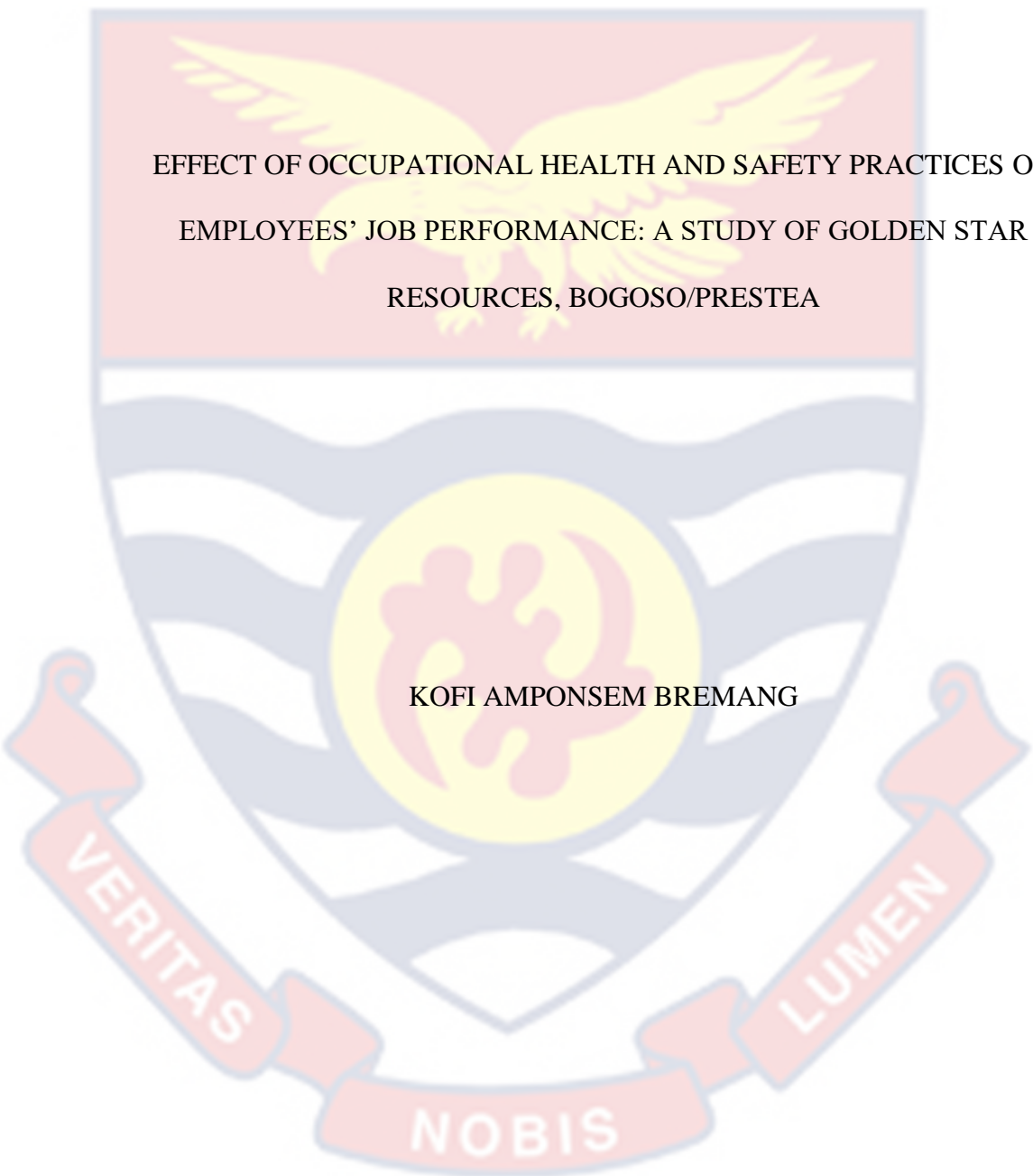


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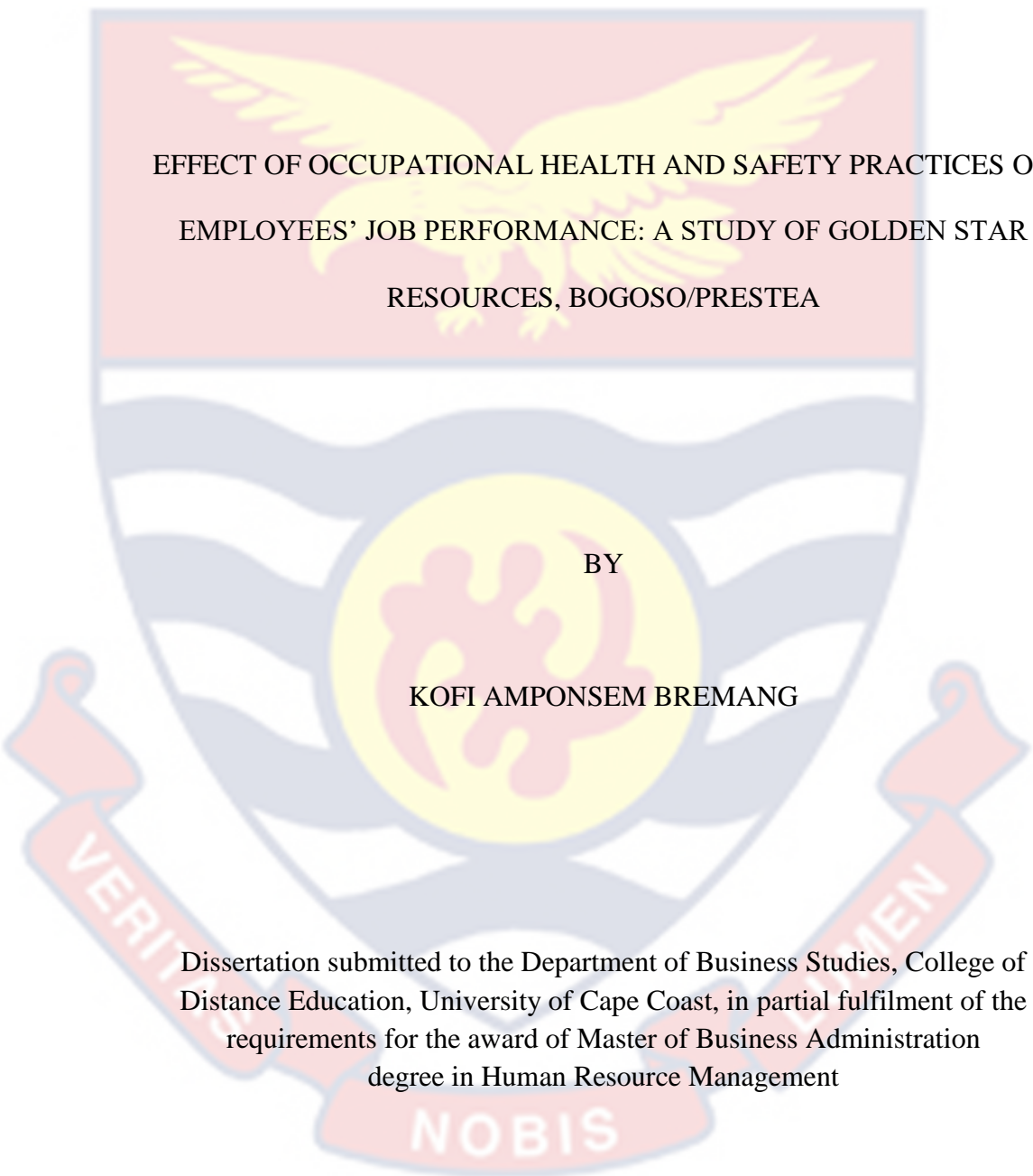


EFFECT OF OCCUPATIONAL HEALTH AND SAFETY PRACTICES ON  
EMPLOYEES' JOB PERFORMANCE: A STUDY OF GOLDEN STAR  
RESOURCES, BOGOSO/PRESTEA

KOFI AMPONSEM BREMANG

2023

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EMPLOYEES' JOB PERFORMANCE: A STUDY OF GOLDEN STAR  
RESOURCES, BOGOSO/PRESTEA

BY

KOFI AMPONSEM BREMANG

Dissertation submitted to the Department of Business Studies, College of  
Distance Education, University of Cape Coast, in partial fulfilment of the  
requirements for the award of Master of Business Administration  
degree in Human Resource Management

JUNE 2023

## DECLARATION

### Candidate's Declaration

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

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

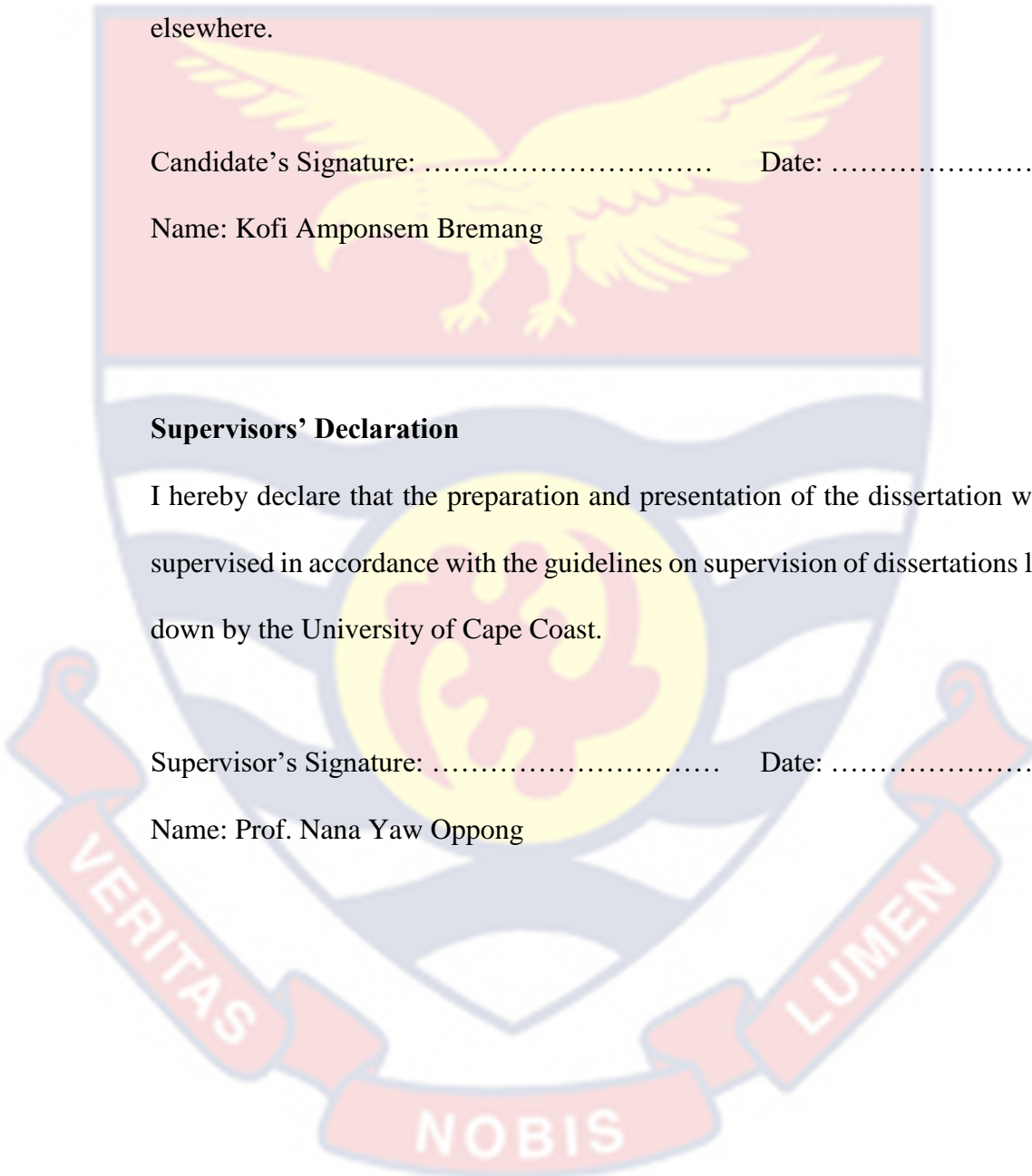
Name: Kofi Amponsem Bremang

### Supervisors' Declaration

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

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

Name: Prof. Nana Yaw Opong



## ABSTRACT

The purpose of the study was to examine the influence of occupational health and safety practices on employees' performance at the Golden Star Resources, Bogoso/Prestea. Specifically, the study aimed to: (a) ascertain the effectiveness of occupational health and safety practices; (b) explore the various indicators of employee performance; and (c) examine the influence of occupational health and safety practices on employees' performance. The study employed quantitative approach with a descriptive cross sectional research design. Questionnaire was used to collect data from 205 respondents from a population of 480. Simple random sampling technique was used to select the sample. Data processing was done using SPSS version 21, and the analytical tools used were regression analysis and descriptive statistics. Findings from the study showed that all the dimensions of health and safety practices at the Golden Star Resources, Bogoso/Prestea were effective, and employees' job performance in the company was also high. It was further found that safety procedures and risk management, first-aid supports and trainings, and occupational hazards prevention all had significant positive effect on employees' job performance. On the whole, this study has contributed a lot in understanding the research problem identified and has offered new insights for practitioners by signifying that they may improve employees' performance level by paying more attention to the occupational health and safety practices. Based on the findings, it was recommended that workload should be reasonably balanced in the company. Lastly, deficiencies and mistakes revealed during internal audits for safety and health should be monitored and removed, and there should be health and safety devices for the employees.

**KEY WORDS**

Employee Performance

First Aid Support and Training

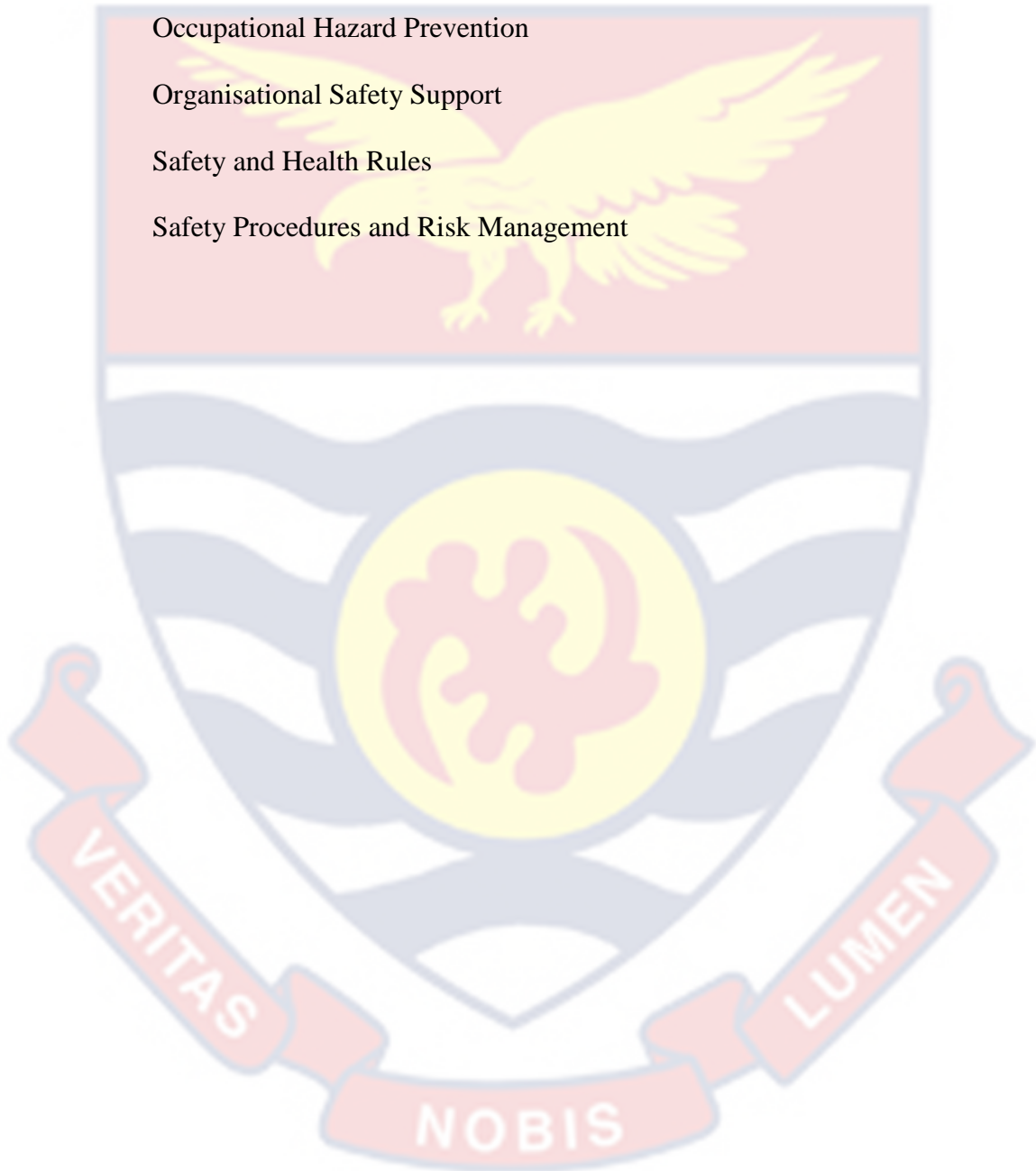
Health and Safety

Occupational Hazard Prevention

Organisational Safety Support

Safety and Health Rules

Safety Procedures and Risk Management



## ACKNOWLEDGEMENTS

I would like to acknowledge and give my heartfelt gratitude to my supervisor Prof. Nana Yaw Opong who made this dissertation possible. His consistent direction and advice in addition to his patience and encouragement held me through all the stages of my work. I wish to show special appreciation to my late Dad who taught me how to stand-up for myself in facing life's realities and accomplishing my dreams and desires. I always admired his zeal and enthusiasm in his accomplishments. He's the man I would always aspire to be.

I would also like to thank the General Manager – FGR-Bogoso/ Prestea Limited - Mr. Ahmed-Salim Adam and Mr. Michael Ephraim – Senior HR Manager (Chifeng Jilong Gold Mining Co) for their infinite support throughout my work. Special thanks to my wife Miss Jocelyn Akyere Akyeampong, my mother Mrs. Mary Bremang and the entire family for their continuous support and understanding when undertaking my research and writing my dissertation. Your prayers for me was what sustained me this far. Finally, I would like to give thanks to Jehovah Almighty, for granting me wisdom, understanding and strength through the difficulties. Your mercies saw me through to the completion of my dissertation.



**DEDICATION**

To my late Dad



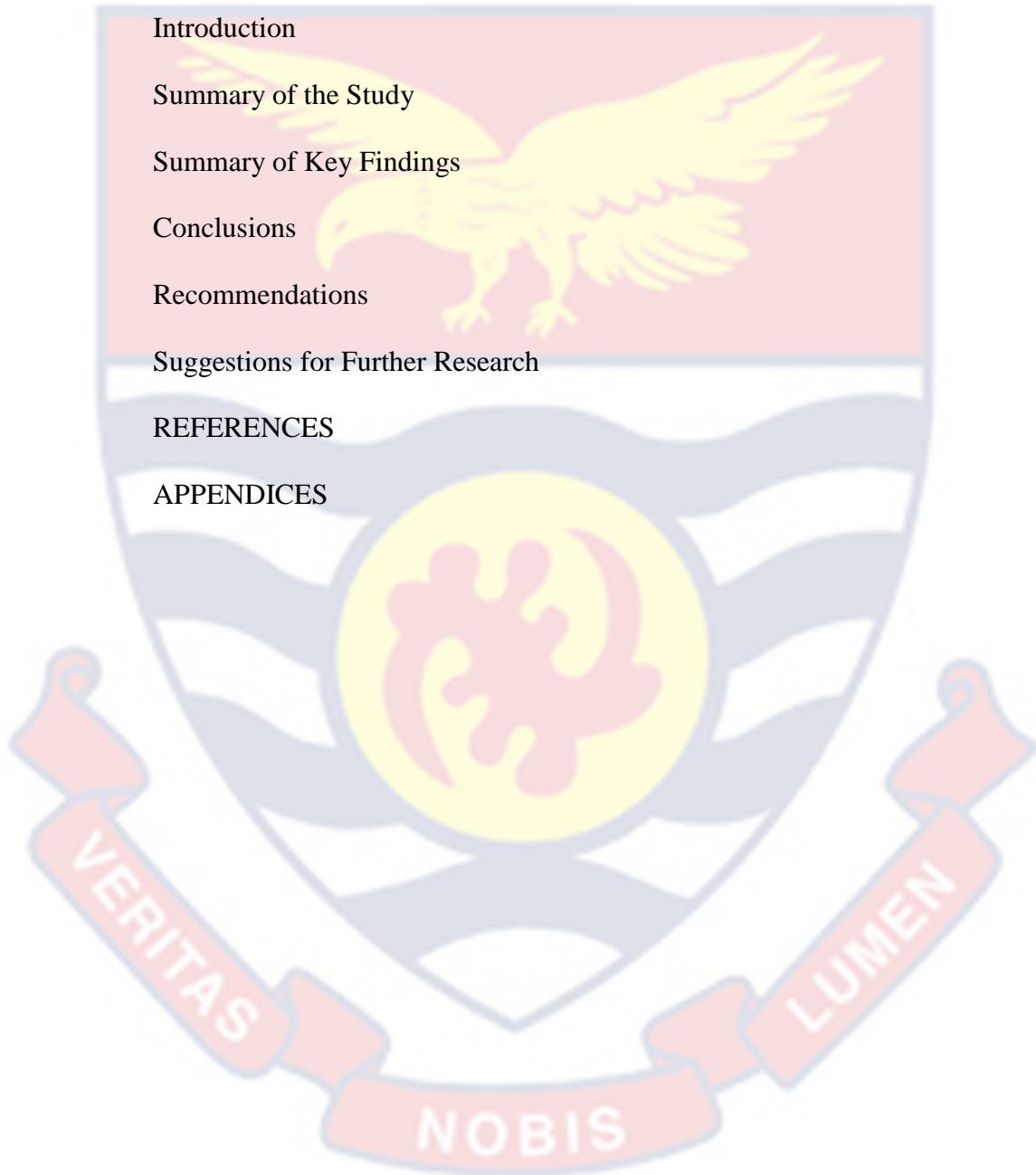
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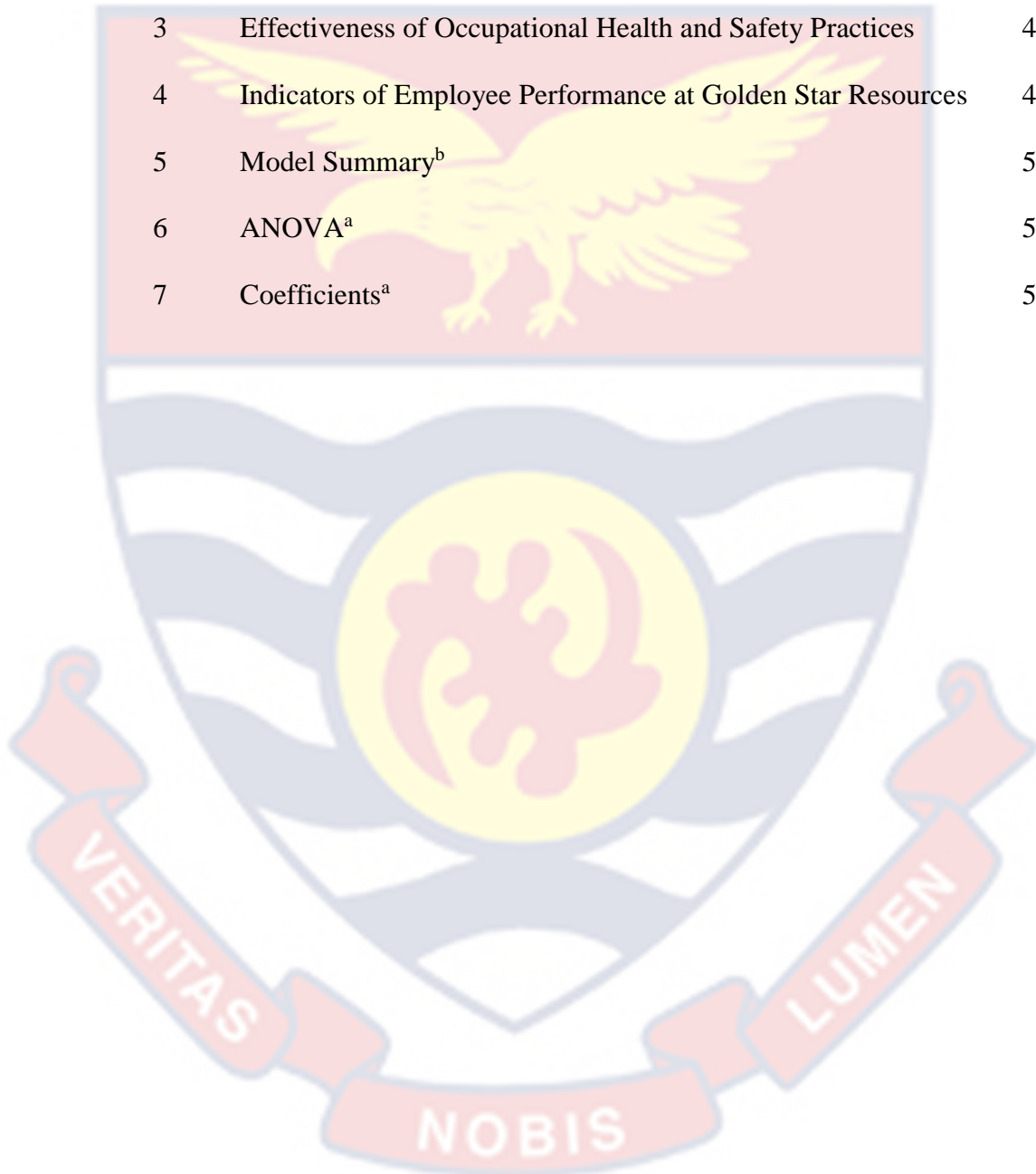
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### LIST OF ACRONYMS

FAST First Aid Support and Training

OHP Occupational Hazard Prevention

OSS Organisational Safety Support

SAHR Safety and Health Rules

SPRM Safety Procedures and Risk Management



## CHAPTER ONE

### INTRODUCTION

#### Background to the Study

Globally, it is estimated that 4% of annual gross domestic product (GDP) is lost due to the direct and indirect costs of occupational accidents and diseases (Yun, 2012). According to Sajjad and Abbasi (2014), most African countries are noted for poor occupational health and safety practices. Notwithstanding numerous occupational health and safety advances in recent years, several occupational health and safety issues still proliferate in most African countries, particularly in Ghana (Puplampu & Quartey, 2012). Thaden, Wiegmann, Zhang, Sharma and Mitchell (2003) asserted that safety culture of an organisation is the product of individual and group values, attitudes, competencies and patterns of behaviour that determine the commitment to, and the style and proficiency of an organisation's health and safety programmes.

Mining, whether is achieved underground or surface, exposes workers to potentially hazardous environments and conditions due to the use of potentially hazardous tools and materials (Pule, 2011). According to Pule (2011), the situation has resulted in high incidence of injuries evidenced in most mining divisions around the globe. Despite varied attempts to improve in safety performance, the number and severity of mining-related injuries remain high and unacceptable in Ghana. For example, in analysing injuries in the Ghanaian mining industry and priority areas for research, Stenn (2019) found that mining equipment was associated with 85% of all injuries and 90% of all fatalities, with mobile equipment, component/part, and hand tools being the leading equipment types.



Implementation of appropriate safety policies has become vital because international bodies like the International Labour Organization (ILO) have set benchmarks and practices that partner states are required to meet, and team approaches adopted by firms as a way of achieving market competitiveness (ILO, 2005). Mining companies should, therefore, take pragmatic steps to be led effectively so that they can move along with excellent organisations at the forefront of this competitive environment.

This is because injured employees may not be able to contribute meaningfully to the productivity of the organisation consequently; there will be low productivity and financial loss (Hukpe, 2012). Furthermore, occupational hazards result to loss of skilled work force because injured and incapacitated employees might not be on their jobs. According to Oluoch (2015), employee job performance is negatively affected by hazards and injuries at workplace because these hazards and injuries will lead to absenteeism. However, Hukpe (2012) opined that exposure to psychosocial hazards can affect employee's job performance.

Job performance is considered as business outcomes (Harter, Schmidt & Hayes, 2002) or 'social and economic outcomes resulting from interplay among work place's attributes, actions and environment' (Combs, Crook & Shook, 2005, p.261). Job performance takes different measures based on the industry or field of study (Jones, Jones, Latreille & Sloane, 2009). These varying measures reflect the multidimensional workplace performance (Combs, Crook, & Shook, 2005). There are financial measures such as profits, share price, turnover/sales, and dividend yield.

There are productivity measures such as labour productivity, efficiency scrap rates, organisational effectiveness, and occupational injuries (Grugulis & Stoyanora, 2011). Job performance could also be seen from quality measures such as customer satisfaction and reliability; as well as human resource perspectives such as labour turnover, absenteeism and job satisfaction (Barling, Kelloway, & Iverson, 2003; Grugulis & Stoyanora, 2011; and Korunka, Scharitzer, Caraya & Sainfort, 2003). To ensure higher employee performance, there is the need for all mining companies put in place zero harm initiative.

This could be achieved by partnering with various organisations in the country that champions the safety and health issues of employees. Golden Star Mining Company have partnered with a wide range of organisations in furtherance of safety and healthy aspects of their employees. The organisations include Chamber of Mines, National Aids Council (NAC), and the Environmental Management Agency (EMA) of Ghana. Despite all these well-meaning and noble initiatives the mining sector continues to be bedevilled by incidents and accidents. Questions regarding the extent to which the safety and health of the employees who work in the mining sector is guaranteed are then raised. How effective are the occupational health and safety practices and how does it influence employees performance in the mining sector of Ghana still remained unanswered.

### **Statement of the Problem**

As indicated by Adei and Kunfaa (2012), safety related accidents, diseases and hazards cost Ghana about 7% of her GDP. The Health and Safety Executive, a UK government agency responsible for the encouragement, regulation and enforcement of workplace health, safety and welfare, and for

research into occupational risks in Great Britain estimates the costs to individual occupational accidents and work-related ill health to be between GBP 10.1 and GBP 14.7 billion; and the costs to employers to be between GBP 3.9 and GBP 7.8 billion (Hassan, Austin, Celia, Disley, Hunt, Marjanovic & Shehabl, 2009).

The figures suggest that work-related ill-health, accidents and injury present a significant cost to many economies and employers, as well as individual employees and their families who experience the direct impact of work-related health and safety issues. Although the impact may be felt long after the event with severe consequences for organisations, many companies, especially mining organisations, fail to recognise the impact due to lack of knowledge, skills and motivation, or due to limited staff resources (Dorman, 2008). Achieving success in the mining sector requires good health and safety practices in that occupational hazards result to loss of skilled work force and injured and incapacitated employees might not be on their jobs.

Again, employee job performance is negatively affected by hazards and injuries at workplace because these hazards and injuries will lead to absenteeism (Oluoch, 2015). Notwithstanding, fatalities still happen in the Ghanaian Mining sector despite spirited efforts to eradicate the problem through a multiplicity of business management policies that are anchored on the safety and health of their employees and their stakeholders. Golden Star Resources for example, in 28<sup>th</sup> December, 2017 reported the loss of lives of two employees at its Prestea Underground Gold Mine as they succumbed to smoke inhalation sickness following exposure to blasting gasses (Coetzer, 2018).

According to the Regional Committee for Africa Report (2004), most African countries tend to struggle with safety practices due to failure to see its importance in the workplace. It has been established that less than one percent of organisational in the informal sector and national research in developing countries focuses on issues concerning safety practices (Barling & Zacharatos, 2010). Even with the very poor percentage, Abubakar (2017); Greepherson (2013); Kaynak, Toklu, Elci and Toklu (2016); and Ulutaşdemir et al. (2015) indicate that most of the research were conducted outside Ghana, thus raising the question on how their findings can be generalised in developing countries like Ghana.

In Ghana, the few studies conducted focused primarily on established commercial institutions as case study. For example, Yankson (2012) used the Ghana Rubber Estates Limited, whilst Gyekye, Salminen, and Ojajarvi (2012) used Ghanaian manufacturing workers. It is, therefore, not clear whether their results would uniformly persist for other sectors including the mining sector of Ghana. This study, therefore, seeks to fill this gap by examining the effectiveness of health and safety practices and their effect on the performance of employees at Golden Star Resources, Bogoso/Prestea.

### **Purpose of the Study**

The purpose of this study was to examine the influence of occupational health and safety practices on employees' performance at the Golden Star Resources, Bogoso/Prestea.

### **Research Objectives**

To achieve the purpose, the following objectives are set to:



1. ascertain the effectiveness of occupational health and safety practices at Golden Star Resources, Bogoso/Prestea.
2. explore the various indicators of employee performance at Golden Star Resources, Bogoso/Prestea.
3. examine the influence of occupational health and safety practices on employees' performance at Golden Star Resources, Bogoso/Prestea.

### **Research Questions**

Based on the research objectives, the study was guided by the following research questions.

1. How effective are occupational health and safety practices at Golden Star Resources, Bogoso/Prestea?
2. What are the various indicators of employee performance at Golden Star Resources, Bogoso/Prestea?
3. What is the influence of occupational health and safety practices on employees' performance at Golden Star Resources, Bogoso/Prestea?

### **Significance of the Study**

Policy makers like the government and other stakeholders around the world have been developing strategies to improve the health and safety at various industries as well employees' performance. Therefore, this study highlighted the influence of occupational health and safety practices on employees' performance. The findings may be used to generate new policies and revision of the existing policies. It is hoped that the study would boost the morale of employees and ensure job security at all times by getting a better understanding of health and safety practices in the organisation. The study would also help the employees to comply with organisational health and safety

standards which in the long run would reduce accidents and injuries at the workplace thereby increasing their performance and productivity.

This study would serve as the basis for increasing the awareness of health safety as well as identifying the weaknesses of the various strategies that employers adopt to enhance health and safety standards and recommend the possible ways of improving them. Employers would appreciate the cost of equipping employees with the right protective clothing and standards to ensure accident free environment. Findings and recommendations offered would not only add to existing literature for academic purposes, but also provide useful insights and guidelines for enhancing the quality of health and safety among employees in organisations.

Theoretically, the study is expected to bridge the gap in the literature on the influence of occupational health and safety practices on employees' performance at the mining sector of Ghana. It could further serve as secondary data for prospective researchers. Thus, it will serve as a reference point to researchers and academicians for further research and add to existing literature on the subject.

### **Delimitations of the Study**

The study is conducted within the framework of examining the effect of occupational health and safety practices on employees' performance. Several studies have proposed equally important dimensions or practices of occupational health and safety. However, this study used the following dimensions of occupational health and safety practices; Occupational Hazard Prevention (OHP), Safety Procedures and Risk Management (SPRM), Organisational Safety Support (OSS), First Aid Support and Training (FAST),



and Safety and Health Rules (SAHR). The scope of the study is limited to employees at Golden Star Resources, Bogoso/Prestea only.

### **Limitations of the Study**

The choice of Golden Star Resources, Bogoso/Prestea as the case study serves as a limitation. The results of this study might not be readily replicable in other institutions within the country. Such phenomenon thwarts interpretations and analyses that can be made from the results and the generalisation of the findings. In other words, the results cannot easily be generalised unless certain adjustments are made to account for unique characteristics of the institution under consideration. Again, the use of quantitative approach, specifically the use of closed-ended questionnaire too did not give the respondents the opportunity to express themselves freely.

### **Organisation of the Study**

The study is presented in five chapters. The first chapter is the introduction which covers; the background to the study, statement of the problem, objective of the study, research questions, significance of the study, delimitations, limitations, and organisation of the study. Chapter two which is the literature review comprised theoretical review, empirical review, and conceptual framework. Chapter three focused on the research methods which included research design, research approach, study area, population of the study, sample and sampling procedures, data collection instrument, data collection procedures, reliability and validity of the data, data processing and analysis. Chapter four covered data analysis and discussions, while the final chapter comprised summary, conclusions, recommendations and suggestions for further studies.

### Chapter Summary

This chapter is the introduction of the study. It provided information about the background to the study, statement of the problem, objectives of the study, research questions, significance of the study, delimitations of the study, limitations of the study, and organisation of the study. The subsequent chapter is the chapter two which is the literature review comprised theoretical review, empirical review, and conceptual framework.



## CHAPTER TWO

### LITERATURE REVIEW

#### Introduction

This chapter discussed relevant issues on the influence of occupational health and safety practices on employees' performance. The first section looked at the theoretical framework for the research. Under this section, the theory underpinning the study was discussed. The second section dealt with the various concepts as well as the empirical review. It surveyed actual studies previously done on the problem. Finally, based on the literature pertaining to the constructs and the relationships among the constructs, a conceptual framework was developed.

#### Theoretical Review

The theoretical framework that helps provides the logical structure of meaning which guided the development of this study is the Social exchange theory. This framework was chosen as it helped bring meaning and generalisation.

#### Social exchange theory (SET)

This theory was introduced by Sociologist George Homans in the late 1950s. Social exchange theory is considered one of the most influential theories in organizational behaviour. The exchange perspective views the employment relationship as consisting of social or economic exchanges (Aryee, Budhwar & Chen, 2002; Cropanzano, Rupp & Bryne, 2003). Economic exchange relationships involve the exchange of relatively concrete, often economic benefits that are exchanged for work performance (Haar, 2006). On the other hand, social exchange theory argues that employees will trade their efforts for

the promise of rewards in the future (Blau, 1964). Thus, the primary tenets of this theory is the reciprocity of commitments between employees and employer over time

According to Korir and Kipkebut (2016), social exchange theory is based on five central elements. The first element is that behaviour is predicted by the notion of rationality; individuals will behave in a given way if they believe behaving in that way will give more rewards. The second element is that each individual relationship provides benefit to the other so long as the exchange is equitable. The third element is that the theory is based on a justice principle; for every exchange, there must be fairness governing behaviour. The next element of the theory is that individuals will always seek to maximize gains and reduce costs and losses. The last element is that individuals participate in a relationship out of a sense of mutual benefit rather than coercion (Searle, 2000).

Social exchange theory, therefore, suggests that employees who value safety received from their organization, such as occupational hazard prevention, safety procedures and risk management, organizational safety support, first aid support and training, and safety and health rules, will reciprocate with more positive work attitudes (Korir & Kipkebut, 2016). The theory posits that individuals form social exchange relationships to the extent that they receive worthwhile benefits and that these benefits are assigned in a fair manner (Cropanzano et al., 2003; Haar, 2006). Therefore, employees perceiving negative and distressing workplace conditions are likely to reciprocate with negative work attitudes while those perceiving the workplace conditions as positive and challenging will reciprocate with positive work attitudes.

It is, therefore, expected that employees who are dissatisfied with their safety are likely to reciprocate with negative work attitudes such as job dissatisfaction, lowered employee job performance, low morale and reduced organizational commitment; while those who perceive their safety as satisfactory are likely to reciprocate with positive work attitudes, such as high job performance, commitment, job satisfaction, low turnover and high employee retention (Cropanzano et al., 2003; Crede et al., 2007).

Thus, when an organization exhibits a readiness to make workplace safe and healthy, the employee is obliged by engaging in desirable behaviour such as high compliance with work procedures and reducing undesirable behaviour such as unsafe behaviour. In this study, SET is theoretically applied to explain the direct relationships between occupational health and safety practices on employees' performance. When an institution cares for their workers' safety, the workers are likely to develop tacit obligations to perform their duties, using behaviour beneficial to the institution (Neal & Griffin, 2016).

Inferring from the theory, when management of Golden Star Mines offers adequate occupational health and safety to its employees, it is expected that the employees would accordingly carry-out their responsibilities efficiently and safely, which then results in better performance. Whilst the employee benefits from good health and safety provisions and practices from the employer, the employer enjoys better performance from the employee. Thus, provision of health and safety practices and enhanced performance constitute social exchange in that adequate health and safety measure is the right of the employee and standard performance is the responsibility of the employee.



## Concept of Occupational Health and Safety

Occupational Health and Safety Management Systems (OHSMS) have been defined by Gallagher (2001) as “a combination of the planning and review, the management organizational arrangements, the consultative arrangements, and the specific program elements that work together in an integrated way to improve health and safety performance.” Efficient use of communication and information networks in enterprises both helps with reducing number of accidents and improves the perception of workers as regards management’s commitment for occupational health and safety (Gyekye et al., 2012).

Safety management systems are integrated mechanisms designed to control the risks that may affect worker’s health and safety in organizations and at the same time to ensure that the company complies with the regulations. A good safety management system should be completely integrated with the company and with binding power; a cohesive system of policies, strategies and procedures provides consistency and harmonization (Fernández-Muniz et al., 2009). Health and safety policy and procedures are a part of efficient health and safety management framework.

General health and safety policies demonstrate the management’s willingness to provide the workers with a healthy and safe workplace (Christian et al., 2009). Risk management is a technique that has been used increasingly in organizations and public sector in order to improve safety and reliability and minimize losses. It includes defining, assessing, and controlling the risks (Cox & Tait, 2008). Similarly, occupational health safety risk management is also described as a three-phase process. First, the hazards in the workplace are defined. Second, the hazards underlying the risk are assessed. Finally,



appropriate controls are put in place for accordingly defined risks (Lingard & Holmes, 2011).

Understanding and managing all risks that would likely affect the organization will render better performance and competitive advantage. A review of occupational accidents and health problems associated with work provides that those who experienced accidents at electricity, gas, steam, water, and sewage system fields and those who experienced occupational accidents in the construction sector rank the first (Kaynak, Toklu, Elci & Toklu, 2016). Albert and Hallowell (2013) suggested in their study that use of safety-related procedures, following instructions, cutting of power lines, and stopping operation of equipment in an attempt to prevent injuries were a cost-inefficient strategy yet very effective as regards preventing injuries.

The findings of the study underscored that the benefit of applying injury prevention strategies were low compared to other sectors (e.g. construction sector). Consequently, investment in safety interventions may not offset economic returns yet creates value as non-monetary benefits (e.g. decreased worker turnovers) and decreases social costs (e.g. social injustice) associated with injuries. De Koster et al. (2011) demonstrated that focusing on safety helped with reducing accidents. In this context direct costs include first intervention, ambulance and hospital expenses, payments for temporary or permanent incapacity for work or death, pecuniary and non-pecuniary damages payable to the worker or worker's relatives, and damages payable to insurance, where indirect cost items include loss of reputation, long-term efficiency, and legal expenses.

In general, companies should invest in practices reducing occupational accidents in order to improve their safety performances. This idea is supported by the fact that such companies that focus on safety in their daily operations and working methods as Scania, Tata Steel, Boston Scientific, and Nissan experience lesser number of accidents and decrease relevant costs. Operation of safety climate relies on the perception of workers and that safety climate as created by the so-called shared perception of workers is associated with policies, procedures, and practices associated with the value and importance of safety within the organization (Griffin & Neal, 2010).

Zohar (2008) suggested that the most consistent factor that contributed in the safety climate was strong commitment of management for safety. Safety commitment is demonstrated by a series of differences: (a) senior management regularly participates in safety activities, (b) safety officer holds higher rank and status in the organization, (c) safety training is emphasized, (d) open communication and close contact between management and workers, (e) stable workforce (e.g. less turnovers), and (f) promotion of safety via guidance and counselling rather than via coercion and admonition etc. However, the essence of conceptualization of safety climate in an institution is the fact that safety is a prioritized issue for enterprises (Chiaburu, Thundiyil, & Wang, 2014). Managerial support for safety and importance of safety in the organization are considered the basis of safety climate.

Kabanoff, Waldersee, and Cohen (2015) defined the criterion of beliefs as regards what was important for individuals and the entire organization. Perception of organizational values is important since it influences the way workers interpret policies, procedures, and practices. According to Griffin and

Neal (2010), for instance, safety climate perception was the extent the workers believe in the value of their safety and wellbeing in the organization. Consideration is the degree to which a leader shows concern and respect for followers, looks out for their welfare, and expresses appreciation and support (Bass, 2000). Chiaburu et al. (2014) defined that individual consideration was found to share a negative relationship with alienation.

### **Occupational Health and Safety Practices**

According to Sermolo (2014), the recent occupational accidents and its associated cost has urged enterprises particularly those in the manufacturing and mining sector to put more importance on occupational health and safety practices. The pressure by both the public authority and the business and social milieu has played an important role in it. This present study investigated occupational health and safety (OHS) practices in five dimensions, i.e. Occupational Hazard Prevention (OHP), Safety Procedures and Risk Management (SPRM), Organizational Safety Support (OSS), First Aid Support and Training (FAST), and Safety and Health Rules (SAHR).

Environmental conditions should be supportive so as the workers become safety sensitive. Thus endeavours that motivate workers and influence beliefs and attitudes should be supported. This can be resolved in case the management shows a clear and compelling interest in the wellbeing and safety of workers, which can be attained by appropriate work equipment, job enrichment programs, skill development, visiting workplaces to warn workers, and clear demonstration that management cares for the safety of workers (Gyekye & Salminen, 2012). The reason is that perceptions of the work

environment impact worker attitudes and so a well-designed job can impact positive psychological conditions (Banai & Reisel, 2017).

Occupational hazard prevention (OHP) and organizational safety support (OSS) positively influence organisational commitment and employee performance, and negatively influences alienation (Banai & Reisel, 2017; Gyekye & Salminen, 2012). Also, first aid training in the scope of OHS is quite necessary in order to control the excessive self-confidence, i.e. the unrealistic “nothing happens to me” idea, and raise awareness as regards emergent situations. First aid training ensures that participants are protected against injuries and occupational diseases. Participants show better efforts for decreasing the risks are workplace subsequent to the first aid training.

It can be said that the first aid training improves the motivation of participants in order to prevent occupational hazards and diseases. Organisational behaviour is directly associated with the organisational safety climate perception of the workers, which positively influences safe working behaviours of workers and decreases the frequency of accidents, in respective order (Sermolo, 2014). Health and Safety Rules (SAHR) in the organisation can, therefore, be said to associate with employee performance.

### **How the Effectiveness of Occupational Health and Safety Practices Are Defined**

Gavin and Matherly (2007) asserted that the effectiveness of health and safety practices could be hampered by three main and overlapping aspects; people, process and technology. The ‘people’ problems ranged from the risk of employees’ emotional or psychological stress, reduction of loyalty to loss of internal expertise and the fact that there is lack of commitment among



employees to provide and be brother's keeper to minimised industrial injury. Malhorta (2014) agreed to this by adding that the lack of cooperation; among workers themselves contribute among others to industrial accidents.

The 'process' meanwhile comprises of two classifications; incompatibilities between the authority (government safety department in charge of health and safety in organisations) and the organisation itself, and the inability of organisation to sufficiently implement their decision to comply with health and safety standards. Among others, authorities' in industrial health and safety programmes only implement general health and safety programmes applicable to all industries and companies but do not take into recognizance specific company demand (Gavin & Matherly, 2007).

At the same time, Mansfield (2010) has found that many companies have embarked on health and safety practices without any formal methodology or guidance. There is lack of progressive and innovative human resource management (HRM) philosophies, policies and processes, (including a proactive and collaborative approach) thereby practising health and safety on ad hoc basis. A work done by Ingalls (2002) on 'measures on safety performance' identify that there is also a high cost of providing health and safety materials at work places which deters management from fully executing health and safety standards in companies thereby leaving employees at the mercy of unsafe work environment.

Further, Ganson (2014) wrote that unqualified safety officers employed to manage the health and safety issues in many companies has been the bane of industrial accidents thereby causing needless industrial injuries and loss of life. There is lack of routine, regular and seasoned training courses on safety



management for workers to appreciate the need for occupational health and safety precautions. Finally, there is lack of governmental control and monitoring programme to visit business organizations companies to unravel whether these companies comply with certain minimum safety standard.

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

According to Dessler (2011), Employee performance management refers to “a process that unites goal setting, performance appraisal, and development into a single, common system whose aim is to ensure that the employee’s performance is supporting the organization’s strategic aims”. A feature of performance management is its ability to measure the employee’s training, standard setting , appraisal and feedback relative to how his/her performance should be and is contributing to the achievements of the organisational goals (Badu, 2012). People are undoubtedly the most important, valuable and costly resource for an organisation and how this resource is managed can have a direct impact on an individual's performance and the organisation as a whole. According to Putterill and Rohrer (2005), performance is directly focused on the productivity of employees by assessing the number of units of acceptable quality produced by an employee within a specific time period.

Job performance is considered as business outcomes (Harter, Schmidt & Hayes, 2002) or ‘social and economic outcomes resulting from interplay among workers on work place’s attributes, actions and environment’ (Combs, Crook & Shook, 2005, p.261). Job performance takes different measures based on the industry or field of study (Jones et al., 2009). These varying measures reflect the multidimensional workplace performance (Combs et al., 2005).

There are financial measures such as profits, share price, turnover/sales, and dividend yield.

There are productivity measures such as labour productivity, efficiency scrap rates, organizational effectiveness, and occupational injuries (Grugulis & Stoyanora, 2011). Job performance could also be seen from quality measures such as customer satisfaction and reliability; as well as human resource perspectives such as labour turnover, absenteeism and job satisfaction (Grugulis & Stoyanora, 2011; Barling et al., 2003; and Korunka et al., 2003). Increasing the performance of staff from the lowest level of the organization to senior management is one of the most effective means of ensuring increase in business performance and profit.

Al-Ahmadi (2009) stated that performance improvement is not only a result of well-functioning system but also depend on effective human resource strategies that succeed in recruiting and maintaining a committed and motivated workforce. According to Ivancevich (as cited in Adjei, 2012), employees are evaluated based on the dimensions of performance known as the criteria of evaluation. Opatha (2002), suggested that in order to accurately evaluate the performance of employees, several criteria become essential in the process.

Information on how well employees are performing the tasks assigned to them can be assessed by managers in the following three different ways according to Mtshokotshe (2018): Trait-based information – this type of information identifies the employees' subjective character which includes attitude, initiative or creativity. Behavioural-based information – this evaluation of job performance focuses on what is included in the job itself. Result based information – this takes into consideration the achievements or accomplishment

of the employee. They are the outcomes produced by the employee in the organisation.

### **Empirical Review**

Mundiri (2018) evaluated the Safety and Health Control Programmes in the Mining Sector, using Mimosa Mines as a case study. The study was carried out to find the solutions to the accidents that continue to happen in the mining sector. This was despite the fact that the mining sector has invested a lot of resources into safety and health and was pursuing a ZERO HARM trajectory which emphasized on zero accidents at workplaces. The study employed a descriptive case study design with positivism and constructivism philosophical approaches. Respondents were made up of 150 employees from Mimosa Mines. The investigation made use of primary and secondary sources of data to achieve its objectives. Primary (first-hand) information was obtained from questionnaires and interviews whilst secondary information was gathered from document analysis and from the internet.

This study concluded that the safety and healthy control programmes were ineffective because of failure by management and employees to play their respective roles in the implementation of safety and health control programmes. Lack of engagement in the safety and healthy processes, production pressure and poor attitude of employees towards safety and health issues were highlighted as some of the key obstacles to making safety and health control programmes effective. The researcher recommended engagement of employees from the formulation to the evaluation stages of safety and health control programs and attitude training programmes to employees by qualified

practitioners, and high commitment level of management as means of reducing health and safety problems.

Also, a survey form study was developed by Kaynak, Elci, and Toklu (2016) in order to investigate the effect of occupational health and safety (OHS) practices on work alienation, organizational commitment, and job performance as a throughput of such practices. The survey was conducted by voluntary participation of white-collared employees who have a global perspective, are easily accessible and better represent their organizational facts. The study population was comprised of small and medium scale production and services sector workers operating in Kocaeli. The study was conducted upon the analysis of questionnaire data replies by a total of 389 employees. Hair's (2010) approach was adopted in the selection process.

Kaynak et al.'s study investigated OHS practices in five dimensions (i.e. safety procedures and risk management, safety and health rules, first aid support and training, occupational accident prevention, and organizational safety support). The data set obtained was analysed by structural equation modelling (SEM) using least squares method. The findings of the analysis suggested that such OHS practices as safety procedures and risk management, safety and health rules, first aid support and training, and organizational safety support had a positive effect on organizational commitment. Again, safety procedures and risk management, safety and health rules, and organizational safety support had indirect effects on job performance of the employees.

Again, Yankson (2012) sought to examine the effect of health and safety standards on productivity. The objective was to identify the health and safety standards in Ghana Rubber Estates Limited, to determine the effect of health



and safety standards on employees' productivity, to determine employees' level of understanding of health and safety policies, to assess the attitude of management towards the health and safety of employees and to identify challenges of the implementation of health and safety standards in the organization. The study was limited to the management and production staff of Ghana Rubber Estates Limited. Research questionnaire and interview guide were developed and distributed to a sample of 120 workers comprising of both production staff as well as management.

This study revealed that employees' productivity is influenced by management safety practices and safety programmes, management attitude towards health and safety, investigation of accidents, supervisors' safety, and training of employees on safety standards held in the organisation. It also revealed that health and safety standards if managed effectively have a positive impact on productivity. It was therefore recommended that organisations should put in place active health and safety committees which should be given full mandate to implement their recommendations. Moreover, copies of organisational safety and health procedures should be given to employees to create awareness of the laid down policies, rules and safety precautions. There should be a continuous review of occupational health and safety policies, to ensure that firms have up to date safety measures in place.

Similarly, Sikpa (2011) did an assessment of effect on occupational health and safety practices on job performance at the Tetteh Quarshie Memorial Hospital, Mampong-Akuapem. Being a health institution, the staff, management, patients and other stakeholders are exposed to several risks and hazards. The research aimed among other things to examine the effect of



occupational health and safety on job performance. The medical doctors/officers, administrators, technicians, cooks, and nurses in the departments and units of the hospital formed the population of the study.

Eighty respondents formed the sample size of the study. Data was collected through questionnaire, interviews and review of relevant literature from books, articles, and websites. It was found that the current occupational health and safety practices at the hospital were inadequate. Staff commitment and compliance to health and safety rules was also low. It was also found that effective occupational health and safety policies have impact on job performance in hospital. It was recommended that management of the hospital constitute a safety committee and maintain regular monitoring, inspection and evaluation and conduct reviews for improvement.

In a related study, Abubakar (2017) examined the influence of occupational hazards on job performance of employees of housekeeping department of hotels in Kaduna metropolis Nigeria. The study specifically investigated the prevalent of occupational hazards peculiar to housekeeping jobs in budget hotels, identified the preventive measures available to reduce occupational hazards and evaluated the rehabilitation measures for injured housekeepers investigated the level of employees' job performance and determined the relationship between occupational hazards and job performance. Cross-sectional survey design was used for the study. A sample of 217 employees was used. Purposive sampling technique was used to select sample from managers and supervisors.

Stratified random sampling technique was used to select guestroom attendants, public area cleaners, and laundry staff under the study area. Structured and unstructured questionnaires were used to collect the data from the guestroom attendants, laundry staff, public area cleaners and supervisors while interview schedules was used for executive head housekeepers. Descriptive statistics were used to analyse data collected through opened-ended questions, prevalence of occupational hazards peculiar to housekeeping jobs in budget hotels, preventive measures available to reduce occupational hazards and rehabilitative measures on injured housekeepers. While multiple regressions were used to determine the influence of the independent variables on the dependent variable and Pearson correlation was used to test the hypotheses.

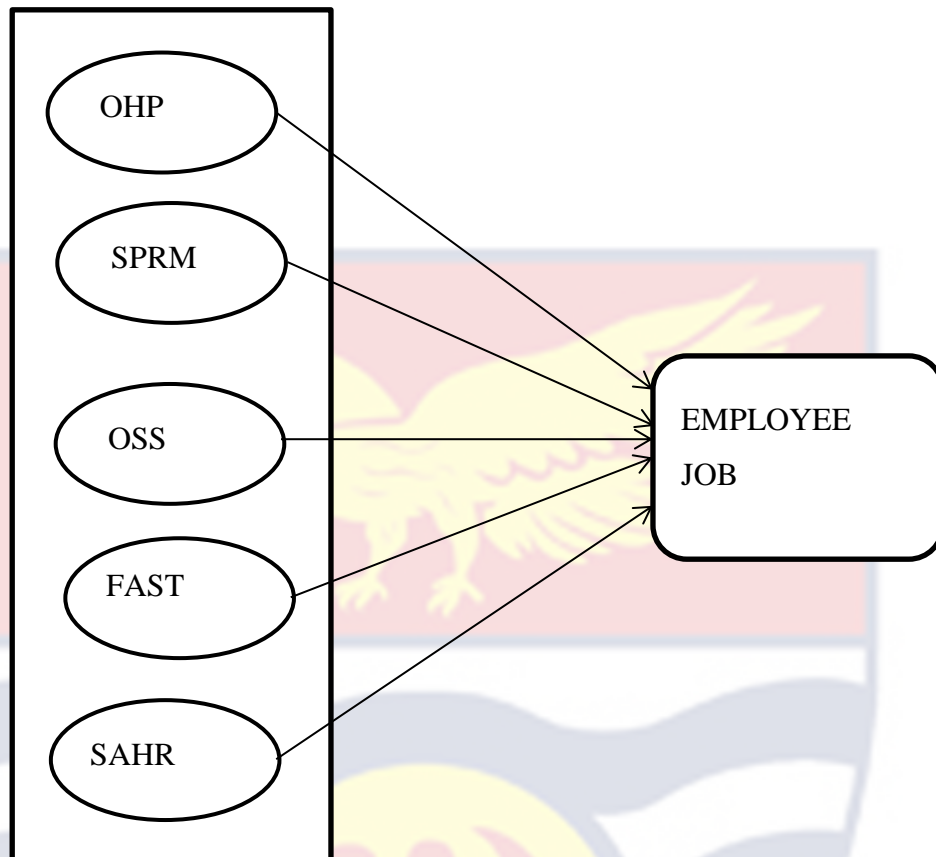
The study revealed that employees job performance and the variables affecting it are significantly correlated with the coefficient  $R= 0.567$ . It also showed that there is inadequate safety training to prevent injuries as well as good rehabilitation measures for injured housekeepers. Occupational hazard was also found to have negative influence employee's job performance. The study concludes that it is apparent that hotel housekeepers sustain injuries at work due to the nature of the tasks assigned and appropriately, designed and diligently practiced preventive measures will reduce the frequency of occupational injuries among hotel housekeepers. The study recommends that safety training should be organized for housekeepers, protective equipment should be provided and employee's safety act should be strictly followed.

It emerged from the study of Takala et al. (2014) that work-related injuries have direct and indirect outcomes on both the lives of the workers and

on the financial status of an organization. It was further stressed that work-place injuries can result into possible reduction in quality work and negative effects on the morale in other workers. It was observed that hazards or injuries at work-place cause psychological suffering especially in the case of a permanent disability generate effects that influence employees' performance negatively and contributes to organization not able to meet its stated goals and objectives. Contrarily, in an attempt to examine how ergonomic hazards are associated with auditors' job and the effects on performance of auditors, through primary data collected from auditors of "Big Four" auditing firms in Nigeria via administration of questionnaire from 825 respondents, Olanmi (2016) argued that an insignificant relationship exists between ergonomic hazards and performance.

### **Conceptual Framework**

Based on the overall review of related literatures and the theoretical framework, the following conceptual model in which this specific study is governed was advanced. As illustrated in the literature, occupational health and safety has significant positive influence on employees' job performance. Occupational health and safety has been taken as independent variable while, employee performance as dependent variable. In the independent variable, Occupational health and safety includes five dimensions which include: Occupational Hazard Prevention (OHP), Safety Procedures and Risk Management (SPRM), Organizational Safety Support (OSS), First Aid Support and Training (FAST), and Safety and Health Rules (SAHR).

**Occupational Health and Safety**

*Figure 1: A conceptual framework depicting the influence of occupational health and safety on employees' job performance*

Source: Author's construct (2020)

**Chapter Summary**

This chapter presented a review of related literature that focused on the constructs of the study. It began with theoretical review, occupational health and safety management, occupational health and safety practices, challenges of good health and safety practices in business, the concept of employee job performance and empirical review. A conceptual framework was developed based on the literature review and theoretical framework.



## CHAPTER THREE

### RESEARCH METHODS

#### Introduction

This chapter discussed how the study was carried out. The chapter included the discussion of the research approach, research design, the study unit/institution, study population, sample and sampling procedure, data collection instrument, data collection procedures, data processing and ethical considerations.

#### Research Approach

Mundiri (2018) confirmed that there are two main approaches to conducting research, namely qualitative approach and quantitative. Qualitative research involves gathering of narrative data on variables over a period of time in order to gain insights into issues of interest. Thus, qualitative approach is a research strategy that emphasises words rather than quantification in the collection and analysis of data (Bryman, 2016). Quantitative approach, on the other hand, refers to a research which is carried out to describe or explain phenomenon numerically. Quantitative research deals with questions of relationships, cause and effect or current status that researchers can answer by collecting and statistically analysing numeric data (Ary, Jacobs, Sorensen & Razavieh, 2010). The two approaches could be used in the same research and that is what is referred to as mixed method approach.

This study adopted a quantitative approach. Quantitative approach is calculative, it maintains consistence as a result its results are re producible. According to Saunders, Lewis, and Thornhill (2012), a quantitative research is referred to as a numerical manipulation and representation of data for the



purpose of having a better description and explanation of that data. This study is a pure quantitative in that in analysing the influence of occupational health and safety practices on employees' performance, descriptive statistics (mean and standard deviations) and regression analysis were employed to analysis all the objectives and the conventional alpha level of 0.05 was adopted. Quantitative research enables the researcher to follow accurately the original set of research goals, arriving at more objective conclusions, and, determining the issues of causality.

### **Research Design**

The research design used for this study was the descriptive survey. This is because it focuses on providing an accurate description of the characteristics of a situation or phenomenon, and that the focus of descriptive research is not to only look out for cause-and-effect relationships but rather, describes the existing variables in a given situation and, sometimes, the relationship that exist among those variables (Johnson & Christensen, 2012).

Hence, the descriptive survey design was used to ascertain the effectiveness of occupational health and safety practices, explore the various indicators of employee performance, and explain the influence of occupational health and safety practices on employees' performance.

Fraenkel, Wallen and Hyun (2011) are of the view that descriptive survey is used to gather information about prevailing conditions such as characteristics, abilities, preferences, satisfaction and behaviour of an individual or physical environment (workplace) or as in historical studies, changes in any of this overtime. Gay, Mills and Airasian (2011) add that descriptive survey design is devoted to the gathering of information about prevailing conditions or

situations for the purpose of description and interpretation. According to him, this type of research design is not simply amassing and tabulating facts but includes proper analyses, interpretation, comparisons, identification of trends and relationships.

Descriptive survey is considered appropriate for this study because, as Fraenkel et al. (2011) and Gay et al. (2011) opined, it has the advantages of (a) producing good amount of responses from a wide range of people. So this study, questionnaire was used to gather data from more (205) respondents (b) provides a meaningful picture of events and seeks to explain people's opinion and behaviour on the basis of data gathered at a point in time. In this study, information provided by respondents on effectiveness of health and safety and their level of performance were explain as given and (c) it can be used with greater confidence with regards to a question of particular interest or value to the researcher.

However, descriptive survey design has its own shortfalls. For instance, Fraenkel et al. (2011) identify problems of descriptive survey design to include the possibility of producing untrustworthy result because they may delve into people's private matters. Also, descriptive survey does not reveal a forecast of things to happen but it provides the basis from which decisions can be made using other methods of research (Fraenkel et al., 2011). Marcsyk, DeMatteon and Festinger (2010) also observe that descriptive survey design, like any non-experimental design, no matter how convincing the data may be, cannot rule out extraneous variables as the cause of what is being observed. This is because it does not have control over the variables and the environment that it studies.

This means that findings from descriptive surveys are most often influenced by factors other than those attributed by the researcher. Again, since most often it makes use of questionnaires, it becomes limited to respondents who are literates. However, attempts were made to minimise the limitation(s) of survey design in this study. These include avoiding issues which respondents considered sensitive and personal. Again, all members of the study population were literates and the researcher used simple language to make the items easy to understand and answer. Therefore, the descriptive survey design adopted for this study is relevant and justified.

### **Study Unit**

The study institution is Golden Star Resources. Golden Star is an established West African gold mining company. The Company has two producing mines in Ghana and is a high grade, low cost, non-refractory gold producer. Golden Star has a 19 year history of producing gold in Ghana. The company has two producing mines; Wassa and Prestea/Bogoso. Prestea/Bogoso which is the main study area is in south-western Ghana, approximately 40km from the Wassa Gold Mine. Previously, production was being delivered from the Prestea Open Pits and the Prestea Underground Gold Mine. In the second half of 2018, Prestea became an underground-focused operation.

Prestea Underground has exploration upside through the extension and definition of the West Reef ore body, with the objective of increasing the supply of high grade ore to the processing plant in the near term. Other focuses of the exploration program include initial testing of the Main Reef and South Gap areas, which have the potential to add ore to the mine plan in the medium to long term. The area was chosen because there have been reported cases of

considerable variation in the adherence to and enforcement of safety standards in the area. Example is when two employees died for their failure to activate their oxy-box at the Prestea Underground Gold Mine in December, 2017 (Coetzer, 2018).

The vision of Golden Star Resources is to build a brand name mining company that: Delivers superior returns to investors, values and develops our people, is committed to international practices and conduct, and is a partner of choice for host communities and governments. This vision could only be achieved through people working in a safe environment. It is, therefore, not surprising that one of the core values of the institution is commitment to safety, employee well-being and protection of the environment. Hence, the study of the influence of occupational health and safety practices on employees' performance using the company is very important and beneficial.

### **Population**

According to Fraenkel, Warren and Hyun (2011), population refers to the complete set of individuals (subjects or events) having common characteristics in which the researcher is interested. For the purpose of this study, population comprised all permanent staff of the Golden Star Resources, Bogoso/Prestea in the Western Region of Ghana. The target population are those whose work involves high health and safety risk such as miners, processors and heavy duty operators. According to the human resource (HR) department of the company, in all, there were 480 staffs as at March, 2021. This group of workers were used because their roles and responsibilities contribute directly to the core mission and vision of the company and they are in a good position to provide information with regards to health and safety practices.



### Sample and Sampling Procedure

The sampling technique used in this study was simple random sampling technique. The simple random sampling technique is the method which gives all the elements of the target population an equal chance of being selected. The technique provides each and every member of the group an equal and independent opportunity to be part of the sample for the study. Out of the 480 employees targeted, a representative sample had to be drawn for the study. First and foremost, the staff numbers of all the targeted population were written on pieces of paper and each folded in very small size. The pieces of paper containing the folded staff numbers were put into a box. Shaking was done to ensure that every folded paper has the chance of being selected. The researcher randomly picked the targeted sample size. This gave all units of the accessible population an equal chance of being selected.

The sample size was obtained by using the Krejcie and Morgan (1970) table of sample size determination (attached as Appendix B). According to Adam (2020), the table computes the sample size by means of a formula developed by the research division of the National Education Association of the United States of America, which takes into consideration chi-square for 1 degree of freedom, the population size, the population proportion, and the degree of accuracy, which is set at 0.05. The table has figures for population ranging from 10 to 1,000,000. The selection of the sample size only involves an accurate matching of the appropriate cell in the sample size column to the corresponding cell in the population column. Therefore, for a target population of 480 staffs, a sample size of at least 214 was required.



## Data Collection Instrument

The main tool that was used to gather data is a self-administered questionnaire. It is made up of only closed-ended questions. Thus, the main source of data for the study was primary source data. Questionnaire was the best data collection tool for this research because it does not only allow for larger sample collection of information at a minimum cost but also respondents' anonymity is greatly assured. According to Haines, Neumark-Sztainer and Thiel (2015), and Orodho (2014), questionnaire is a simple yet effective research instrument; in addition to its cost effectiveness, it reduces distortions in data which might result from interviewer bias that may arise during interview process.

The questionnaire comprised 42 items grouped under five main sections (i.e. Section A-C). Section A consisted of five statements determining the demographic information of the respondents. Section B comprised five sub sections (BI, BII, BIII, BIV and BV), which measured the occupational health and safety (OHS) practices. Each of the sub section (BI, BII, BIV and BV) was made up of 5 items except sub section BIII was made up four items. Section E gathered information on the indicators of employee job performance at work and it was made up of 13 items.

The occupational health and safety (OHS) practices and the employee job performance were all measured on a five point likert-scale with 1 being *least agreement* and 5 being *highest agreement*. A 5-point likert scale was used because it eliminates the development of response bias amongst the respondents; it assesses attitudes, beliefs, opinions and perception; makes the response items standard and comparable amongst the respondents; responses

from the likert scale questions are easy to code and analyse directly from the questionnaires (Can't, 2011).

### Validity and Reliability of the Instrument

In every research study, it is essential to test for the validity and reliability of the instruments used. The validity of an instrument guarantees that the variables used in the study are adequately measured. To make sure the questionnaire is reliable; a pilot-test was conducted using respondents from Tarkwa Mines which is similar to the proposed study unit but different set up. The Cronbach's alpha reliability method was utilised for the estimation of the overall questionnaire's reliability. The value of Cronbach's alpha ( $\alpha$ ) range from 0 to 1 and the closer the value of  $\alpha$  to 1 the better the reliability. Studies have shown that a reliability coefficient of .70 or more is considered reliable (Fraenkel et al., 2011). The Cronbach's alpha ( $\alpha$ ) obtained for each variable is presented in Table 1.

**Table 1: Reliability Analysis of Constructs**

Variables	Number of Items	Cronbach's alpha
Safety Procedures and Risk Management	5	.740
Safety and Health Rules	5	.755
First-Aid Supports and Trainings	4	.681
Occupational Hazards Prevention	5	.697
Organizational Safety Supports	5	.714
Employee Performance	13	.834

Source: Field survey (2021)

Although most prior studies have supported a reliability coefficient of 0.70 or more, this study adopted 0.60 as suggested by Pallant (2013). From Table 1, the value of coefficient alpha for employee performance was the highest (0.834) exceeding the original alpha value of 0.70 as proposed by Fraenkel et al. (2011). The coefficient alpha values for Safety Procedures and Risk Management, Safety and Health Rules, Organizational Safety Supports (0.740, 0.755 and 0.714 respectively) were all high exceeding the original 0.70 alpha value. First-Aid Supports and Trainings, and Occupational Hazards Prevention had an alpha value of 0.681 and 0.697 respectively which though is below the 0.70; they were above the accepted threshold suggested by Pallant (2013). Hence, the results of the Cronbach's alpha in the table signify that all the constructs are reliable and can be used in this study.

#### **Data Collection Procedures**

Data was obtained through the administration of questionnaires. The questionnaire was designed and administered to the various respondents by the researcher with the aim of seeking information on the influence of occupational health and safety practices on employees' performance. The data collection was done over three months during working hours. Thus, the data collection started from 1<sup>st</sup> June and ended on 20<sup>th</sup> August, 2021. To enhance the confidentiality and credibility for the research, an introductory letter was obtained from the head of the Department of Human Resource Management of the School of Business, University of Cape Coast so as to be introduced to the respondents who participated in the study. The letter was obtained in May, 2021.

A day was set to visit first and held discussions with various head of departments of respondents that took part in the pre-test and the main study for them to understand the purpose of the study. The researcher delivered the questionnaires to the targeted population himself. Also, some respondents were allowed to use their own convenient time to fill out the questionnaires, which were picked up after some days. For those that were not able to return their questionnaires the researcher followed up to collect the completed forms for analysis. A sample size of at least 214 was targeted. However, when the questionnaire was administered, 205 valid questionnaires were retrieved. This represents a response rate of 95.79 percent; hence, very good for analysis.

#### **Data Processing and Analysis**

The data were analysed using SPSS version 22. This software was used because it is the most appropriate package for analysing data. In addition, the advantages of the software include (a) it is user-friendly, (b) it can easily be used to analyse multi-response questions, cross section and time series analysis and cross tabulation; (that is, relating two sets of variables) and (c) it can also be used alongside Microsoft Excel and Word (Bell, Bryman & Harley, 2018). This study employed both descriptive and inferential statistics (regression) to analyse data collected from the field. First, the data collected were sorted and organised. The data were then coded to enable the researcher to identify codes that pertained to possible responses for each item on the questionnaire. The analyses were done in line with the specific objectives of this study.

Descriptive statistics discern basic patterns in data (Bell et al., 2018). Mean, median, frequency (mode), standard deviation, and inferential statistics are used to make inferences concerning research proposition applicability to the



study population. Regression analysis on the other hand, is used when one want to predict the value of a variable based on the value of another variable. Simple linear regression entails two variables – the dependent variable and one independent variable whilst multiple linear regression entails many variables – one dependent variable and two or more independent variables. Research question one and two were analysed using descriptive statistics (frequencies, means and standard deviations) whilst research question three was tested using multiple regression analysis as the question sought to infer the influence of health and safety practices on employee job performance.

### **Ethical Consideration**

Ethics in social science research has to do with the responsibility of researchers to be honest and respectful to all individuals who are affected by the research studies or reports of the results of the studies (Gravetter & Forzano, 2018). Ethical issues confront every researcher who embarks on a study involving humans as subjects. Some general agreements have been shared by researchers about what is proper and improper in the conduct of scientific inquiry. The most important ethical agreements that prevail in social research include, harm to participants, voluntary participation, anonymity and confidentiality and deception. These concerns were dealt with in the course of data collection. Firstly, it was ensured that no participant was harmed through the revelation of information that could embarrass him/her.

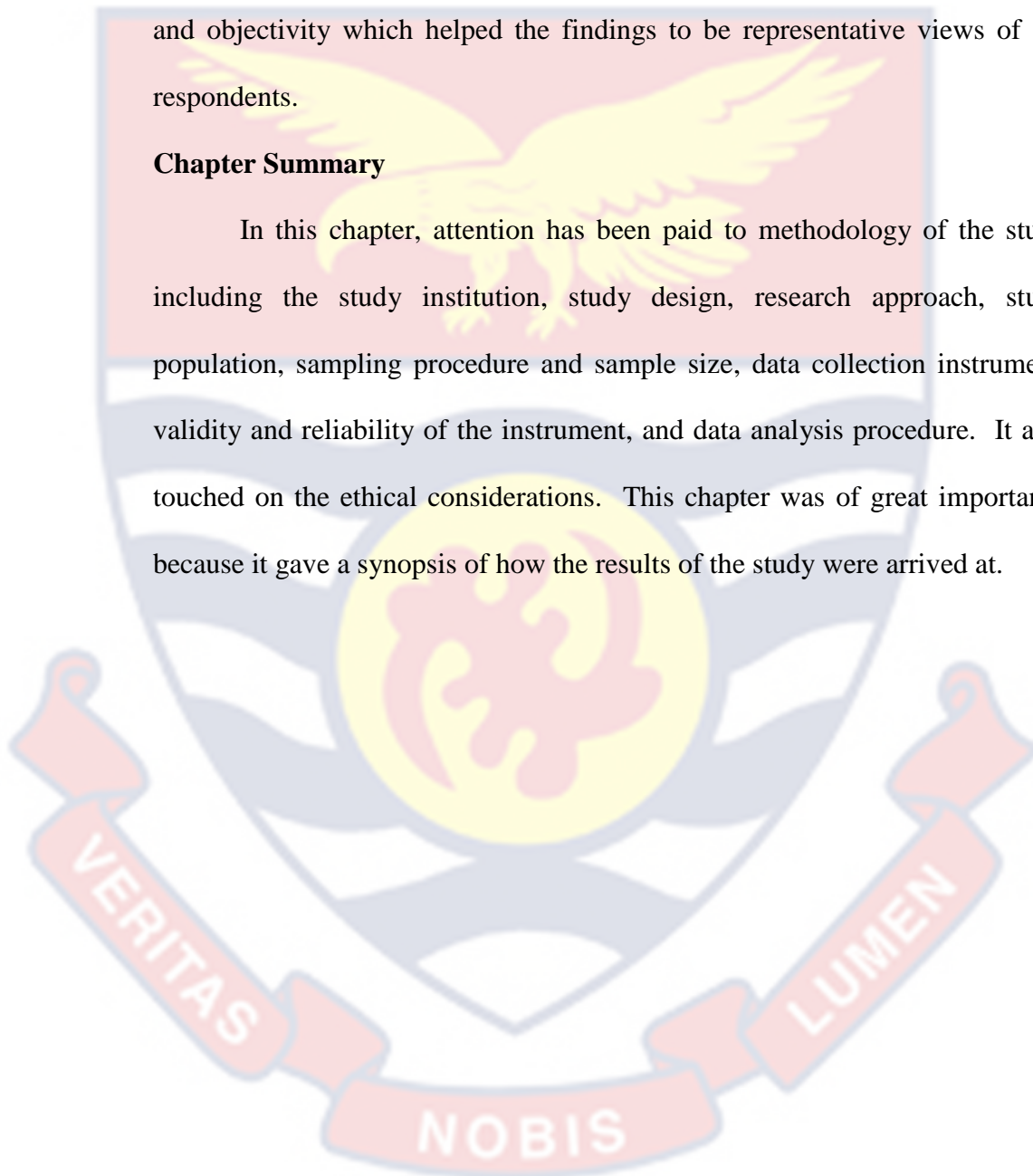
Secondly, the respondents were adequately educated about what was being investigated and this enhanced the chances of their participation. Furthermore, the respondents were assured of complete anonymity and confidentiality. This was achieved by concealing their true identities through



the use of code words to represent their names. Finally, respondents were told that the researcher was pursuing a genuine academic exercise devoid of any deception by showing them a letter from the school and the researcher's student's identity card. By the above methods the researcher ensured neutrality and objectivity which helped the findings to be representative views of the respondents.

### **Chapter Summary**

In this chapter, attention has been paid to methodology of the study including the study institution, study design, research approach, study population, sampling procedure and sample size, data collection instrument, validity and reliability of the instrument, and data analysis procedure. It also touched on the ethical considerations. This chapter was of great importance because it gave a synopsis of how the results of the study were arrived at.



## CHAPTER FOUR

### RESULTS AND DISCUSSION

#### Introduction

The study sought to examine the influence of occupational health and safety practices on employees' performance at the Golden Star Resources, Bogoso/Prestea. The study employed quantitative research approach with a descriptive survey design. Questionnaire was used to as the research instrument. Simple random sampling technique was used to select the respondents. Data processing was done using SPSS version 21, and the analytical tools used were regression analysis and descriptive statistics using frequencies, percentages, means and standard deviation. This chapter presented findings of the study and discussions of the findings. The first section provides the profile of the respondents. The second section of the chapter presented results of the descriptive and the inferential (regression) statistics in accordance with the specific objectives of this study with detailed discussion provided for each finding.

#### Socio-Demographic Characteristics of Respondents

The demographic characteristics of respondents were in relation to gender, age, marital status, education level, and years of work experience. The results obtained in relation to socio-demographic characteristics of the respondents are shown in Table 2.

**Table 2: Background Information of Respondents**

Variable	Frequency	Percentage (%)
<i>Sex</i>		
Male	154	75.1
Female	51	24.9
Total	205	100
<i>Age Range</i>		
20-30 years	66	32.2
31-40 years	94	45.9
41-50 years	40	19.5
51 and above years	5	2.4
Total	205	100
<i>Marital Status</i>		
Single	71	34.6
Married	125	61.0
Widow/Widower	9	4.4
Total	205	100
<i>Education Level</i>		
Below First Degree	58	28.3
First Degree	112	54.6
Postgraduate Degree	27	13.2
Professional Certificate	8	3.9
Total	205	100
<i>Years of Work Experience</i>		
1-5 years	71	34.6
6-10 years	68	33.2
11-15 years	43	21.0
16 or above years	23	11.2
Total	205	100

Source: Field work (2021)

As shown in Table 2, a total of 205 respondents comprising 75.1 percent males and 24.9 percent of females partook in this study. Meaning the employees at Golden Star Resources, Bogoso/Prestea is male dominant and this could be as result of the nature of the work. In terms of age, majority of the respondents were from 31 to 40 years old (45.9%). A total of 66 respondents (32.2%) and 40 respondents (19.5%) were in the age group of 20 to 30 years and 41 to 50 years old respectively. Only 5 respondents (2.4%) were in the age group of 51 years or above. Bearing in mind the constitutional retirement age of 60 years for workers in Ghana, it could be said that many of the respondents are still young and are having long and fruitful years of service ahead of them.

Again, majority of the respondents (61.0%) were married while 34.6 percent stated that they were single. This could be due to the relative matured nature of the respondents. It was also found, 4.4 percent of the employees had lost their spouse. The level of education of the respondents was mostly (54.6%) first degree holders, whilst 28.3 percent held below first degree (various diplomas, SSS/GCE O/Level Certificate, JHS/JSS certificate and primary education). Again, 13.2 percent of the respondent held postgraduate certificates. Only 3.9 percent of them held professional certificates. Finally, it is worthy to note that most of the respondents have worked in the institution for more than five years. It could be said that majority of the respondents are in position to provide information necessary for this study.

### **Effectiveness of Occupational Health and Safety Practices**

The first research objective was to ascertain the effectiveness of occupational health and safety practices at Golden Star Resources, Bogoso/Prestea. To measure respondents' views on this issue, five main

dimensions of occupational health and safety proposed by Christopher, Paul and Badejo (2012), and Glendon, and Litherland (2001) were considered. Their dimension includes; Occupational Hazard Prevention (OHP), Safety Procedures and Risk Management (SPRM), Organizational Safety Support (OSS), First Aid Support and Training (FAST), and Safety and Health Rules (SAHR). Again, on a 5-point scale, a mean score of 0-2.50 is considered low, between 2.51 and 3.50 is considered moderate (average), and 3.51 and above is considered high (Okorley, 2010). The results obtained are presented in Table 3.

**Table 3: Effectiveness of Occupational Health and Safety Practices**

Variable	Mean	Std. Dev.	Min.	Max.
Safety Procedures and Risk Mgt.	3.37	.66682	1.40	4.80
Safety and Health Rules	3.89	.58020	1.60	5.00
First-Aid Supports and Trainings	3.97	.48630	2.50	5.00
Occupational Hazards Prevention	4.12	.46382	2.00	5.00
Organizational Safety Supports	4.08	.49076	1.80	5.00

\*Scale (Mean): 0–2.50 =Low; 2.51–3.50=Average; 3.51 and above=High

Source: Field work (2021)

From Table 3, Occupational Hazards Prevention was identified as the most effective occupational health and safety practice at the Golden Star Resources, Bogoso/Prestea as it has the highest mean score of 4.12. The respondents seem consistent with their response in terms of Occupational Hazards Prevention as it could be seen from the least standard deviation of 0.46382. The result demonstrates that deficiencies and mistakes revealed during internal audits for safety and health are monitored and removed, and there are health and safety devices for the employees. Safety improvement interventions



were either incident induced or proactively planned (Blair, 2014). As reported by Blair (2014), what made safety interventions effective are corrective actions and safety controls. A corrective action is an action taken to eliminate or reduce the cause of a system deficiency, hazard, or risk (Blair, 2014). Safety controls, however, were the processes for risk identification, assessment, and mitigation (Blair, 2014).

The second most effective health and safety practice found was Organizational Safety Supports ( $M=4.08$ ,  $SD=0.49076$ ). The respondents indicated that adequate damage is paid in case of injury, sufficient time is granted for an employee to be recovered, occupational safety regulations are followed at organisation, and due care is taken at the Golden Star Resources, Bogoso/Prestea not to disclose privacy of workers (medical records). This result is in agreement with the work of Gunningham and Bluff (2009) which indicate effective health and safety practices in companies do not only dwell on putting measures in place to avoid occurrence of accidents but also providing appropriate remedy for addressing occurrence of accidents and respecting privacy of workers.

Again, from Table 3, the study found that Safety and Health Rules is an effective occupational health and safety practice at the Golden Star Resources, Bogoso/Prestea branch ( $M=3.89$ ,  $SD=.58020$ ). Majority of the respondents agreed that Safety Rules are followed even under tight schedule, health examination is made at the organisation prior to the employment, periodical health examinations are undertaken at Golden Star Resources, Bogoso/Prestea after selection (employment, hiring). This supports finding by Murray-Gibbons and Gibbons (2007) who postulated in his study that to have an effective

occupational health and safety, visible signs and notices must be pasted on all danger sites and ensure their compliance so as to prevent injuries and death resulting from work place accidents.

Per the views of the respondents, First-Aid Supports and Trainings is also effective at the Golden Star Resources, Bogoso/Prestea branch ( $M=3.97$ ,  $SD=.48630$ ). This finding implies that the following are very effective at the Golden Star Resources, Bogoso/Prestea branch; emergency treatment in case of accident, workers being trained against health hazards, workers being provided with health and hygiene training, or workers being provided with first aid training. This finding supports the finding of Sikpa (2011) that organisational provision of first-aid supports and training of employees against health hazards and hygiene training are high.

Finally, on an average level, Safety Procedures and Risk Management was also identified as an effective occupational health and safety practice at the Golden Star Resources, Bogoso/Prestea ( $M=3.37$ ,  $SD=0.66682$ ). This could be manifested in the form of poorly defining probable risks and results at the organisation, workers being ill-informed about changes in division of labour in the unit and workers could not easily recognise the relevant procedure of each task in the organisation. Osuala (2011) argues that if there is any change at the workplace, the risk assessment forms must be changed also to suit new working environment. Attainment of safety entails risk management, which is the effect of uncertainty on outcomes (Chun et al., 2014).

## Indicators of Employee Performance at Golden Star Resources, Bogoso/Prestea

Research Objective Two sought to explore the various indicators of employee performance at Golden Star Resources, Bogoso/Prestea. To achieve this research objective, several questions were posed. Respondents were given options to select from a series of issues that were applicable to them. Again, on a 5-point scale with 1 being a minimum score and 5 being a maximum score, a mean score of 0-2.5 is considered low, between 2.51 and 3.51 is considered moderate (average) and above 3.51 is considered high (Okorley, 2010). The results obtained are presented in Table 4.

**Table 4: Indicators of Employee Performance at Golden Star Resources**

S/N	Statement	Mean	Std. Dev.	Max	Min
1	Ability to maintain and complete all documentations is indicator of performance at where I work.	3.82	.88651	1.00	5.00
2	Ability to make suggestions to improve the system is an indicator of performance at my work place.	3.51	.91077	1.00	5.00
3	Avoidance of unnecessary lateness and absenteeism is considered crucial at my work place.	4.13	.70954	2.00	5.00
4	I am required to have adequate knowledge and understanding of all my tasks.	4.08	.58053	2.00	5.00
5	I have the required skills to perform my task.	4.21	.54483	2.00	5.00
6	Loyalty is an indicator of performance at where I work.	3.30	1.2304	1.00	5.00
7	I am required to have some level of motivation to perform my task.	3.73	.78809	1.00	5.00
8	I perform my work to the expected standards.	4.20	.51161	3.00	5.00

**Table 4: Continue...**

S/N	Statement	Mean	Std. Dev.	Max	Min
9	Employees should be able to judge a given work situation and respond adequately to it.	3.94	.60754	2.00	5.00
10	Employees should be able to make snap judgments with limited information.	3.59	.81524	1.00	5.00
11	Employees are required to manage their time and allocate resources effectively.	3.94	.64663	2.00	5.00
12	Ability to carry out orders and instructions issued by management related to the work is an indicator of performance at my work place	3.97	.67432	2.00	5.00
13	Employees at my workplace are to adapt in the event of emergency situations at work	3.90	.61377	2.00	5.00
14	Effectiveness of Overall Employee Performance	3.87	.43715	2.23	4.77

\*Scale (Mean): 0–2.50 =Low; 2.51–3.50=Average; 3.51 and above=High

Source: Field work (2021)

From Table 4, the following were found to be a high indicators of performance at Golden Star Resources, Bogoso/Prestea; ability to maintain and complete all documentations, ability to make suggestions to improve the system, avoidance of unnecessary lateness and absenteeism, having adequate knowledge and understanding of all tasks, having the required skills to perform my task, having some level of motivation to perform my task, performing one's work to the expected standards, ability to judge a given work situation and respond adequately to it, ability to make snap judgments with limited information, ability to manage time and allocate resources effectively, ability to carry out orders and instructions issued by management related to the work, and ability to adapt in the event of emergency situations at work. It was only loyalty which was found to be an average indicator of performance at the company.

These findings confirm Jones et al. (2009) assertion that employee job performance takes different measures based on the industry or field of study. These varying measures reflect the multidimensional workplace performance (Combs et al., 2005). Job performance could also be seen from quality measures such as customer satisfaction and reliability; as well as human resource perspectives such as labour turnover, absenteeism and job satisfaction (Grugulis & Stoyanora, 2011; Barling, Kelloway, & Iverson, 2003; and Korunka, Scharitzer, Caraya & Sainfort, 2003). Increasing the performance of staff from the lowest level of the organization to senior management is one of the most effective means of ensuring increase in business performance and profit.

The forgoing shows employee performance epitomizes workers' performance at the workplace. Employee performance has several different aspects including task meticulousness, work discipline, readiness for innovation and task proficiency (Motowidlo & Kell, 2012). From another perspective, Miao and Cao (2019) categorize job performance into three aspects including productivity, efficiency and effectiveness. Viswesvaran and Ones (2000) on the other hand, classify employee performance with job-specific task proficiency, non-job-specific task proficiency. Employee performance has different dimensions including task performance, adaptive performance, counter-productive behaviour and contextual performance (Biełkowska & Tworek, 2020).



## **Influence of Occupational Health and Safety Practices on Employees' Performance at Golden Star Resources, Bogoso/Prestea**

Research Objective Three sought to examine the influence of occupational health and safety practices on employees' performance at Golden Star Resources, Bogoso/Prestea. As expounded by Christopher et al. (2012), and Glendon, and Litherland (2001), occupational health and safety practice is made up of five main dimensions namely; occupational hazard prevention, safety procedures and risk management, organizational safety support, first aid support and training, and safety and health rules. The indicators for each of the five dimensions were separately aggregated. Afterwards, the five dimensions were used as the independent variables. All the indicators under employee performance were also aggregated into a single score and used as the dependent variable. Subsequently, the independent variables were regressed on the dependent variable.

The model, therefore, comprised occupational hazard prevention, safety procedures and risk management, organizational safety support, first aid support and training, and safety and health rules as the explanatory variables and employee performance as the dependent variable. Assessment was based on unstandardized (B) and standard ( $\beta$ ) beta values, correlation values (R), coefficient of determination ( $R^2$ ), standard errors and the corresponding significant levels (p-values). To avoid auto-correlation, Durbin-Watson score must fall within the range 1.5 - 2.5 (Tabachnick & Fidell, 2013). The results show there is no problem of auto-correlation hence warranting the interpretation in respect of the regression results. The findings from the regression analysis are presented in Table 5, Table 6 and Table 7.

**Table 5: Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.678 <sup>a</sup>	.459	.446	.32549	1.868

a. Predictors: (Constant), Organizational Safety Supports, Safety Procedures and Risk Management, First-Aid Supports and Trainings, Occupational Hazards Prevention, Safety and Health Rules

b. Dependent Variable: Employee Performance

Source: Field work (2021)

From Table 5, the model correlation coefficient (R) value of 0.678 indicates that there is a strong positive relationship between the dependent variable and the independent variable. This confirms an empirical studies by Abubakar (2017), and Gyekye and Salminen (2012) that occupational health and safety practices have a strong positive and significant relationship with employees' performance. Co-efficient of determination is the measure for assessing how a change in the independent variable cause change in the dependent variable (Kassem, Khoiry & Hamzah, 2020). It is measured by the R-square score in regression models. R-square above 0.67 are classified as substantive, 0.33 are labelled moderate and those less than 0.19 are termed weak (Kassem et al., 2020).

Observation of the co-efficient of determination results shows that changes in components of occupational health and safety practices jointly accounts for 45.9% positive change in employee job performance after the effect of other factors having the capacity to influence employee job performance had been statistically controlled for ( $r^2=0.459$ ). Thus, the

remaining 54.1% is being explained by other variables not included in the model. It is therefore prudent to examine the state of significance of such contribution to changes in employee job performance as ascribed to changes in the components of occupational health and safety at the Golden Star Resources, Bogoso/Prestea.

**Table 6: ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	17.902	5	3.580	33.796	.000 <sup>b</sup>
	Residual	21.082	199	.106		
	Total	38.985	204			

a. Dependent Variable: Employee Performance

b. Predictors: (Constant), Organizational Safety Supports, Safety Procedures and Risk Management, First-Aid Supports and Trainings, Occupational Hazards Prevention, Safety and Health Rules

Source: Field work (2021)

The *F* statistic in the ANOVA Table 6 tests the joint significance of the independent variable in explaining the dependent variable. In this analysis, the *p*-value is well below .05 ( $p < .001$ ). Therefore, it can be concluded occupational health and safety practices as measured by occupational hazard prevention, safety procedures and risk management, organizational safety support, first aid support and training, and safety and health rules accounts for a statistically significant positive moderate significant change in employee job performance at the Golden Star Resources, Bogoso/Prestea. The finding contradicts the initial claim by Olanmi (2016) that an insignificant relationship exist health and safety practices and performance but rather supports the idea that occupational

health and safety practices has significant bearing on individual work performance in the work context (Takala et al, 2014; Yankson, 2012)

Perhaps the significant positive change in employee job performance as accounted for by changes in health and safety practices is better explained by the position of the social exchange theory. This can be aligned with the proposition espoused by the social exchange theory that employees respond to such investment from their employers with extra-role behaviour (Cropanzano & Mitchell, 2005). The social exchange theory therefore is anchored on mutual obligation of seeking each other's betterment through organization-led exchange relationships (Kim & Qu, 2020). Improvement in employee performance inherently has bearing on occupational health and safety, thereby, justifying the investment in organizational intervention such as health and safety practices at the Golden Star Resources, Bogoso/Prestea.

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

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	1.059	.244		4.331	.000
Safety Procedures and Risk Management	.145	.044	.221	3.324	.001
Safety and Health Rules	.038	.069	.050	.544	.587
First-Aid Supports and Trainings	.168	.066	.178	2.550	.012
Occupational Hazards Prevention	.262	.066	.291	3.942	.000
Organizational Safety Supports	.107	.073	.120	1.472	.143

a. Dependent Variable: Employee Performance

Source: Field work (2021)

From Table 7, the statistics of the standardised betas for the occupational health and safety practices are as follows: safety procedures and risk management

(.221), safety and health rules (.050), first aid support and training (.178), occupational hazard prevention (.291), and organizational safety support (.120). The statistics shows that occupational hazard prevention had the largest standardised beta whilst safety and health rules had the smallest standardised beta. It implies that occupational hazard prevention makes the strongest unique contribution to explaining employee performance, when the variance explained by all other variables in the model is controlled. Also, safety and health rules make the lowest unique contribution to explaining the dependent variable, when the variance explained by all other variables in the model is controlled.

Table 7 depicts that apart from Safety and Health Rules, and Organizational Safety Supports the rest of the occupational health and safety practices contributes to the prediction of employee performance at Golden Star Resources. Safety Procedures and Risk Management had a positive unstandardized beta (B) coefficient of .145 and it was statistically significant at 0.1% level of significance. The reason is that the p-value of vigour (0.000) is lesser than the alpha value (0.001). The unstandardized beta coefficient value of .145 implies that for every unit improvement or effective in Safety Procedures and Risk Management at Golden Star Resources, employees' performance will increase by 0.145 units. Therefore, the study found that Safety Procedures and Risk Management significantly influence employees' performance at Golden Star Resources.

Another covariate that was included in the regression model to predict employees' job performance was First-Aid Supports and Trainings. From Table 7, the respective t-value was bigger than 1.96 indicating the coefficient is significant. That is, Golden Star Resources, Bogoso/Prestea has at least an



averagely good First-Aid Supports and Trainings ( $B = .168$ ): this value tells us that for every unit effective First-Aid Supports and Trainings that the Golden Star Resources, Bogoso/Pretea put in place, employees' job performance will increase by .168 units implying that, First-Aid Supports and Trainings affects employees' job performance positively. Therefore, the study found that First-Aid Supports and Trainings is one of the dimensions of occupational health and safety that significantly influence employees' job performance at Golden Star Resources, Bogoso/Pretea.

Moreover, from Table 7, Occupational Hazards Prevention has significant effect on employee performance. Occupational hazards prevention had a positive unstandardized beta ( $B$ ) coefficient of .262 and it was statistically significant at 1% level of significance. The reason is that the p-value of Occupational Hazards Prevention (0.000) is less than the alpha value (0.001). The unstandardized beta coefficient value of .262 implies that for every unit improvement or effectiveness in the occupational hazards prevention at Golden Star Resources, Bogoso/Pretea; employees' performance will increase by 0.262 units. Therefore, the study found that occupational hazards prevention is one of the dimensions of occupational health and safety practices that significantly influence employee performance at Golden Star Resources, Bogoso/Pretea.

The managerial implications of these findings are that although all the components of occupational health and safety practices account for 45.9% significant change in the level of employee job performance at the Golden Star Resources, Bogoso/Pretea after the effect of other factors that have the potential to enhance state of employee job performance are statistically

controlled for, only Safety Procedures and Risk Management, First-Aid Supports and Trainings, and Occupational Hazards Prevention actually contributes significantly to causing such a significant change in the state of employee job performance. Safety and Health Rules, and Organizational Safety Supports have the potential to positively improve the state of employee job performance; their contributions are however ascribed to chance hence these variables are not significant candidates for improving employee job performance.

This result confirms many prior empirical studies. For example, in examining the influence of occupational hazards on job performance of employees of housekeeping department of hotels in Kaduna metropolis Nigeria, Abubakar (2017) found that occupational hazard prevention have positively influence employee's job performance. According to Takala et al. (2014), work-related injuries have direct and indirect outcomes on both the lives of the workers and on the financial status of an organization. It was further stressed that work-place injuries can result into possible reduction in quality work and negative effects on the morale in other workers. It is observed that hazards or injuries at work-place cause psychological suffering especially in the case of a permanent disability generate effects that influence employees' performance negatively and contributes to organization not able to meet its stated goals and objectives.

Again, Yankson (2012) sought to examine the effect of health and safety standards on productivity in Ghana Rubber Estates Limited. The objective was to determine the effect of health and safety standards on employees' productivity, to determine employees' level of understanding of health and

safety policies, to assess the attitude of management towards the health and safety of employees and to identify challenges of the implementation of health and safety standards. The study revealed that employees' productivity is influenced by management safety practices and safety programmes, management attitude towards health and safety, investigation of accidents, supervisors' safety, and training of employees on safety standards held in the organisation. It also revealed that health and safety standards if managed effectively have a positive impact on productivity.

The finding also supports the social exchange theory which suggests that employees who value safety received from their organisation, such as occupational hazard prevention will reciprocate with more positive work attitudes (Korir & Kipkebut, 2016). Thus, when an organisation exhibits a readiness to make workplace safe and healthy, the employee obliges by engaging in desirable behaviour such as high compliance with work procedures and reducing undesirable behaviour such as unsafe behaviour. When an institution cares for their workers safety, the workers are likely to develop tacit obligations to perform their duties, using behaviour beneficial to the institution (Neal & Griffin, 2006).

### **Chapter Summary**

This chapter presented the results from analysis of the data in accordance with the research objectives of this study. Data was analysed by using descriptive statistics (frequencies, percentages, means, and standard deviations) analysis and regression analysis for demographic variables and the research objectives. A detailed discussion was also provided for each key finding. Findings from the study showed that all the dimensions of health and safety

practices at the Golden Star Resources, Bogoso/Prestea were effective. Employee job performance at the company was also high. Finally, Safety Procedures and Risk Management, First-Aid Supports and Trainings, and Occupational Hazards Prevention had significant positive effect on employees' job performance.





## CHAPTER FIVE

### CONCLUSIONS AND RECOMMENDATIONS

#### Introduction

This chapter summarised and drew conclusions based on the results. Appropriate recommendations were also made based on the conclusions derived from the study. Suggestions were then made for further research on occupational health and safety (occupational hazard prevention, safety procedures and risk management, organisational safety support, first aid support and training, and safety and health rules) and employees' job performance.

#### Summary of the Study

The study was conducted to examine the influence of occupational health and safety practices on employees' performance at the Golden Star Resources, Bogoso/Pretea. Specifically, the study aimed to; (a) Ascertain the effectiveness of occupational health and safety practices at Golden Star Resources, Bogoso/Pretea; (b) Explore the various indicators of employee performance at Golden Star Resources, Bogoso/Pretea; and (c) Examine the influence of occupational health and safety practices on employees' performance at Golden Star Resources, Bogoso/Pretea. To achieve these objectives, the study was guided by three research questions.

Literature review was done on occupational health and safety practices, and employees' performance. The study employed quantitative research approach. Descriptive survey was used as the research design and the study population comprised all permanent staff of the Golden Star Resources, Bogoso/Pretea in the Western Region of Ghana. The target population are those whose work involves high health and safety risk such as miners,



processors and heavy duty operators. A sample size of 205 employees was obtained from a total population of 480 miners, processors and heavy duty operators. Questionnaire was used as the data collection instrument. The study data were analysed using SPSS version 21.0. Regression analyses and descriptive statistics (frequencies, percentages, means and standard deviation) were used to present the data.

### **Summary of Key Findings**

In terms of the findings, there were three key outcomes of the study and they are as follows; On research objective one, it was found that all the dimensions of health and safety practices (occupational hazard prevention, safety procedures and risk management, organisational safety support, first aid support and training, and safety and health rules) at the Golden Star Resources, Bogoso/Prestea were effective.

Twelve out of thirteen indicators were found to be high indicators of employee job performance at Golden Star Resources, Bogoso/Prestea. It was only loyalty which was found to be an average indicator of performance at the company. Three of the occupational health and safety practices (i.e. Safety Procedures and Risk Management; First-Aid Supports and Trainings; and Occupational Hazards Prevention) had significant positive effect on employees' job performance.

### **Conclusions**

Based on the key findings of this study, conclusions can be drawn for the whole research work. From the study, one major issue assessed was the effectiveness of occupational health and safety practices at Golden Star Resources, Bogoso/Prestea. From the findings, it is concluded that Golden Star

Resources, Bogoso/Pretea has put in place very effective occupational health and safety practices.

Another major issue investigated was to explore the various indicators of employee performance at Golden Star Resources, Bogoso/Pretea. From the findings of the study, it is concluded that Golden Star Resources, Bogoso/Pretea does not only focus on task performance indicators but also consider quality measures such as ability to manage time and allocate resources effectively and reliability; as well as human resource perspectives such as labour turnover, absenteeism and job satisfaction. However, loyalty which is very essential has not been considered by the company as major performance indicator.

Moreover, the issue of influence of occupational health and safety practices on employees' performance at Golden Star Resources, Bogoso/Pretea was also examined. From the findings of the study, it is concluded that the performance of employees at Golden Star Resources, Bogoso/Pretea will increase if the employees are informed about changes in division of labour, probable risks and results are defined, written work procedures are compliant with practice in the organisation, when employees can easily recognise the relevant procedure of each task in the organisation, and workload is reasonably balanced in the company.

Again, when emergency treatment is available in case of accident in my organisation, workers are trained against health, workers are provided with health and hygiene training, and workers are provided with first aid; employee performance will increase. Finally, when the deficiencies and mistakes revealed during internal audits for safety and health are monitored and removed, and

there are health and safety devices for the employees; the performance of employees at Golden Star Resources, Bogoso/Prestea will improve. This is because occupational health and safety practices of Safety Procedures and Risk Management, First-Aid Supports and Trainings, and Occupational Hazards Prevention had significant positive effect on employees' job performance.

All things considered, this study has contributed a lot in understanding the research problem identified and has offered new insights for practitioners (i.e. human resource practitioners, administrators, chief executive officers, top management teams, government agencies, and heads of departments) by suggesting that they may improve employees' performance level by paying more attention to the occupational health and safety practices, particularly safety procedures and risk management; first-aid supports and trainings; and occupational hazards prevention put in place by their institution or organisation.

### **Recommendations**

Based on the findings obtained from the study, the following recommendations have been made. Regarding the finding that all the dimensions of health and safety practices (occupational hazard prevention, safety procedures and risk management, organisational safety support, first aid support and training, and safety and health rules) at the Golden Star Resources, Bogoso/Prestea were effective, it is recommended that management should maintain and strengthen their health and safety practices. For instance they should keep acting quickly when a safety concern or problem is raised; collaborate with the workers to ensure the safest possible conditions; workers who act safely should receive positive feedback from management; and management should listen carefully to workers' ideas about improving safety.

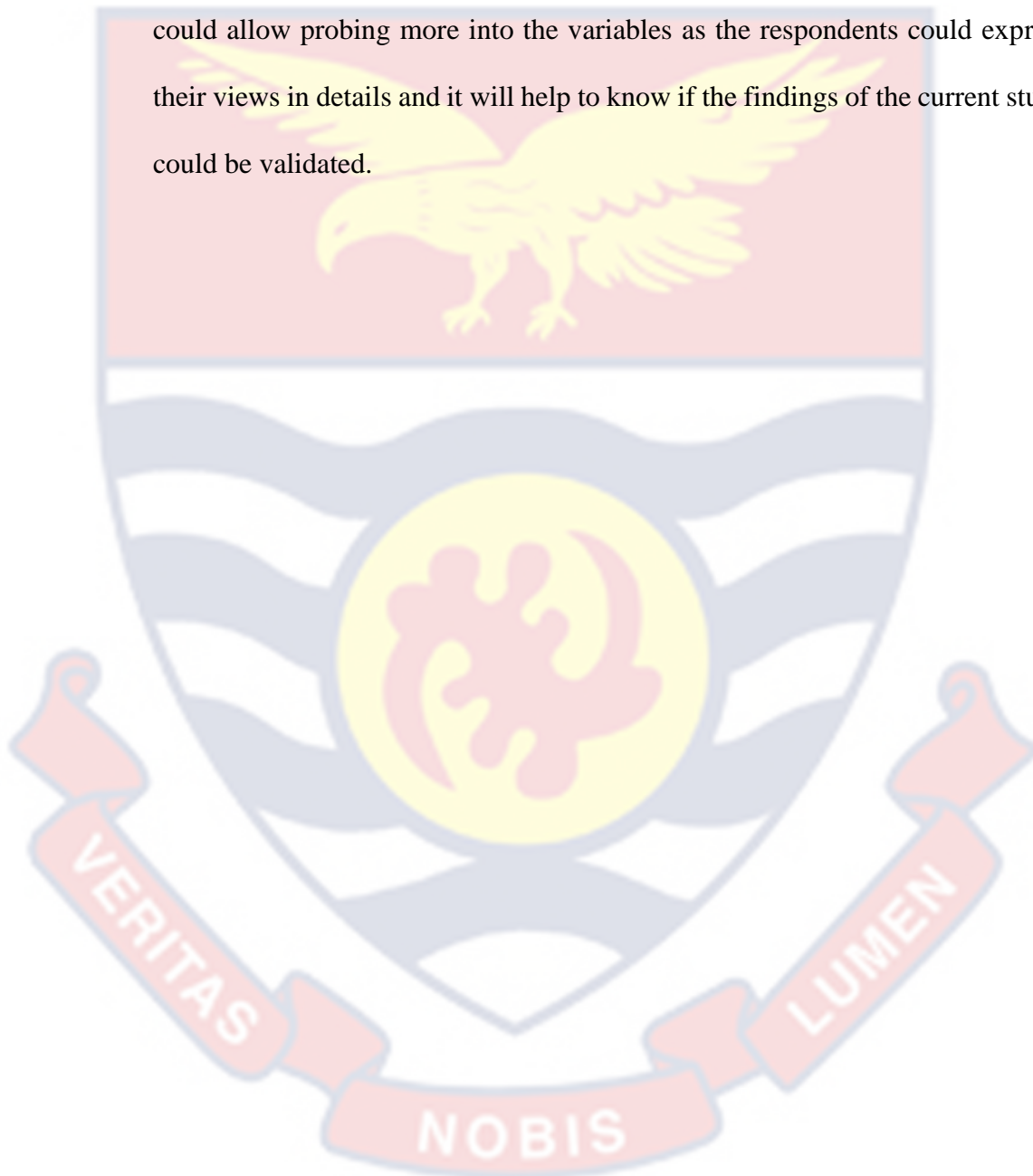
Pertaining to the finding that among the indicators of employee performance at the company, loyalty was an average, it is recommended that management of the company should reconsider employee loyalty as a major indicator of employee performance. This is because employees who have high loyalty will be motivated to work and do their best for the company. Employee loyalty increases performance, through reducing turnover, improving quality, establishing trust among team members, and generally improving the reputation of the organisation.

Finally, based on the finding that Safety Procedures and Risk Management; First-Aid Supports and Trainings; and Occupational Hazards Prevention have significant positive effect on employees' job performance, it is recommended that employees should be informed about changes in division of labour. Again, deficiencies and mistakes revealed during internal audits for safety and health should be monitored and removed, and there should be health and safety devices for the employees. Lastly, management should regularly organise education, training, workshops, seminars on occupational hazards issues, publish materials on health and safety to include safety consciousness in the minds of workers.

### **Suggestions for Further Research**

The study was limited to only Golden Star Resources, Bogoso/Prestea. Further research could be conducted to cover more institutions or organisations. Health and safety practices might be substantially different from other institutions regarding the amount of information or the level of information. The study, therefore, suggests that further research could be done in respect of other organisations in the country.

Again, this study made use of structured questionnaire as the main research instrument. This does not allow the respondents to express their views in more details. For that matter, it is suggested that an interview or focused group discussion should be used in future. The reason being that such method could allow probing more into the variables as the respondents could express their views in details and it will help to know if the findings of the current study could be validated.





## REFERENCES

- Abubakar, R. L. (2017). Influence of occupational hazards on employees' job performance in housekeeping department of budget hotels in Kaduna Metropolis, Nigeria. Unpublished master's dissertation, School of Hospitality and Tourism, Kenyatta University, Kenya.
- Adam, A. M. (2020). Sample size determination in survey research. *Journal of Scientific Research and Reports*, 26(5), 90-97.
- Adei, D., & Kunfaa, E. Y. (2012). Occupational health and safety policy in the operations of the wood processing industry in Kumasi, Ghana. *Journal of Science and Technology (Ghana)*, 27(2), 161-173.
- Adjei, D. (2012). *The impact of job rotation on employees' performance: A case study of UTRAK financial services limited*. Unpublished master's thesis, Department of Managerial Science of the School of Business, Kwame Nkrumah University of Science and Technology.
- Al-Ahmadi, H. (2009). Factors affecting performance of hospital nurses in Riyadh Region, Saudi Arabia. *International Journal of Health Care Quality Assurance*, 22(1), 40-54.
- Albert, A., & Hallowell, M. R. (2013). Safety risk management for electrical transmission and distribution line construction. *Safety Science*, 51(1), 118-126.
- Ary, D., Jacobs, L. C., Sorensen, C., & Razavieh, A. (2010). *Introduction to research in education* (8<sup>th</sup> ed.). Canada: Wadsworth Cengage Learning.

- Aryee, S., Budhwar, P. S., & Chen, Z. X. (2002). Trust as a mediator of the relationship between organizational justice and work outcomes: Test of a social exchange model. *Journal of Organizational Behavior*, 23(3), 267-285.
- Badu, S. O. (2012). *The effects of employee transfer on performance in the health sector. A case study of selected hospitals in The Kumasi Metropolitan Assembly*. Unpublished master's thesis, Department of Managerial Science of the School of Business, Kwame Nkrumah University Of Science And Technology.
- Banai, M., & Reisel, W. D. (2017). The influence of supportive leadership and job characteristics on work alienation: A six-country investigation. *Journal of World Business*, 42(4), 463-476.
- Barling, J. & Zacharatos, R. (2010). *Participatory approach to health promotion for informal sector workers in Thailand*, Thai Health Promotion Foundation.
- Barling, J., Kelloway, E. K., & Iverson, R. (2003). High-quality work, job satisfaction and occupational injuries. *Journal of Applied Psychology*, 88 (2), 276-283.
- Bass, B. M. (2000). *Bass and Stogdill's Handbook of Leadership*. New York: Free Press.
- Bell, E., Bryman, A., & Harley, B. (2018). *Business research methods*. Oxford: Oxford University Press.
- Bieńkowska, A., & Tworek, K. (2020). Job performance model based on employees' dynamic capabilities. *Sustainability*, 12(6), 2250.
- Blair, E. (2014). Safety interventions. *Professional Safety*, 5(9), 50-55.

- Blau, P. (1964). *Exchange and Power in Social Life*. New York: Wiley.
- Bryman, A. (2016). *Social research methods*. Oxford: Oxford University Press.
- Buhler, P. M. (2003). Managing in the new millennium: Understanding the manager's Motivational tool bag. *SuperVision*, 64(12), 20-22.
- Cant, M. C. (2011). *Marketing management: A South African perspective*. Cape Town: Juta and Company Ltd.
- Chiaburu, D. S., Thundiyl, T., & Wang, J. (2014). Alienation and its correlates: A meta-analysis. *European Management Journal*, 32(1), 24-36.
- Christian, M. S., Bradley, J. C., Wallace, J. C., & Burke, M. J. (2009). Workplace safety: A meta-analysis of the roles of person and situation factors. *The Journal of Applied Psychology*, 94(5), 1103-1127.
- Christopher, C. O., Paul, O. O., & Badejo, A. E. (2012). Promoting ethical human resource management practices in work organizations in Nigeria: Roles of HR professionals. *International Journal of Human Resource Studies*, 2(2), 116-132.
- Coetzer, S. (2018). *Golden Star reports two fatalities at Prestea underground gold mine*. Retrieved on 30<sup>th</sup> May, 2019 from <http://www.gsr.com/-investors/news/news-details/2018/Golden-Star-Reports-Two-Fatalities-at-Prestea-Underground-Gold-Mine/default.aspx>
- Combs, J. G, Crook, T. R., & Shook, C. L. (2005). The dimensionality of organizational performance and its implications for strategic management research. *Research Methodology in Strategy and Management*, 2, 259-286.
- Cox, S. J., & Tait, N. R. (2008). *Safety, Reliability and Risk Management: an integrated approach*. Oxford: Butterworth-Heinemann.

- Crede, M., Chernyshenko, O. S., Stark, S., Dalal, R. S., & Bashshur, M. (2007). Job satisfaction as mediator: An assessment of job satisfaction's position within the nomological network. *Journal of Occupational and Organizational Psychology*, 80(3), 515-538.
- Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. *Journal of Management*, 31(6), 874-900.
- Cropanzano, R., Rupp, D. E., & Byrne, Z. S. (2003). The relationship of emotional exhaustion to work attitudes, job performance, and organizational citizenship behaviors. *Journal of Applied Psychology*, 88(1), 160-169.
- Dashtahi, A. K., Ekrami, M., Navehebrahim, A., & Sarmad, M. R. (2016). Application of leadership theories in higher distance education leadership. *International Journal of Humanities and Cultural Studies (IJHCS)*, 1(1), 1087-1097.
- De Koster, R. B. M., Stam, D., & Balk, B. M. (2011). Accidents happen: The influence of safety-specific transformational leadership, safety consciousness, and hazard reducing systems on warehouse accidents. *Journal of Operations Management*, 29(7-8), 753-765.
- DeJoy, D. M., Della, L. J., Vandenberg, R. J., & Wilson, M. G. (2010). Making work safer: Testing a model of social exchange and safety management. *Journal of Safety Research*, 41(2), 163-171.
- Dessler, G. (2011). *Fundamentals of human resource management*. London: Pearson Higher Ed.
- Dorman, P. (2008). *Markets and mortality: Economics, dangerous work, and the value of human life*. New York: Cambridge University Press.



Fernandez-Muniz, B., Montes-Peon J. M., & Vazquez-Ordas, C. J. (2009). Relation between occupational safety management and firm performance. *Safety Science*, 47(7), 980-991.

Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2011). *How to design and evaluate research in education*. New York: McGraw-Hill Humanities/Social Sciences/Languages.

Gallagher, C. (2001). New directions: Innovative management plus safe place, Occupational health and safety management systems. In *Proceedings of the First National Conference* (pp. 65-83). University of Western Sydney, Australia.

Ganson, A. G. (2014). *Assessing the effectiveness of health and safety practices at AngloGold Ashanti Company, Obuasi Mine*. Master's dissertation, School of Graduate Studies, Kwame Nkrumah University of Science and Technology, Kumasi.

Gavin, W. & Matherly, X. F. (2007). A behavioural approach to occupational safety pinpointing and reinforcing safe performance in a food manufacturing plant. *J Safe Res*, 6(3), 434-445.

Gay, R. L., Mills, G. E., & Airasian, P. W. (2011). *Educational research: Competencies for analysis and application*. New York: Pearson Higher Education.

Gholami, S., Keykale, M., Tir, M., & Ramandi, F. (2015). Investigating the relationship between organizational climate and organizational citizenship behavior among staff hospital. *European Journal of Biology and Medical Science Research*, 3(3), 54-63.



- Glendon, A. I., & Litherland, D. K. (2001). Safety climate factors, group differences and safety behaviour in road construction. *Safety Science*, 39(3), 157-188.
- Gravetter, F. J., & Forzano, L. A. B. (2018). *Research methods for the behavioral sciences*. Boston, Massachusetts: Cengage Learning.
- Greeperson, A. (2013). *The impacts of the health and safety programmes on the performance, at Arusha Airport Authority*. Unpublished Master's Dissertation, the Open University of Tanzania, Tanzania.
- Griffin, M. A., & Neal, A. (2010). Perceptions of safety at work: A framework for linking safety climate to safety performance, knowledge, and motivation. *Journal of Occupational Health Psychology*, 5(3), 347-358.
- Grugulis, I., & Stoyanora, D. (2011). Skill and performance. *British Journal of Industrial Relations*, 49 (3), 515-536.
- Gunningham, N., & Bluff, L. (2009). What determines efficacy? The roles of codes and guidance materials in occupational safety and health regulation. *Policy and Practice in Health and Safety*, 7(2), 3-29.
- Gyekye, S. A. (2012). Workers' perceptions of workplace safety and job satisfaction. *International Journal of Occupational Safety and Ergonomics*, 11(3), 291-302.
- Gyekye, S. A., Salminen, S., & Ojajarvi, A. (2012). A theoretical model to ascertain determinates of occupational accidents among Ghanaian industrial workers. *International Journal of Industrial Ergonomics*, 4(2), 233-240.

- Haar, J. M. (2006). Challenge and hindrance stressors in New Zealand: exploring social exchange theory outcomes. *International Journal of Human Resource Management*, 17(11), 1942–1950.
- Haines, J., Neumark-Sztainer, D., & Thiel, L. (2015). Addressing weight-related issues in an elementary school: What do students, parents, and school staff recommend? *Eating Disorders*, 15(1), 5-21.
- Hair JR, J. F., Black, W. R., Babin, B. J., & Anderson, R. E. (2010). *Multivariate Data Analysis* (7th ed.). Upper Saddle River, NJ: Prentice Hall.
- Harter, J. K., Schmidt, F. L., & Hayes, T. L. (2002). Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis. *Journal of Applied Psychology*, 87 (2), 268-279.
- Hassan, E., Austin, C., Celia, C., Disley, E., Hunt, P., Marjanovic, S., Shehabl, A., Villalba-Van-Dijk, L. & Stolk, C. V. (2009) “Health and Wellbeing at Work in the United Kingdom, *RAND Technical Report*”, TR-758-DH,
- Hukpe, M. (2016). *Psychosocial risks and workers health*. Retrieved on 30<sup>th</sup> May, 2019 from [https://oshwiki.eu/wiki/Psychosocial\\_risks\\_and\\_workers\\_health](https://oshwiki.eu/wiki/Psychosocial_risks_and_workers_health)
- ILO. (2005). Number of Work related Accidents and Illnesses Continues to Increase, *Joint Press Release*.
- Ingalls, R. O. (2002). Structured management training in underground mining-five years later. Information Circular 9145, Bureau of Mines Technology Seminar, Pittsburgh, PA.

- Johnson, B. & Christensen, L. (2012). *Educational research. Quantitative, qualitative, and mixed approaches* (4th ed.). California: Sage Publication Inc.
- Jones, M. K., Jones, R. J., Latreille, P. L., & Sloane, P. J. (2009). Training, job satisfaction, and workplace performance in Britain: Evidence from WERS 2004. *Labour*, 23 (Special Issue), 139-175.
- Kabanoff, B., Waldersee, R., & Cohen, M. (2015). Espoused Values and Organizational Change Themes. *The Academy of Management Journal*, 38(4), 1075-1104.
- Kassem, M. A., Khoiry, M. A., & Hamzah, N. (2020). Structural modelling of internal risk factors for oil and gas construction projects. *International Journal of Energy Sector Management*, 14(5), 975-1000.
- Kaynak, R., Toklu, A. T., Elci, M., & Toklu, I. T. (2016). Effects of occupational health and safety practices on organizational commitment, work alienation, and job performance: using the PLS-SEM approach. *International Journal of Business and Management*, 11(5), 146-166.
- Kim, H., & Qu, H. (2020). The mediating roles of gratitude and obligation to link employees' social exchange relationships and prosocial behaviour. *International Journal of Contemporary Hospitality Management*, 32(2), 644-664.
- Korir, I., & Kipkebut, D. (2016). The effect of reward management on employees commitment in the Universities in Nakuru County-Kenya. *Journal of Human Resource Management*. 4(4), 37-48.

- Korunka, C., Scharitzer, D., Carayon, P., & Sainfort, F. (2003). Employee strain and jobsatisfaction related to an implementation of quality in a public service organization: a longitudinal study. *Work & Stress, 17* (1), 52-72.
- Krejcie, R.V., & Morgan, D.W. (1970). Determine sample size for research activities. *Educational and psychological measurement, 30*(3), 607-610.
- Lingard, H., & Holmes, N. (2011). Understandings of occupational health and safety risk control in small business construction firms: Barriers to implementing technological controls. *Construction Management and Economics, 19*(2), 217-226.
- Malhorta, E. L. (2014). Action on worksite health and safety problems: A followup survey of workers participating in a hazardous waste worker training program. *Amer J Indust Med, 3*(2), 730-743.
- Mansfield, E. W. (2010). Measuring the effectiveness of an industrial lift truck safety training program. *Journal of Safety Research, 15*(3), 125-135.
- Marczyk, G. R., DeMatteo, D., & Festinger, D. (2010). *Essentials of research design and methodology* (Vol. 2). New Jersey: John Wiley and Sons Inc.
- Miao, R., & Cao, Y. (2019). High-performance work system, work well-being, and employee creativity: Cross-level moderating role of transformational leadership. *International Journal of Environmental Research and Public Health, 16*(9), 16-40.
- Middlehurst, R. (2013). Changing internal governance: Are leadership roles and management structures in United Kingdom universities fit for the future? *Higher Education Quarterly, 67*(3), 275-294.
- Motowidlo, S. J., & Kell, H. J. (2012). Chapter 5 job performance. *Handbook of Psychology, 91-131*.



- Mtshokotshe, Z. (2018). The implementation of human resources management strategy within restaurants in East London, South Africa. *African Journal of Hospitality, Tourism and Leisure*, 7(3), 1-15.
- Mundiri, C. (2018). *An evaluation of the effectiveness of safety and health control programmes in the Zimbabwean mining sector: A case study of Mimosa mine*. Unpublished master's dissertation, Department of Adult Education, Gweru, Zimbabwe
- Murray-Gibbons, R., & Gibbons, C. (2007). Occupational stress in the chef profession. *International Journal of Contemporary Hospitality Management*, 19(1), 32-42.
- Neal, A., & Griffin, M. A. (2016). A study of the lagged relationships among safety climate, safety motivation, safety behavior, and accidents at the individual and group levels. *Journal of Applied Psychology*, 91(4), 946-953.
- Okorley, E. N. A. (2010). *Factors influencing the motivation of bank staff in the Cape Coast metropolis*. Unpublished master's dissertation, Department of Management Studies, University of Cape Coast, Ghana.
- Olasanmi, O. O. (2016). Effect of ergonomic hazards on job performance of auditors in Nigeria. *American Journal of Industrial and Business Management*, 6(01), 33-44.
- Oluoch, E. O. (2015). *Effect of occupational safety and health programmes on employee performance at Kenya Power Company Limited*. Unpublished master's dissertation, School of Business, University of Nairobi.
- Opatha, H. H. D. N. P. (2002). Performance Evaluation of Human Resources. *Institute of Management and Science*, 18, 26-33.



- Orodho, A. J. (2014). *Statistics made user friendly for education and social science research*. Nairobi: Masola Publishers.
- Osuala, E. O. (2011). Health Education: Implications for the achievement of the health-related millennium development goals. *West African Journal of Nursing*, 22(1), 16-25.
- Pallant, J. (2013). *SPSS survival manual*. London: McGraw-Hill Education.
- Pule, T., (2011). Mining activities and occupational health and safety at work. *Afr. Newsl. Occup. Health Saf.*, 21(1), 4-7.
- Puplampu, B. B., & Quartey, S. H. (2012). Key issues on occupational health and safety practices in Ghana: A review. *International journal of business and social science*, 3(19), 20-27
- Putterill, M. S., & Rohrer, T. C. (2005). A causal model of employee commitment in a manufacturing setting. *International Journal of Manpower*, 16(5/6), 56-69.
- Quartey, S. M., & Awoyemi, M. O. (2002). *Research methodology in education*. Accra: KNA B Limited.
- Regional Committee for Africa Report. (2004). Occupational health and Safety in the African Region; Situational Analysis and perspectives. *Fifty-fourth Session (WHO) Brazzaville, Republic of Congo, Africa*, 1-25.
- Sajjad, N. K., & Abbasi, B. (2014). Studying the Relationship between Quality of work life and Organizational Commitment. *Research Journal of Recent Sciences*, 3(2), 92-99.
- Saunders, M., Lewis, P. & Thornhill, A. (2012) *Research methods for business students* (6<sup>th</sup> ed.). Harlow: Pearson.

Searle, M. S. (2000). Social exchange theory as a framework for understanding ceasing participation in organized leisure activities. In *Proceedings of the Sixth Canadian Congress on Leisure Research, University of Waterloo, May 9* (Vol. 12).

Sermolo, S. (2014). *Study of Occupational safety and health in Ethiopian Construction Industry: A case study on Addis Ababa and Welkite* (Doctoral dissertation, Addis Ababa University).

Sikpa, F. C. (2011). *An Assessment of occupational health and safety practices on job performance at the TettehQuashire Memorial Hospital, ManopangAkuapan*. Unpublished master's dissertation, Institute of Distance Learning, Kwame Nkrumah University of Science and Technology, Kumasi.

Stemn, E. (2019). Analysis of injuries in the Ghanaian mining industry and priority areas for research. *Safety and health at work, 10*(2), 151-165.

Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics* (6<sup>th</sup> ed.). Upper Saddle River, New Jersey: Pearson.

Takala, J., Hämäläinen, P., Saarela, K. L., Yun, L. Y., Manickam, K., Jin, T. W. & Lin, G. S. (2014). Global estimates of the burden of injury and illness at work in 2012. *Journal of Occupational and Environmental Hygiene, 11*(5), 326-337.

Thaden, V.T.L., Wiegmann, D. A., Zhang, H., Sharma, G. & Mitchell, A.A. (2003). *Development and initial validation of a safety culture survey for commercial aviation*. Washington, DC: Federation Aviation Administration.

Ulutaşdemir, N., Balsak, H., Berhuni, Ö., Özdemir, E., & Ataşalan, E. (2015). The impacts of occupational risks and their effects on work stress levels of health professional (The sample from the Southeast region of Turkey). *Environmental Health and Preventive Medicine*, 20(6), 410-421.

Viswesvaran, C., & Ones, D. S. (2000). Perspectives on models of job performance. *International Journal of Selection and Assessment*, 8(4), 216-226.

Yankson, E. (2012). *The effect of health and safety standards on productivity in Ghana rubber estates limited*. Unpublished master's dissertation, Institute of Distance Learning, Kwame Nkrumah University of Science and Technology, Kumasi.

Yun, L.Y. (2012). Economic costs of work-related injuries and ill health. *Asian-Pacific Newsletter on Occupation Health and Safety, Economics in Occupational Health and Safety*, 19(2), 38-39.

Zohar, D. (2008). Safety climate in industrial organizations: theoretical and applied implications. *Journal of Applied Psychology*, 65(1), 96-115.

## APPENDICES

## Appendix A: Questionnaire

## UNIVERSITY OF CAPE COAST

## SCHOOL OF BUSINESS

## DEPARTMENT OF HUMAN RESOURCE MANAGEMENT

Dear Respondent,

My name is Kofi Amponsem Bremang. This is purely an academic exercise and in partial fulfilment of the requirements for the award of Master of Business Administration (Human Resource Management) by the University of Cape Coast. The main purpose of the study is to examine the influence of occupational health and safety practices on employees' performance at the Golden Star Resources, Bogoso/Prestea. Please read each statement carefully and answer them as frankly as you can. There is no right or wrong answer. Your responses will be accorded the utmost confidentiality. Your maximum cooperation is highly solicited. Thank you.

**SECTION A: DEMOGRAPHIC INFORMATION**

Please, tick the appropriate answer where choices given are applicable.

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

**2. Age Range**

(a) 20-30 years [  ] (b) 31-40 years [  ]

(c) 41-50 years [  ] (d) Above 50 years [  ]

**3. Marital Status:** (a) Single [  ] (b) Married [  ]

(c) Widow/Widower [  ]

**4. Education level:** (a) Below First Degree [ ] (b) First Degree [ ]

(c) Postgraduate Degree [ ] (d) Professional Certificate [ ]

**5. Years of Work Experience:** (a) 1-5years [ ] (b) 6-10years [ ]

(c) 11-15years [ ] (d) 16 or above years [ ]

### SECTION B: OCCUPATIONAL HEALTH AND SAFETY PRACTICES

This section seeks to measure the effectiveness of occupational health and safety practices in your company.

Please, on an interval scale of 1-5 where: *1=Least Agreement* and *5=Highest Agreement*, rate the following areas.

	<b>Safety Procedures and Risk Management (SPRM)</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>I</b>						
I	Workers are informed about changes in division of labour in Golden Star Resources, Bogoso/Prestea.					
2	Probable risks and results are defined at Golden Star					
3	Written work procedures are compliant with practice in my organization.					
4	Workers can easily recognize the relevant procedure of each task in my organisation.					
5	Workload is reasonably balanced in my organisation.					



<b>II</b>	<b>Safety and Health Rules (SAHR)</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
1	Timing for sufficient rest and appropriate working is underway in my organisation.					
2	Safety rules are always practical in my organization.					
3	Safety rules are followed in my organization even under tight schedule.					
4	Health examination is made at the Golden Star Resources, Bogoso/Prestea prior to the employment.					
5	Periodical health examinations are undertaken at Golden Star after selection (employment, hiring).					
<b>III</b>	<b>First-Aid Supports and Trainings (FAST)</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
1	Emergency treatment is available in case of accident in my organization.					
2	Workers are trained on health issues.					
3	Workers are provided with first aid training in my organisation.					
<b>IV</b>	<b>Occupational Hazards Prevention (OHP)</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
1	Workers assigned to serious and hazardous tasks use safety gadgets e.g. glasses, boots, gloves, masks, jumpsuits and shoes in my organisation.					
2	Deficiencies and mistakes revealed during internal safety and health audits are monitored and removed.					

3	There is appropriate lay-out and lighting in the section, where I work.					
4	Appropriate and effective waste disposal is practiced in the section, where I work.					
5	Only those with necessary equipment and specifically assigned workers have access to serious and likely hazardous workplaces in my organization.					
<b>V</b>	<b>Organizational Safety Supports (OSS)</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
1	Adequate and timely medical treatment provided in my workplace.					
2	Sufficient time is granted for a worker to be recovered.					
3	System established for payment of workman compensation in case of injury.					
4	Occupational safety regulations are followed at Golden Star Resources, Bogoso/Prestea.					
5	Due care is taken at Golden Star Resources, Bogoso/Prestea not to disclose privacy of workers (medical records).					

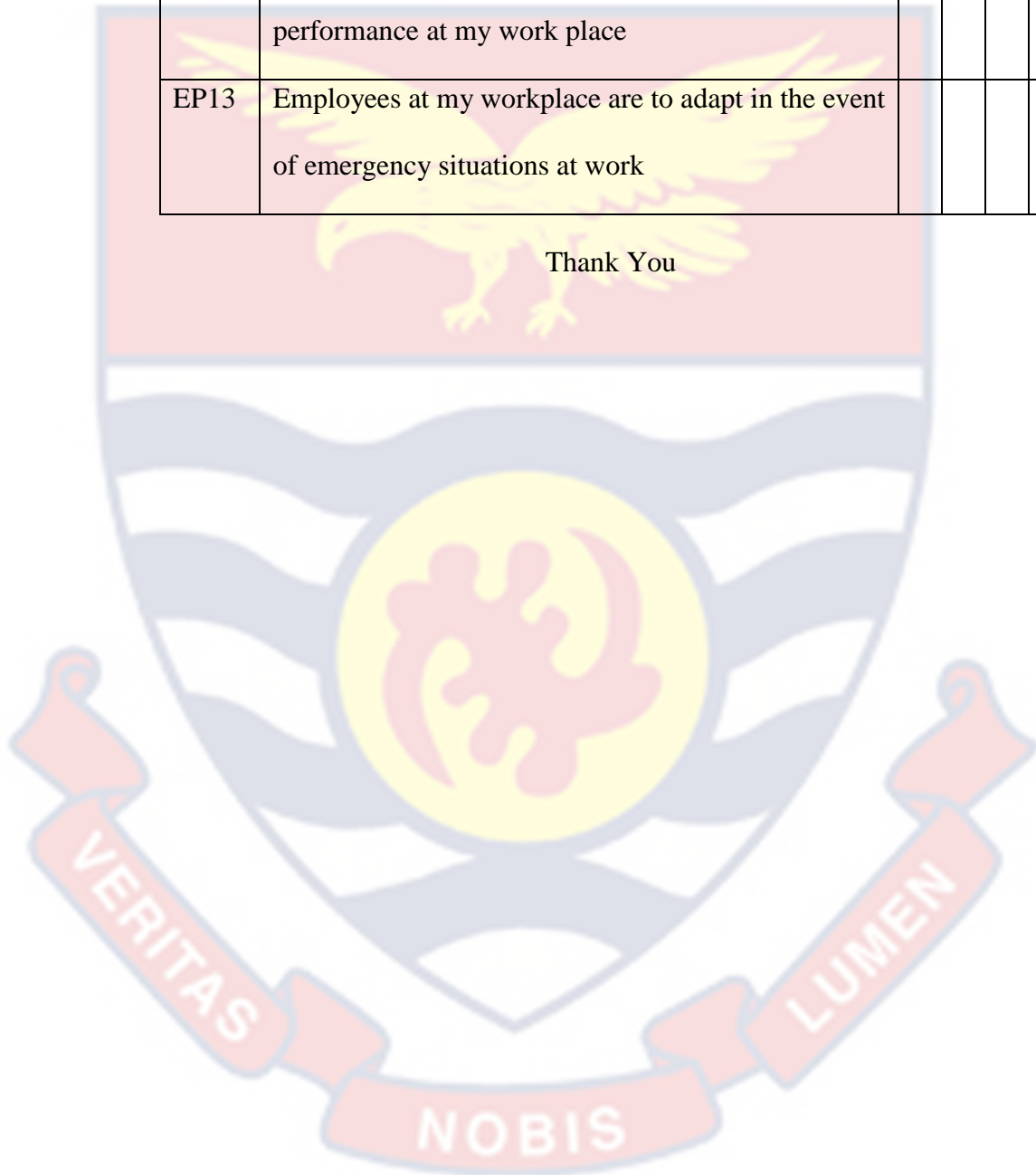
**C. EMPLOYEE'S PERFORMANCE**

This section seeks to measure employee's performance at your workplace. Please, on an interval scale of 1-5 where: *1=Least Agreement* and *5=Highest Agreement*, rate the following areas.

S/N	Statement	1	2	3	4	5
EP1	Ability to maintain and complete all documentations is indicator of performance at where I work.					
EP2	Ability to make suggestions to improve the system is an indicator of performance at my work place.					
EP3	Avoidance of unnecessary lateness and absenteeism is considered crucial at my work place.					
EP4	I am required to have adequate knowledge and understanding of all my tasks.					
EP5	I have the required skills to perform my task.					
EP6	Loyalty is an indicator of performance at where I work					
EP7	I am required to have some level of motivation to perform my task.					
EP8	I perform my work to the expected standards.					
EP9	Employees should be able to judge a given work situation and respond adequately to it.					
EP10	Employees should be able to make snap judgments with limited information.					

EP11	Employees are required to manage their time and allocate resources effectively.					
EP12	Ability to carry out orders and instructions issued by management related to the work is an indicator of performance at my work place					
EP13	Employees at my workplace are to adapt in the event of emergency situations at work					

Thank You



## Appendix B: Krejcie and Morgan Table

*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	100000	384

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