assess influence of training and development on employee performance at Buduburam Fire Service Station, Kasoa. The regression model was evaluated by the coefficient of determination denoted by R-square ( $R^2$ ). This represents the proportion of variance in either variable which is linearly accounted for by the other (Cohen, 1992). The analysis with the help of SPSS and the output of the analysis are seen in tables 6, 7, and 8. With training and development as the independent variable and employee performance as the dependent variable. Table 6 gives

the model summary of the output. This table displays R, R squared, adjusted R squared, and the standard error. R is the Pearson product moment correlation coefficient which indicates the strength and direction of the linear relationship between the dependent variable (employee performance) and the independent variable (training and development).

From Table 6, training and development and employee performance are positively correlated. However, the strength of the relationship was moderate at (.407). The R squared, the coefficient of determination, is the proportion of variation in the dependent variable explained by the regression model. Thus, about (16.5%) of the variation in employee performance is explained by the level of training and development existing. Adjusted R<sup>2</sup> is reported when it substantially differs from R<sup>2</sup> (Green & Salkind, 2010). But since there is no difference between the two, the adjusted R<sup>2</sup> will not be reported in this study.

**Table 6: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.407 <sup>a</sup>	.165	.150	4.87537

a. Predictors: (Constant), TD

Source: Field survey (2020)

Table 7 is the ANOVA table which provides the test significance for R and R<sup>2</sup> using the F-statistic. The F statistic is the regression mean square (MSR) divided by the residual mean square (MSE). If the significance value of the F statistic is small (smaller than say 0.05) then the independent variables do a good job explaining the variation in the dependent variable. In this

analysis, the  $\rho$ -value is well below .05 ( $\rho = .001$ ). Therefore, it can be concluded that the R and  $R^2$  between training and development and employee performance is statistically significant, and therefore training and development can significantly impact employee performance.

**Table 7: ANOVA<sup>a</sup>**

		Sum of				
Model		Squares	df	Mean Square	F	Sig.
1	Regression	254.459	1	254.459	10.705	.002 <sup>b</sup>
	Residual	1283.541	54	23.769		
	Total	1538.000	55			

a. Dependent Variable: Employee Performance

b. Predictors: (Constant), Training and Development

Source: Field survey (2020)

Table 8 provides information that is useful for understanding the regression equation. Under the column marked unstandardized coefficient and sub-column B, the numerical value for the first row, labelled (constant), is the value for the intercept (a) in the regression equation. The numerical value on the second row, labelled as training and development in this case (representing the independent variable), is the value for the slope (b) for the regression equation. Based on these results, the researcher can report the following regression equation, predicting employee performance based on the existing Training and development.

$$Y (\text{Employee performance}) = 9.323 + 0.472X (\text{Training and development}).$$

Taking the values for the slope and the intercept in the resulting regression equation, the researcher can make the following accessions:



According to the intercept, when there is no training and development of employees at the institution, employee performance will be 9.323, and according to the slope, any training will lead to an increase in employees performance by (47.2%). Therefore, training and development has a strong significant effect on employee performance.

**Table 8: Coefficients<sup>a</sup>**

Model		Unstandardized		Standardized		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	9.323	3.477		2.681	.010
	T&D	.472	.144	.407	3.272	.002

a. Dependent Variable: Employee Performance

Source: Field survey (2020)

The results imply that training of employee is essential for every organization to develop the performance of its employees and the organization should evaluate the training program as per the objectives and missions (Chris, 2011). Also, the findings corroborate with Onwumelu and Dialoke (2018) whose finding revealed that training has a positive impact on employee performance. Again, the findings are that consistent with Saleem (2011) who mentioned that training is an organized increase from the know-how skills and sensations needed for staff members to execute efficiently in the offered process, as well as, to operate in underling situation. Lastly, the results are in line with Singh and Mohanty (2012) who explained in their research that training is an important tool for the purpose of enhancing the workforce performance and it will ultimately increase the worth of an organization but

organization ought to be balance amongst training worth and training disbursement.

### **Effect of Organizational Development on Employee Performance at Buduburam Fire Service Station, Kasoa**

Again, regression analysis was employed to examine effect of organizational development on employee performance at Buduburam Fire Service Station, Kasoa. The regression model was evaluated by the coefficient of determination denoted by R-square ( $R^2$ ). This represents the proportion of variance in either variable which is linearly accounted for by the other (Cohen, 1992). The analysis with the help of SPSS and the output of the analysis are seen in tables 9, 10, and 11. With organisational development as the independent variable and employee performance as the dependent variable. Table 9 gives the model summary of the output. This table displays R, R squared, adjusted R squared, and the standard error. R is the Pearson product moment correlation coefficient which indicates the strength and direction of the linear relationship between the dependent variable (employee performance) and the independent variable (training and development).

From Table 9, organisational development and employee performance are positively correlated. However, the strength of the relationship was strong at (.761). The R squared, the coefficient of determination, is the proportion of variation in the dependent variable explained by the regression model. Thus, about (57.9%) of the variation in employee performance is explained by the level of organizational development existing. Adjusted  $R^2$  is reported when it

substantially differs from  $R^2$  (Green & Salkind, 2010). But since there is no difference between the two, the adjusted  $R^2$  will not be reported in this study.

**Table 9: Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.761 <sup>a</sup>	.579	.572	3.46119

a. Predictors: (Constant), Organisational Development

b. Dependent Variable: Employee Performance

Source Field survey (2020)

Table 10 is the ANOVA table which provides the test significance for R and  $R^2$  using the F-statistic. The F statistic is the regression mean square (MSR) divided by the residual mean square (MSE). If the significance value of the F statistic is small (smaller than say 0.05) then the independent variables do a good job explaining the variation in the dependent variable. In this analysis, the  $p$ -value is well below .05 ( $p = .001$ ). Therefore, it can be concluded that the R and  $R^2$  between organisational development and employee performance is statistically significant, and therefore organisational development can significantly impact employee performance.

**Table 10: ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	891.090	1	891.090	74.383	.000 <sup>b</sup>
	Residual	646.910	54	11.980		
	Total	1538.000	55			

a. Dependent Variable: Employee Performance

b. Predictors: (Constant), Organisational Development

Source: Field survey (2020)

Table 11 provides information that is useful for understanding the regression equation. Under the column marked unstandardized coefficient and sub-column B, the numerical value for the first row, labelled (constant), is the value for the intercept (a) in the regression equation. The numerical value on the second row, labelled as organisational development in this case (representing the independent variable), is the value for the slope (b) for the regression equation. Based on these results, the researcher can report the following regression equation, predicting employee performance based on the existing organisational development.

$$Y (\text{Employee performance}) = 9.323 + 0.472X (\text{organisational development}).$$

Taking the values for the slope and the intercept in the resulting regression equation, the researcher can make the following accessions: According to the intercept, when there is no organisational development of employees at the institution, employee performance will be 9.428, and according to the slope, any organizational development will lead to an increase in employees performance by (57.4%). Therefore, organisational development has a strong significant effect on employee performance.

**Table 11: Coefficients<sup>a</sup>**

Model		Unstandardized		Standardized		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	9.482	1.359		6.979	.000
	OD	.574	.067	.761	8.625	.000

a. Dependent Variable: Employee Performance

Source: Field survey (2020)

It is to note that the findings are in line with many studies (Onwumelu & Dialoke, 2018; Laghari, Akhtar & Ayub, 2016; Oduro-Danso, 2013). For instance, the result is in line with Onwumelu and Dialoke (2018) who asserted that organizational development impact positively on the performance of employees. Also, the finding is congruent Laghari, Akhtar and Ayub (2016) whose results showed an affirmative link between determinants of organizational development, development of soft skills in employees and their performance at large. Correspondingly, the results are consistent with Oduro-Danso (2013) who established that indicators of organizational development such as strategy, leadership, culture, structure, and reward systems positively impact employee performance.

### **Effect of Career Development on Employee Performance at Buduburam Fire Service Station, Kasoa**

The third objective sought to evaluate the effect of career development on employee performance at Buduburam Fire Service Station, Kasoa. Again, a regression analysis was employed to examine the effect thereof. The regression model was evaluated by the coefficient of determination denoted by R-square ( $R^2$ ). This represents the proportion of variance in either variable which is linearly accounted for by the other (Cohen, 1992). The output of the analysis is seen in tables 12, 13, and 14. Again, with career development as the independent variable and employee performance as the dependent variable. Table 12 gives the model summary of the output. This table displays R, R squared, adjusted R squared, and the standard error. R is the Pearson product moment correlation coefficient which indicates the strength and direction of

the linear relationship between the dependent variable (employee performance) and the independent variable (career development).

**Table12: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.311 <sup>a</sup>	.097	.080	5.07253

a. Predictors: (Constant), Career Development

Source: Field survey (2020)

Therefore, from Table 12, career development by staff and their performance was positively correlated, and the strength of the relationship was weak at (.311). The R squared, the coefficient of determination, is the proportion of variation in the dependent variable explained by the regression model. Thus, about (9.70%) of the variation in employee performance is explained by the career development provided. Adjusted R<sup>2</sup> is reported when it substantially differs from R<sup>2</sup> (Green & Salkind, 2010). Again, since there is no difference between the two, the adjusted R<sup>2</sup> will not be reported in this study.

Also, Table 13 is the ANOVA table which provides the test significance for R and R<sup>2</sup> using the F-statistic. The F statistic is the regression mean square (MSR) divided by the residual mean square (MSE). If the significance value of the F statistic is small (smaller than say 0.05) then the independent variables do a good job explaining the variation in the dependent variable. In this analysis, the p-value is well below .05 ( $\rho = .001$ ). Therefore, it can be concluded that the R and R<sup>2</sup> between career development and employee performance is statistically significant, and therefore the career

development can significantly influence employees' performance at the Budubram Fire Service Station, Kasoa.

**Table 13: ANOVA<sup>a</sup>**

		Sum of				
Model		Squares	df	Mean Square	F	Sig.
1	Regression	148.550	1	148.550	5.773	.020 <sup>b</sup>
	Residual	1389.450	54	25.731		
	Total	1538.000	55			

a. Dependent Variable: Employee Performance

b. Predictors: (Constant), Career Development

Source: Field survey (2020)

Table 14 provides information that is useful for understanding the regression equation. Under the column marked unstandardized coefficient and sub-column B, the numerical value for the first row, labelled (constant), is the value for the intercept (a) in the regression equation. The numerical value on the second row, labelled as career development in this case (representing the independent variable), is the value for the slope (b) for the regression equation.

**Table 14: Coefficients<sup>a</sup>**

		Unstandardized		Standardized		
		Coefficients		Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	9.438	4.654		2.028	.048
	CD	.496	.206	.311	2.403	.020

a. Dependent Variable: EP

Source: Field survey (2020)

Based on these results, the researcher can report the following regression equation, predicting employees' performance based on the career development received.

$$Y (\text{employee performance}) = 9.438 + 0.496X (\text{career development}).$$

Taking the values for the slope and the intercept in the resulting regression equation, the researcher can make the following accessions: according to the intercept, when there is no career development provided to the staff, their performance will be 9.438, and according to the slope, career development will lead to an increase in their performance by (49.6%). By predicting, career development has a weak significant effect on employees' performance.

The result meant that career development help build employees' knowledge and skills to enhance their performance, prepare them for new opportunities and challenges (Amah, 2006). Again, it is in line with Agba, Festus and Ushie (2010) who elucidates that career development involves concerted efforts directed towards assessing a workers' potentials identifying likely career paths for that employee and designing and implementing various forms of training and experience to prepare that person for more advanced job. Further, it is consistent with Zulkarnain (2013) whose results shows that career development was related to quality of work life of employee. It is to note that the findings validate Manggis, Yuesti, and Sapta (2018) and Nasution, Mariatin and Zahreni (2018) whose result also showed that career development has positive and significant effect to employee performance.



Lastly, the study sought to examine the overall effect of human resource development on employee performance at Budubram Fire Service Station, Kasoa. With this, the various construct for human resource development (training and development, career development and organizational development) were put together as a composite. The human resource development construct was regressed on employees' performance. Table 15, 16 and 17 showed the results thereof.

**Table 15: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.815 <sup>a</sup>	.664	.645	3.15046

a. Predictors: (Constant), OD, CD, TD

Source: Field survey (2020)

**Table 16: ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1021.879	3	340.626	34.319	.000 <sup>b</sup>
	Residual	516.121	52	9.925		
	Total	1538.000	55			

a. Dependent Variable: EP

b. Predictors: (Constant), OD, CD, TD

Source: Field survey (2020)

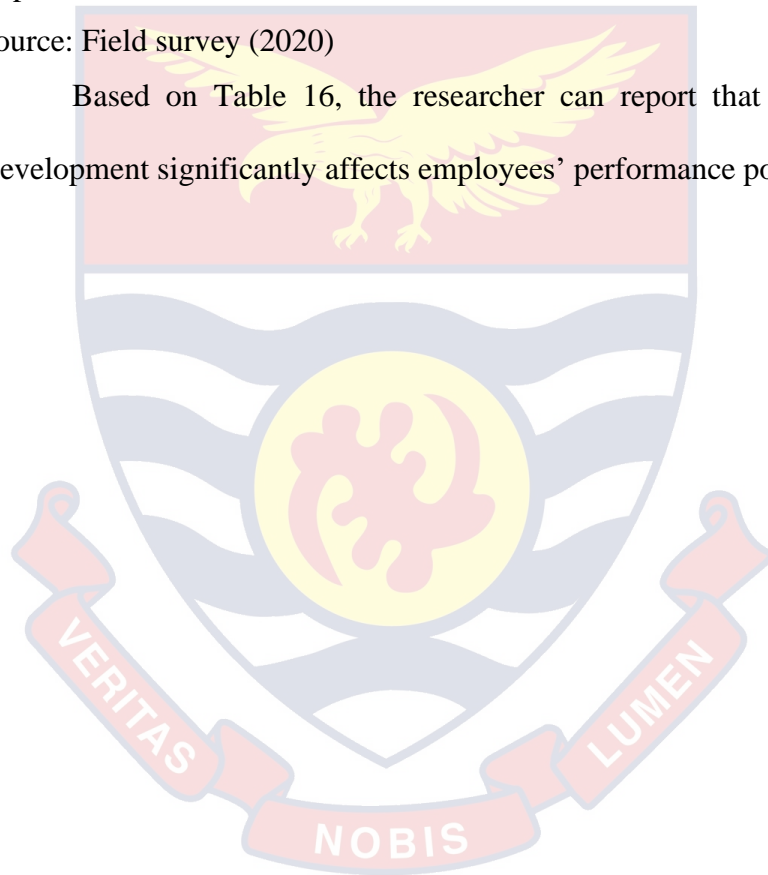
**Table 17: Coefficients**

Model		Unstandardized		Standardized		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	2.525	3.594		.703	.485
	CD	.320	.130	.201	2.469	.017
	TD	.260	.097	.224	2.694	.009
	OD	.506	.064	.671	7.963	.000

Dependent Variable: EP

Source: Field survey (2020)

Based on Table 16, the researcher can report that human resource development significantly affects employees' performance positively.



## CHAPTER FIVE

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### Introduction

This chapter presents the summary, conclusions and recommendations of the study. The summary and conclusions are based on the findings captured in chapter four. The chapter also presented the recommendations of the study based on the study's conclusions. The chapter concluded with suggestions for further research.

#### Overview

The purpose of this study was to examine the effect of human resource development on employee performance at Buduburam Fire Service Station, Kasoa. In order to achieve the main objective, the following research objectives were set to guide the study:

1. To assess the influence of Training and development on employee performance at Buduburam Fire Service Station, Kasoa.
2. To examine the effect of organizational development on employee performance at Buduburam Fire Service Station, Kasoa.
3. To evaluate the effect of career development on employee performance at Buduburam Fire Service Station, Kasoa.

The quantitative research approach and the explanatory research design were employed in the study. The target population consisted of 56 staff at Buduburam Fire Service Station, Kasoa and all the respondents participated in the study. Structured questionnaires were distributed to the respondents of which all were appropriate for analysis. Data obtained were analyzed using percentage and linear regression.

## Summary of Key Findings

Based on the first objective, the study found that among the indicators of training and development of fire service staff, safety, communication, problem-solving skills, time management, ethics, job rotation and emotional intelligence are important for training and development. It was also found that these indicators in composite impact on employee performance and that training and development and employee performance are positively correlated.

The study also found that in order to develop the organization successfully, factors such as coherence, synergy, positive working environments, strategy, leadership, culture, structure, reward system and work policies and procedures need to be managed well. Likewise, organizational development positively predicts employee performance. However, the study found that the organizational structure and culture at Buduburam Fire Service Station, Kasoa were less favourable as respondents indicated.

Lastly, the study found that, career development of employees' aid in employee performance and that the two variables are positively related. Meaning career planning, career advancement, career guidance and mentorship influences employee performance at Buduburam Fire Service Station, Kasoa. Again, training and development, organizational development and career development as a composite predict positive variance in employee performance.

## Conclusions

This study has provided an overview and relevant discussion on human resource development and employees' performance and the effect of human resource development on employees' performance at Buduburam Fire Service

Station, Kasoa. The study concluded that in order to develop human resource of an organisation, training and development of the staff is key and that training and development enhance employees' performance.

Likewise, the study concluded that career development of employees is important and it helps augment their performance. Also, employees should be given career guidance, mentorship and should advance in their career.

Finally, the study further concluded with confirmation to other studies and assertions that organizational development is statistically significant and positively related to employees' performance at Buduburam Fire Service Station, Kasoa.

### **Recommendations**

Based on the study's conclusions, the following recommendations were hereby made.

1. The study recommended that management should enhance their structure such that it would outline how activities are directed in order to achieve the goals of an organization. These activities can include rules, roles, and responsibilities.
2. The study recommended that management should provide shared assumptions, values, and beliefs, which will govern how people behave in organizations. These shared values will make up the culture and would have a strong influence on the people in the organization and dictate how they act and perform their jobs.

### Suggestion for Further Studies

Only staff of the Buduburam Fire Service Station in Kasoa were included in this study. As a result, future research might be expanded to include other fire stations in the region or Ghana as a whole, broadening the reach of staff development and how it affects performance. Future research should look into the impact of human resource development dependent variables other than employee performance, according to the findings.



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**APPENDIX I**  
**QUESTIONNAIRE**

This questionnaire is part of a study that is investigating human resource development practices on employee performance at Budubram Fire service station at Kasoa. Kindly indicate your preference among alternative answers for each question by ticking in the appropriate box. Where alternative answers are not provided, fill in the gaps provided. Thank you for your contribution. Respondents are assured of the confidentiality of this exercise because it will be solely used for academic purpose.

**1. Background Information**

- a. Gender: Male  Female
- b. Age: 20-  30yrs 30-40yrs  40-50yrs  
above 50yrs
- c. Number of years spent at the Institution
- 1-5yrs  5-10  10-15yrs  above 15yrs

**2. Human Resource Development practices**

Kindly indicate your level of agreement with regards to each of the following statements on human resource development practices in your organisation. The responses would be measured numerically such that SD = Strongly Disagree, D = Disagree, N= Neural, A= Agree and SA = Strongly Agree to the issues.

<b>Constructs</b>	<b>SD</b>	<b>D</b>	<b>N</b>	<b>A</b>	<b>SA</b>
<b>Training and Development</b>					
Safety					
Communication skills					
Problem-solving skills					
Time management					
Ethics					
Job rotation					
Emotional intelligence					
<b>Career Development</b>					
career planning					
career advancement					
career guidance					
Mentorship					
<b>Organizational Development</b>					
Coherence					
Synergy					
Strategy					
Leadership					
Culture					
Structure					
Reward systems					
Work policies and procedures.					

### 3. Performance Indicators

Kindly indicate your level of performance with regards to each of the following statements on the level of performance as a result of HRD practices in your institution. The responses will be measure numerically such that SD = Strongly Disagree, D = Disagree, N= Neural, A= Agree and SA = Strongly Agree to the issues.

Constructs	SD	D	N	A	SA
<b>Effectiveness</b>					
<i>Prevention</i> - activities undertaken to educate the community and monitor compliance with the Regulation given.					
<i>Preparedness</i> - measure the extent of how well the community is ready for emergency events					
<i>Response</i> – activities done to modify the emergency to reduce its effects					
<i>Recovery</i> – activities to help both the community and service have to return to normal arrangements.					
<b>Efficiency</b>					
Cost effectiveness					
Inputs to outputs – activity recorded a yielded outcome					

Thank you!!

Table 3.1

*Table for Determining Sample Size of a Known Population*

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

*Note: N is Population Size; S is Sample Size* *Source: Krejcie & Morgan, 1970*

