THE EFFECT OF OCCUPATIONAL HEALTH AND SAFETY ON JOB PERFORMANCE (PRODUCTIVITY) OF EMPLOYEES OF BLUE SKIES GHANA LIMITED

BY

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JULY, 2015
DECLARATION

I do hereby declare that this research work is as a result of my own effort under the guidance of my supervisor and to the best of my knowledge has not been presented wholly or partly to this institution or any other institution for a similar purpose. All references used in the work have been dully acknowledged.

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CERTIFICATION

I hereby certify that this thesis was supervised in accordance with the guidelines on supervision laid down by the University of Ghana.

Dr. Patience Aseweh Abor
(Supervisor)
DEDICATION

I dedicate this thesis to the Almighty God for seeing me through, to my wife Miss Evelyn Nyewie and two daughters, Tuurosong and Zunuo for their immense sacrifices, support and encouragement in this difficult and engaging period of the family life. I am grateful to you all.
ACKNOWLEDGEMENT
I wish to express my sincere gratitude to God for his grace that enabled me to complete this work.

I am also very thankful to my supervisor, Dr. Patience Aseweh Abor of the University of Ghana Business School for her invaluable guidance that enabled me to complete this study successfully.

I am also grateful to Mr. Ampaabeng of the human resource unit of blue skies Ghana limited and the entire management for their support in the study. My profound gratitude also goes to Mr. George Abrefa of Ghana police hospital for his encouragement and support for the study. Finally, to all those who contributed in many ways but cannot be mentioned here due to limited space, I wish to say thank you all.
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<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
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<td>OHS</td>
<td>Occupational Health and Safety</td>
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<td>ILO</td>
<td>International Labour Organization</td>
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<tr>
<td>CDC</td>
<td>Center for Disease Control</td>
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<td>EUROSTAT</td>
<td>European Statistics</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>NIOSH</td>
<td>National Institute of Occupational Safety and Health</td>
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ABSTRACT

Due to the high rate of unemployment situation in Ghana some organizations have taken for
granted the health and safety issues of their employees. Much research has been conducted in the
area of health and safety in the mining and the construction sectors as well as the wood
processing industry in Kumasi but it seems much attention has not been paid to research into
health and safety of employees in the agro processing industry especially the fruit processing
sector which is an emerging area in Ghana. These studies have highlighted the dangers workers
are exposed to while trying to earn income for the upkeep of their families. Unfortunately in
Ghana as of now there is no known comprehensive national policy guiding work place health
and safety of employees apart from Act 651 of the Labour law 2003 which admonishes
employers not to expose their workers to hazards that subsequently cause injury at work. This
same act also entreats workers to work within the employer’s standard operating procedures that
have been provided with health and safety requirements incorporated. Despite the above
mentioned act and efforts by the factories inspectorate division of the ministry of employment
and labour relation to ensuring that workers work in a safe and healthy environment, industrial
workers still suffer a lot of job related injuries of which Blue skies Ghana limited is no
exceptional. The questions here are: what role does management of blue skies Ghana limited
play to keep workers safe and healthy at work? What is the attitude of the employees to health
and safety issues at the work place? And what is the impact of the employees’ health and safety
on their productivity. The mixed method approach and a cross-sectional survey design were
adopted in gathering the data for the study. The study shows that there is high level of knowledge
among the employees of blue skies concerning health and safety at work and therefore have
positive attitude to occupational health and safety (OHS) issues in the firm. The study also
revealed that the management has a view that healthy staff makes healthy organization which also increases productivity in the firm and hence management has put in place measures to ensure staff's health and safety. In conclusion Blue skies Ghana take the safety and health of the employees seriously so has series of programs to increase their knowledge about work place safety and health and strictly enforces these safety measures. Ghana’s draft policy on Occupational Health and Safety should be fast-tracked to ensure that employers are bound by the rules to take safety training of their staff serious as blue skies Ghana has done. Finally policy makers can use blue skies Ghana limited as case study or a mentoring firm for other companies in Ghana in terms of health and safety issues of the workers.
CHARPTER ONE

1.0 Introduction

This is the first chapter of the whole work and contains the study background, problem statement, purpose of the research, main and specific objectives, the research questions and the significance of the study. The scope and limitations of the study as well as the operational definitions of terms have also been captured in this chapter.

1.1 Background to the Study.

As quoted by Takala (2005) in the introductory report, decent work – safe work, Mr. Kofi Annan a former Secretary-General of the United Nations is reported to have said:

All too often lives are shattered unnecessarily because of poor working conditions and inadequate safety systems... Let me encourage everyone to join the International Labour Organization in promoting safety and health at work. It is not only sound economic policy, it is a basic human right” (Takala, 2005: Page 1).

Throughout the world, there is growing acceptance that accidents and ill-health at work impact not only on the lives of individual workers, their families and their potential for future work, but also the productivity and profitability of their enterprises and ultimately the welfare of the society in which they live. In short, safety and health at work makes good business sense, and maintaining acceptable standards is seen as an integral and key component of societal development, poverty alleviation and of ‘decent work” (Takala,2005: Page 1).
Indeed it is right of every employee to live safe and healthy and the main objective of every production company is to make profit to keep the company running. The productivity of employees of any organization maintains the economic and material base of the company; therefore the safety and occupational health of these employees are crucial pre-requisites for productivity. Healthy employees do not benefit only the organization they work for but the society as a whole in which they live. Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity (World Health Organization [WHO], 1946). In 1950, the International Labour Organization (ILO) and the World Health Organization (WHO) jointly defined occupational health as the promotion and maintenance of physical, mental and social well-being of all employees. This is to be achieved by manipulating the workplace to preventing ill-health, reducing risks factors and adapting people to their jobs. Efforts to improve upon workplace conditions globally were initiated as far back in 1954 but only in 1979 that the world health organization and the international labour organization intensified their efforts (WHO, 2004).

Historically the linkage of occupational hazards and the consequent poor health of employees can be traced back to several centuries, but the proper description of work related illnesses was done in the final years of the 17th century by Bernardino Ramazzini, the father of occupational medicine and a lecturer at university of Modena (Franco, 1999). He was born in Carpi a town in Modena on 4th October, 1633. He graduated in philosophy and medicine and practiced in Italy until 1676 when he returned to Modena to lecture. He was made the Chair of the theory of medicine in 1682 by Duke Francesco d’Este (Franco, 1999)

Bernardino Ramazzini spent about 20 years visiting job sites and observing workers activities as well as discussing with workers their illnesses (Franco, 1999). His extensive investigation of
working activities made him an expert on the topic. His inspection and analysis enabled him to establish a link between workplace hazards and illnesses and suggested possible preventive measures at three stages namely elimination of hazards in the environment, selection of engineering model and use of personal protective equipment. His work is credited for its similarity with the modern occupational health which emphasizes on hazards prevention, personal protection, addresses environmental and social issues. Today occupational health and safety has been accepted as a branch of public health (Franco, 1999).

Estimates from the international labour organization cited in Takala (2005) shows that around 2.2 million workers lose their lives yearly. This is due to occupational accidents and work-related illnesses. Statistics from the 2003 data of ILO reveals that fatal occupational accidents are about 358,000 each year. Globally, about 337 million workers fall victim of occupational accidents and 160 million occupational diseases occur yearly and fatal work-related diseases are around 1.95 million per year (Al-Tuwaijri et al., 2008).

From the perspectives of the international labour organization, in 2010, the economic costs of occupational health and safety problems take a considerable toll on the competitive advantage of both the enterprises and member states, for instance accidents in the manufacturing sector of United States cost more than 190 billion US dollars and about 40 billion NOK in Norway whiles in the United Kingdom it was estimated to be £19 billion. The cost of workplace accidents in the year 2000 alone was €55 billion across the fifteen European Union member states (European Commission, 2004). Interesting findings by Nelson et al., (2005) revealed that occupational accidents from hazards in the workplace is decreasing in more developed countries but increasing in the developing world of which Ghana is no exception (Hamalainen et al., 2006).
Data from the international labour organization and the world health organization indicates that in Sub-Saharan Africa, the fatality rate per 100,000 workers is 21 and the accident rate is 16000 meaning each yearly about 54000 workers die and 42 million work-related accidents are reported that results in at least three days’ excuse duty from work (Lajini, 2014). Katsuro et al in 2010 conducted a study in the food processing industry in Zimbabwe and concluded that worker productivity is negatively affected by bad occupational health and safety programs and for this reason health and safety issues are like give and take principle, employer provide healthy working environment and the employee also works harder to meet targets.

Work-related morbidity and mortality cannot be easily calculated because in some instances in the developing world the workers and the employees refuse to report the accident to the appropriate institutions for action but settle it locally at the firm level (Driscoll et al., 2005a). This situation is seen in Ghana where employees ignorantly fear that they will lose their jobs if they report injury for compensation. The poor health and safety record in developing countries as compared to the developed world may be attributable to the use of outmoded technology, labour intensive methods and low workforce participation in health and safety issues (Kheni, Gibb & Dainty, 2006).

According to Norman et al (2014) in Ghana a cumulative amount of GH₵ 5368203 was paid as compensation to employees in three years (2008—2010) from both private and public sectors. In 2008 alone there was a cumulative compensation of 2,225,817.00 Ghana cedis comprising of 1,331,054.00 Ghana cedis and 894,763.00 Ghana cedis in private and public sectors respectively. In 2009 an amount of GH₵1,120,779.00 was paid in the private sector alone and the public sector making no payment and finally in 2010 an amount of GH₵ 2,021,607 was paid for
compensation composing of GH₵1,025,243 (private) and GH₵ 996,364 (public). Work related accidents, injuries and diseases cost Ghana about 7% of GDP (Adei & Kunfaa, 2007).

Today most individual employers are well aware of the benefits of attending to the safety needs of the people they employ. Not only do organizations want to avoid paying high compensation cost for workplace injuries but they want to maintain a reputation of corporate responsibility and maintain a happy and productive workforce. One question is that in labour intensive agro processing industry like blue skies Ghana limited, how can the gap be closed between current and desired reduction in the levels of occupational safety and health hazards or risks.

The legal and institutional arrangements for the management of health and safety have little impact on the attitude of managers of companies in Ghana (Gibb & Bust, 2006). Work affects the lives of employees and their families in many important ways; it provides the necessary income to fulfill basic needs of the employee’s family. The work environment of the employee is so important that it provides a sense of belonging and attachment to other individuals outside his immediate family and defines his status in society. Therefore, it is not surprising that when work opportunities are lost through illness or injury, serious threats to wellbeing are encountered and injured workers are one group of individuals who experience such a disruption.

Occupational safety and health practitioners over the years have been classifying risks according to time horizons and severity (imminence and seriousness of risks) to enable them prioritize certain measures. The concept of risks however remains broad and not differentiated into sub classifications and this has had a significant impact on occupational health and safety management.
1.2 Problem Statement

According to Eijkemans (2004) citing the ILO the global workforce was about 2.6 billion people. As they work to sustain the economic and material basis of society, they in turn exposed themselves to numerous, preventable hazards and its associated risks. Again estimates from the ILO in the same year states that over 2 million people die each year from work related diseases and injuries and this figure is just a small proportion as another 160 million nonfatal diseases and 270 million nonfatal injuries occur annually. In effect a loss of about 4% of the global gross domestic product is accounted for by occupational diseases and injuries (Eijkemans, 2004).

Data from the United States of America indicates that in 2012 alone a total of 4,383 workers died from work-related injuries and nearly three (3) million injuries to workers in the private industry as well as 793,000 injuries to public sector workers (National Institute for Occupational Safety and Health, CDC, unpublished data [NIOSH], 2014). Again in 2012, an estimated 2.8 million job-related injuries were treated in emergencies in health facilities and resulting in 140,000 hospitalizations (National Institute for Occupational Safety and Health, CDC, unpublished data, 2014). The cost to the American society, work-related fatalities, injuries, and illnesses was estimated at $250 billion in 2007 (National Institute for Occupational Safety and Health, CDC, unpublished data, 2014). Statistics reported in the health and safety executive (HSE) 2011/12 edition indicates that 173 workers were killed at work in Great Britain in 2011/12 and 111,164 injuries to employees were reported. The cost of work place injuries and illness to the society in the United Kingdom as at 2010/2011 was £13.4 billion pounds (health and safety executive annual statistics report 2011/12).
Reports by EUROSTAT (2007) indicates that the last decade has witnessed a percentage reduction in work-related injuries in the industrialized world some of them are England and Germany with 10% and 35% respectively and the corresponding figures from 167,251 in 1997 to 151,084 in 2005 in England and from 1,598,972 to 1,029,520 in Germany (ILO, 2007) as cited in (Eurostat, 2007).

The risk factors to occupation related illnesses are 10 to 20 times more in developing countries than in developed world (WHO, 2004). Again in the developing countries only about 10% of the work force have the opportunity for accessing occupational health services. These occupational health and safety issues remain neglected because they are competing with social, economic and political issues (Nuwayhid, 2004). Due to the neglect of occupational health issues in the developing world only 5% to 10% of workers have access to occupational health services whiles about 20% to 50% of their counterparts in the developed countries do have access (WHO, 2004).

According to Eijkemans (2004) developing countries do not have the legal framework to protect the health and safety of workers. In addition, Nuwayhid (2004) intimates that the problems of occupational health in parts of the developing world such as Bangladesh and Central Africa can be associated with weak governmental interest in occupational health, poor data and data collection systems as well as weak enforcement of health and safety regulations.

Much research has been conducted in the area of health and safety in the mining and the construction sectors as well as the wood processing industry in Kumasi but it seems much attention has not been paid to research into health and safety of employees in the agro processing industry especially the fruit processing sector which is an emerging area in Ghana. The aforementioned gap has constrained the development of strategic approaches to risks control in this
sector. The question therefore is what roles have the management and the employees of Blue Skies Ghana limited played to address the issue of occupational health and safety at their workplace.

1.3 Purpose of the Study

The legal and institutional arrangements for the management of health and safety have little impact on the attitude of managers of companies in Ghana (Gibb & Bust 2006). Therefore this study assesses the occupational health and safety of workers of blue skies Ghana limited.

1.4 Broad Objective

The main objective of the study is to assess the health and safety of employees of blue skies Ghana limited.

1.4.1 Specific Objectives of the Study

1. To determine the roles played by the management to ensure workplace health and safety.

2. To determine the attitude of the employees towards health and safety issues.

3. To ascertain if there is a link between the occupational safety and health and employees’ job performance.
1.5 Research Questions

1. What role does management play to ensure workplace health and safety of their workers?

2. What is the attitude of employees towards occupational health and safety issues in the company?

3. Have the employee’s health status got effects on their productivity and company’s revenues?

1.6 Significance of the Study

The outcome of the study will add to the existing knowledge already established about the safety and health practices in industries. Again the findings from the study will be useful for the companies understudy to reorganize their safety and health programs based on lapses that may be discovered and recommendations that will be made. In addition, policy makers will also use the findings in drawing policies to ensure the health and safety of workers in Ghana. Finally, the study will also contribute to building a foundation of knowledge and serve as a reference for future academic researches.

1.7 Scope and Limitations of the Study

This study was limited to the employees and management of blue skies Ghana limited. The study was limited to only one firm therefore generalization could not be made to other firms involved in similar activities but limited to blue skies. Due to resources and time constraints a small proportion of the work force of the firm was used for this study. It is believed that the views of the participants would reflect that of the entire workforce because they operate in the same
environment and share ideas. In addition to the above challenge, accessing statistics from the factories inspectorate division as well as the labour offices posed a challenge, accurate data on accidents and persons injured could not be given because the victims do not report the incidents to the bodies concern. Therefore the departments at times hear of the incidents in the media and then follow up which sometimes the firms and the victims do not cooperate. For this reason statistics from Ghana on industrial accidents could not be used in the study.

1.8 Operational Definitions of Terms.

**Hazards**: These are agents or substances at the working environment that expose the employee to danger.

**Risks**: This is the probability of the danger occurring to the worker in the job environment.

**Employee**: Is an individual engaged by another person or organization to perform a task in exchange for a reward.

**Employer**: The one entrusting a task to another person with the aim of paying for the tasks performed by that individual.

1.9 Chapter Disposition

The study was organised into six chapters. The first chapter contained information on the background to the study and problem statement. It also contained the research objectives and questions as well as the significance, scope and limitations of the study. Chapter two reviews relevant literature related to work place safety and health of the workforce of blue skies Ghana limited. It focused mainly on occupational health and safety of workers worldwide, Africa and
in Ghana. Chapter three discussed in details the methods and tools to use in the gathering and analysis of the data. Again this chapter described the research setting, study population, instrument of data collection and sampling techniques as well as sample size used for the study. Chapter four also looked at the findings of the study. Tables were employed in the presentation of the findings. Chapter five presented a discussion of the findings of the study. This compared the findings with relevant literature. Finally summary, conclusions and recommendations have also been captured in chapter six.
CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.0 Introduction

This chapter deals with both the theoretical and empirical literature that underpin the study. The theories adopted for the study are entropy model (EM) and Strecher and Rosenstock (1997) health belief model (HBM) as theories for the study. These theories were appropriate for the study based on the argument advanced in Redding et al (2000) that the entropy model (EM) and health belief model (HBM) are the most appropriate theories for the purpose of this research. These theories provided a balanced and comprehensive approach to hazard (health and safety) control. These theories are appropriate for the study as they sought to address the fundamental weakness of the early models that treat risk as a broad concept and fail to sufficiently explain the significance of unforeseen and residual risks as well as the role that perception plays in risk management. In addition, they do not clearly illustrate how risk is affected by business activity thus has not led to the emergence of a comprehensive and strategic direction for risk reduction (Gyapong et al., 2007). This chapter discusses and reviews issues regarding Occupational Health and Safety as follows:

- Entropy model (EM)
- The health belief model (HBM)
- Occupational health
- Occupational safety
- Current practices to improve occupational health and safety
2.1. The Theoretical Discussion

2.1.1 The Entropy Model

The entropy model (EM) perceives occupational health and safety as risk in two categories:

- entropic (unforeseen) risk-the risk associated with the degradation of business system and
- residual risk-the inherent danger in all organizational activities.

The two categories of risk look at occupational health and safety in unsafe conditions (unforeseen risk) and unsafe acts (residual risk). The entropy model places weight on systems quality while at the same time it emphasizes much less on human error as the cause of accidents. According to this model, employees do not want to be injured at work and that they rarely knowingly act in an unsafe manner of their own volition (Chen, 2002). Lund and Nicholson (2003) believe that unsafe acts are a function of systemic problems such as insufficient skill-based training, work pressure or excessive demands from the task or environment. The model emphasizes that previous theories’ emphasis on worker fallibility has hindered companies from exploring fully, parameters that lead to incidents - unforeseen risk and residual risk. The entropy model provides organizations like blue skies Ghana limited with a strategic approach to managing risk in the short and longer term.

The entropic model conceives of a methodology, referred to as the four-fold strategy, which addresses entropic and residual risks using a multidisciplinary approach which involves:

1. Taking immediate corrective action to eliminate entropic risk;

2. Establishing maintenance strategies to prevent future entropic risk;

3. Managing residual risk in the short term; and

When firms allow their systems to degrade, their risk exposure increases and they become less productive (Hill et al, 2007). The entropy model allows the behavioural aspects of safety to be clarified by looking at behavioural safety management as the risks associated with human resources and the organizational culture that defines acceptable behaviour (Alli, 2008). The primary objective of the culture is to develop employee competencies and vigilance (Adams, 2008). A "safe worker" operating in a safety culture (Lund & Nicholson, 2003), therefore, can be defined as someone who:

- is educated about residual risk,
- is vigilant because of residual risk,
- works safely and efficiently to keep entropic risk low,
- is informed of changes in entropic and residual risk, and
- has the knowledge and opportunity to make suggestions that contribute to improve safety, production output and system factor quality (Mills et al, 2007).

According to Hill et al (2007) entropic model places occupational health and safety strategically at the center of total management systems so that safety becomes part of the organizational way of life. Risk is understood and managed as a result of the models used to explain how accidents happen. The domino theory developed in 1931 suggests that one event leads to another, then to another and so on, culminating in an accident (Lund & Marriott, 2005). Even though the entropic model recognizes the long–standing tradition of the shift of focus from how work environment affects health to individual psychosocial factors where the individual worker needs to take responsibility for his or own health and safety (Mills et al, 2007), it argues that one cannot afford
to neglect the responsibility of organizations for providing systems that reduce risk at the workplace (Waddell & Burton, 2006). Buck Consultants (2009) opine that of course, the individual employee cannot be expected to achieve a transformation towards a healthier lifestyle on his or her own without the employer providing policies, information, resources and good working environment to enable behavior change (Jamison et al, 2006). A study by Becker (2004) showed that a previous study that used the domino theory found that 88 percent of accidents are caused by unsafe acts of people, two percent by unsafe actions and the rest percent by “acts of God.” It is clear from this study that the work environment is not in focus when issues of occupational health and safety come up (Mills et al, 2007). This has the tendency to make it very difficult to address issues of occupational health and safety (Buck Consultants, 2009). A study by Collins (2002) revealed that emphasis from theories that placed responsibility on the worker at the neglect of the employer thereby putting the employee always under the microscope as the one who is responsible for the majority of work related accidents, and the system is seen to account for a negligible percent of accidents if any at all (Budhwar & Debrah, 2004). Budhwar and Debrah (2004) found that later theories included the structure of accidents model which identifies immediate causes and contributing causes of accidents. The former involves unsafe acts and unsafe conditions while the latter includes safety management performance and the mental/physical condition of the worker (Kamoche et al., 2004; Kamoche, 2002). The entropic model is unique for the study as it traces links that bring the relational flow between work and accidents at the workplace (Mills et al, 2007). In all these, though the importance of systems management is acknowledged, but unsafe conditions were overshadowed by a strong emphasis on the operator as the primary instigator of accidents at the workplace (Nyamekye et al., 2009). The emphasis on worker behavior in these models is problematic since it can lead to lack of
consideration of underlying weaknesses in organizational systems that contribute to incidents (Buck Consultants, 2009). For example, a vehicle rollover in blue skies Ghana limited may be attributed to human error when the root cause is fatigue caused by excessive hours of work (Nyamekye et al., 2009). The entropic model has significant implications for management practices, particularly in hazardous industries such as mining and manufacturing companies such as blue skies Ghana limited, as the case for this study. The health belief model (HBM) addresses the issue from different perspective as adopted for the study.

2.1.2 The Health Belief Model (HBM).

Strecher and Rosenstock (1997) describe health belief model as a theory that explains why people do or do not engage in preventive health and safety measures, such as wearing protective clothes, getting tested for a disease, or keeping their working environment safe. It is one of the models which adopted theories from other disciplines and one of such is the behavioral science to study health and safety problems. Mills et al (2007) argued that it is one of the most widely recognized and used models in health and safety behavior applications and also explains why people would or would not use available preventive measures. The presupposition is that people who feared accidents and value their health are influenced by the type of activities they do and the system, policies, resources and information put in place (Buck Consultants, 2009). This is seen in the degree of fear (perceived threat) and the expected fear reduction actions so far as that supposed reduction seemed to outweigh practical and psychological barriers to taking action (net benefits) (Baah, 2007). The researcher thinks that the fear of accidents is not enough for people to engage in activities that will prevent them, but the awareness that certain preventive measures can help reduce the threat is important. Hence should the employers of blue skies develop better work conditions and purchase safer equipment, redesign the management process, modify site
and invest in training activities that provide relevant information to promote health and safety (Mills et al, 2007), it will reduce the level of risk that employees will face and increase net production.

Waddell and Burton (2006), explains four expectations that exemplify the health belief model. These expectations correspond to the perceived threat of hazards and expected outcome are discussed:

**Perceived susceptibility**

In the health belief model, this concept refers to how much individuals believe that they are vulnerable to or at risk for some situation. In relation to this study, if employers at blue skies believe that employees are vulnerable to work-related threats as a result of unsafe working conditions and excessive demands from work (Collins, 2002), they will put measures in place to reduce such health and safety hazards those employees at blue skies are not immune from. This effort of management will help employees see the level of danger associated with their work and change their attitudes appropriately. They will thereby adopt good occupational health and safety practices based on the knowledge that they are vulnerable to accidents (Alfers, 2010).

**Perceived severity**

This concept in health belief model refers to how serious the individual believes the consequences of being injured or ill are. The study bears on the presupposition that if the employers put systems in place to inform employees about the risk associated with poor working tools and environment and poor health and safety behavior can be fatal, the employees will change their attitudes and engage in practices that improve safety at their work place. For
example, if the employee at blue skies Ghana limited knows that a faulty plant can cut off his or her hand or kill him or her, he or she will change his or her attitude and become vigilant (Alfers, 2010).

**Perceived effectiveness**

Perceived effectiveness as a concept in health belief model refers to the expected benefits if one engages in accident prevention behavior. Fitting this into the study, if employees at blue skies realize that by observing health and safety measures will actually reduce the risk of occupational health hazard (accident), they are likely to embrace it to safe themselves and their dependents from the effects of poor health and safety related accidents (Hemp, 2004). According to Alfers (2010) the worker having the knowledge that health and safety can be promoted through accident prevention, would discourage the machine operator at blue skies not to operate under the influence of medication that will actually prone him or her to work-related accidents (Jamison et al, 2006). The issue of reduced work-related accident has been what every organization has noted for very long time since this issue is directly linked to the profitability of same (Singh, 2004). What has been missing over the years is how organizations value the health and safety of their workers for the sheer good of it (Levy & Sidel, 2006). The researcher sees the issue of the risk of occupational health and safety hazards to blue skies Ghana limited workers as a priority considering how vulnerable these workers are as a result of high unemployment situation in Ghana, thus making many employers to treat their workers with all the disregards as far as the issue of occupational health and safety is concerned (Gyapong et al., 2007). This state is dire because in many work places in the developed world as employees become aware that accidents can be reduced to the barest minimum, they engaged in proper safety practices that help in the drastic reduction of health and safety incidents (Meyer et al., 2010). To this end, treating workers
in developing countries, including blue skies in Ghana will help the employees to lead healthy and safer lifestyles that would go to the benefits of both the workers and the company.

**Perceived cost**

This concept refers to the barriers or losses that interfere with health behavior change. Referring to the barriers that can impede the practice of proper safety behavior, experience of employees make them take for granted that they are immune to accident and this problem in this sense of immunity exposes them to serious health and safety problems. For instance, a worker at the blue skies Ghana limited who has worked for a long time on equipment would begin to belief that he or she has mastered the use of the machine so well thereby almost becoming a friend of the machine. This affinity as a result of experience has the potential to endanger the workers’ health and safety if no one by this the researcher alludes to management, see reason to put the worker, who is lost in check (Lowry et al, 2010). Employers have to make this a point to conscientize such workers to fall in line (Birn et al, 2009). Allusion that by observing safety rules equals perceived time waste must be erased by management, failure to do so carries with it financial burden, therefore, adequate information on the expected gain has to be driven home forcefully for proper safety practices (Graham, 2007).

As in the economics literature according to Burton (2010), it is assumed that the preventive action will be taken only if the expected benefits outweigh the expected costs. The role of demographic and social variables (called mediating factors) can indirectly affect behavior by influencing an individual’s perceptions of susceptibility, severity, benefits and costs (Bates et al., 2008). This model can apply to the workers at blue skies if their activities are to fit into the four aforementioned expectations for a dignified worker to work in an environment that is not only worker friendly but human dignifying (Mills et al., 2007; Jamison et al., 2006).
Even though health belief model in this study is apt based on the problem and objectives of the study, the research draws on ecosocial theory (Krieger, 2008), as a theory of disease distribution which was first proposed in 1994 and have been elaborating since (Krieger, 1994, 2001, 2004, 2008, 2010). Drawing on this framework concerned with the social production of disease, health and safety informed by, among other things, the thorny issues in the field of occupational health, especially in the developing world. This theory makes expositions about some of the issues thereby leaving the relevant gap that makes the adoption of the health belief model appropriate as one of the theories to deploy for this study. The expositions in this theory cover:

- what is—and isn’t—known about the magnitude of and trends in occupational health inequities;
- who is most burdened by these adverse health and safety outcomes (and in relation to what referent group) and also is most adversely affected by lack of knowledge about these health and safety inequities and their causes;
- how determinants of occupational health inequities—and potential confounders and effect mediators—are conceptualized, measured, and modeled in empirical analyses (including at what level, and in relation to life course and historical generation); and
- what kinds of actions, by whom, are needed to reduce both the occurrence of work-related hazards and their inequitable distributions (Krieger, 2010).

Accordingly, from an ecosocial perspective, it highlighted what is missing when it comes to occupational health and safety of workers but what this theory did not do on occupational health disparities is the prescription that shows the way forward (Meyer et al., 2010). The health belief model tries, however, to show the multiple pathways, the interplay of exposure, susceptible and possible resistance from people who would look at the cost element they are to bear when the
issue of health and safety was to be handled properly (Lowry et al., 2010). Another issue about the theory is its contribution to the field of occupation health and safety. In brief the purpose of the study is not to review each literature in depth about occupational health and safety, but rather to expose the common concerns and challenges of workers regarding occupational health and safety, as well as the findings of the current study, its implications for advancing scientific understanding and action regarding occupational health inequities in the occupational health and safety in the developing world for that matter Ghana. Two major themes stand out in the review of literature: one regarding the availability—or, more pointedly, the lack of availability—of relevant data, the other on how patterns of occupational hazards and health inequities can vary by social group, for example, by gender, and educational level (Nyamekye et al., 2009).

Encapsulating these concerns are three issues relating to occupational health and safety; these precepts underscore how social injustice simultaneously shapes the existence—or not—of data to document and analyze the problems it produces, with the impact likely worst among people jointly affected by—and most constrained by—multiple domains of social inequality (Birn et al., 2009). Studies by Nyamekye et al (2009) and Birn et al (2009) showed that, among the 10 studies they reviewed, five focused on the difficulties of obtaining valid data on the occurrence, distribution, and determinants of occupational injuries and hazards affecting the most disempowered workers just as the case in developing countries where an unemployment is very high, whose ranks disproportionately include undocumented day-laborers and permanent workers (Fujishiro et al., 2010; Lefkowitz et al., 2010; Lowry et al., 2010; Menzel and Gutierrez, 2010; Smith, 2003).

Although occupational health and safety researches attempt to expose the workers plight in the work place, more of them focused attention on mining and the construction industry with the
view that those areas pose more of occupational health and safety issues to workers (Bates et al., 2008). This little attention of previous studies has provoked the present study in order to open the door of opportunities that would give small and medium scale enterprises and the informal sectors the exposure for serene business environment for economic progress (Gyapong et al., 2007). The study is in this area of research as it tries to make a point that Ghana gives a new attention to occupational health and safety issues and practices.

This study’s findings on blue skies especially on occupational health and safety in the production sector will open the debate on research in that area thereby giving that area of research attention (Nyamekye et al., 2009; Birn et al., 2009). As the case is, occupational health and safety issues have continued to remain outside mainstream organizational and management research problem as the focus of employers is on profit and staff recruitment (Barling et al. 2002). Most countries and industries scarcely recognize occupational health and safety practices as a crucial determinant of national development (Iriart & Pamponet, 2010). Therefore, mainstreaming occupational health and safety into national agenda becomes an important consideration for not only developed countries but also for the developing countries as well (Katsoulakos & Katsoulacos, 2007). Apparently, less than one percent of organizational and national researches focus on issues concerning occupational health and safety practices (Barling & Zacharatos, 2000).

Apart from little research attention on occupational health and safety issues in general, there is also an acute lack of literature on these matters. Particularly, most African countries are struggling with occupational health and safety practices as few attempts from the industries and the governments are notable (Iriart & Pamponet, 2010, Waddell & Burton, 2006, Regional Committee for Africa Report, 2004). Despite the struggling attempts, several steps
have been taken to protect employees’ health and safety at both the national and industrial levels. However, there is still little attention to occupational health and safety (OHS) issues, as this is shown by several occupational health and safety hazards, risk and diseases in African countries especially West Africa (Iriart & Pamponet, 2010). Many people believe that this is due to lack of political will but there is also the belief that lack of employment opportunities play a role (Iriart & Pamponet, 2010).

Similarly, it is easily observed that, there is lack of effective interventions from qualitative and quantitative action-researches. Observations suggest that, there are poor attitudes toward occupational health and safety practices, as employers are not really concerned about the protection of employees’ health and safety (Ministry of Health Report, 2002) and even worse, some employers do not realize that they have the legal responsibility to protect employees’ health and safety.
2.2 The conceptual framework for analysis.

The link between management role at ensuring OHS of employees, knowledge level of workers on health and safety, workers attitude to OHS and the effect of these on job performance of the employees.

2.2.1 Employees Knowledge on Health and Safety

Management has influence on the knowledge level of employees about health and safety. Awareness of health and safety among workers is created by management by organizing in-service training for workers on occupational health and safety, engaging consultants on health and safety for advice and development of occupational health and safety policy documents that
guides the running of the working environment. The enforcement of standard safety protocols at the working environment also rests on the management and the decision to invest in modern technology to reduce labour intensive procedures largely is a management decision. This linkage is supported by the views of Buck Consultants (2009) and Jamison et al (2006) that the individual employee cannot know more about health and safety without the employer providing policies, information and resources about occupational health and safety. Research has proven that making employees knowledgeable about health and safety, making them aware of the dangers of engaging in unsafe behavior to themselves, the families and the society as a whole is a form of accident prevention (Gyapong et al, 2009, Alfers, 2010, Mills et al, 2007).

2.2.2 Attitude of Employees to Health and Safety

The attitude of employees about health and safety is dependent on the role played by management of the firm. Enforcement of safety protocols at the workplace and sanctioning recalcitrant employees as far as company safety regulations are concerned change the attitude of the workers. This is supported by Buck Consultants (2009) and Jamison et al (2006) that the individual employee cannot be expected to achieve a transformation towards a healthier lifestyle on his or her own without the employer providing policies, information, resources and good working environment to enable behavior change. Feedback obtained by management from the attitude of the employees also influences the training giving to the workers by the employers.

2.2.3 Productivity (Job performance)

When employees are knowledgeable about health and safety at the work environment and believe that it is their limbs that are cut off in case of work place accidents, they tend to modify their attitude to safety issues at work. This eventually makes them stay healthy and reduce
absenteeism at work. They become productive because healthy employees are able to meet their set production targets.

2.3 The Empirical Context Review

2.3.1 The concept of health in occupational health and safety (OHS)

The concept of health has been defined variously; Buck Consultants (2009) define health as the protection of workers in their employment from risks resulting from factors adverse to health. Another definition by Alfers (2010) thinks the placing and maintenance of the worker in an occupational environment adapted to his or her physiological and psychological capabilities is health. Muchemedzi and Charamba (2006) define occupational health as a science concerned with health in its relation to work or working environment. In most cases, occupational health and safety (OHS) is largely measured by negative outcomes such as workplace injury and illness but these measures have a shortfall, for instance, a low incidence of injury at blue skies Ghana limited does not necessarily mean that adequate safety systems and controls are in place (Nyamekye et al., 2007).

At some food factories including blue skies Ghana limited, attention is mainly on negative outcomes. As long as there are no serious accidents, occupational health and safety policies and practices are not carried out fully. As a result, threats to employees’ safety are not eliminated in time because accident-prone areas are not recognized and taken care of before accidents occur (Burton & Waddell, 2006). Muchemedzi and Charamba (2006) explain that accidents do not arise from a single cause but from a combination of factors which act simultaneously. A potentially unsafe situation does not cause an accident until someone is exposed to it. It also stands to reason that, that someone can only fall victim if he or she is not
aware of the potential danger that is lurking because the knowledge that there is a possible danger to life is itself is a form of accident prevention (Gyapong et al., 2009).

Accidents are caused by the result of unsafe acts or practices (the human element that results from poor attitudes, physical conditions and lack of knowledge or skills to enable one to work safely), though this assertion is true it is not entirely true for accidents at work places especially blue skies for evidence abound that employers are normally concern about their employees work performance at the expense of occupational health and safety (Muchemedzi and Charamba, 2006). Accidents are also caused by the result of unsafe conditions of equipment or materials (Koopman et al, 2011).

Koopman et al (2011) states that accidents bring pain and suffering to the worker and his family, especially when it results in permanent disability, the consequences are disastrous for both the victim and the company. The victim loses his earning capacity and ability to enjoy a normal active life, and the society and company are deprived of his/her skill and contribution to production. For this reason, there is need for the employer’s participation in ensuring that occupational health and safety programs and policies are existent (Koopman et al, 2011). If these occupational health and safety programs are in place, it is more likely that the worker at blue skies Ghana limited would participate in order to preserve his/her life.

Towers (2003) explain that it is important to empower, educate and persuade workers to exercise their powers in the protection of their occupational health and safety. Employees are left to form their own occupational health and safety committees which are not taken seriously by the management. The past decade has witnessed an increasing number of publications addressing interventions aimed at preventing work-related illness and injury and employee health (Towers,
The rising interest and investment in workplace health promotion raises no questions as a cost benefit analysis of the subject matter is more likely to go in its favour - an affirmation of Frost and Robinson (1999) assertion that many business scholars are recognising the importance of healthy organizations and healthy people (Nyamekye et al., 2009), yet in the developing world the obverse holds due to the peculiar challenges that confront them, a case in point is the African countries where the present study is conducted.

The goal of many organizations has been to avoid being unhealthy as opposed to optimizing health. There is however, a growing recognition that financial health correlates with investments in employee well-being (Goetzel, Guindon, Turshen & Ozminskowski, 2008), a condition which is gradually putting health and safety issues at the front end of work, job and organizational design efforts. Indeed, the costs of unsafe, stressful and unhealthy workplaces are horrific in personal, economic and social terms (Kelloway and Day, 2005) and therefore require immediate attention. For instance, a 2007/2008 survey by the health and safety executive (HSE) on work-related illness estimated 34 million lost work days; 28 million due to work related illness and 6 million due to workplace injury (HSE, 2009). Translating this in monetary terms means an erosion of a chunk of the profit margins of organizations.

Jones et al (2003) in a similar study reported that 14% of the people in the United Kingdom who retired early did so because of ill-health and part of these ill-health conditions were believed to be the result of working conditions or at least made worse by working conditions and conditions are not in the least better in Ghana especially at the blue skies company. Occupational health has become by far the most prevalent danger faced today by people at their work (WHO, 2002). A new assessment of workplace accidents and illness by the
ILO (2006) indicates that occupational disease accounts for 1.7 million annual work-related deaths and outpaces fatal accidents by four to one. Thus the focus of occupational health and safety is gradually moving from occupational accidents to occupational diseases. This shift in trend perhaps tells of:

1. The recent trend in global industrialization;

2. The over concentration of efforts in the area of occupational safety to the neglect of occupational health in the past;

3. The gains made in the area of occupational accidents

But it must however, be noted that this new trend applies to workers in developed countries at least not those struggling in developing countries as such accidents are still high like before if not more due to weak institutional framework regarding health and safety of workers (Nyamekye et al., 2009). The case that the pattern persists, there is research evidence that new work-related hazards and diseases have emerged in some countries as a result of globalization. In Vietnam just like all other developing countries for example, many new chemical substances have been introduced in industries such as organic solvents in the footwear industry and pesticide use in agriculture. It is estimated that there are 5000 – 10,000 commercial chemicals that are toxic, of which 150-200 chemicals are known as possible causes of cancer (Burton, 2006). Other problems linked with globalization are unemployment and the precariousness of working conditions due to new systems of work organization and liberalization of the industrial relations (Rantanen, 2009).
Due to globalization and its resultant changes in the nature of work, people in developing countries have to deal with increasing work-related stress (WHO, 2004). In industrialized countries however, people are becoming more familiar with what work-related stress is and how to manage it (WHO, 2009; WHO, 2007), a situation which may not yet be the case in developing countries. New estimates by the ILO (2012) suggest that the number of job-related accidents and illnesses, which annually claim more than two million lives, appears to be rising because of industrialization in some developing countries. Globalization leads to contracting and flexibility, which may cause a further compromising of health and safety standards in many developing countries (Holkeri, 2009). Indeed, industrialization in developing countries, which is a product of globalization, is a much welcome phenomenon in principle but with its associated health related problems many will soon wish it never came (Koopman et al, 2011).

Despite significant improvements in health and safety in many parts of the world over the past several decades, the global challenge of providing for worker health and safety is ever greater today (ILO, 2012). The International Commission on Occupational Health (ICOH) in its centennial declaration in Milan also stated that: In spite of the impressive progress made in the improvement of health, safety and social conditions of work, in the industrialized countries, the need for occupational health and safety is as evident as it was 100 years ago. This explains the dearth in generating proper data and evaluating the impact of the changes at work. The situation is quite disturbing in the face of world health organization (WHO) figures showing that about 75% of the world’s labor force (which counts about 2400 million people) live and work in developing countries (WHO, 2009; Towers, 2003).
Developing countries like Ghana who are at the receiving end of industrialization especially in the mining and minerals sectors and now at the production areas; classified as hazardous industries (Gyekye, 2007), therefore present an avenue for an exploratory study on occupational health and safety, quality of life and employee well-being and Blue Skies Ghana as a case cannot be overemphasized. The case of Ghana shows that the African continent is witnessing a verifiable shift towards peace, stability and economic growth. This situation is making the world appreciate West-Africa for its significant investment opportunities. Ghana is one such country in the sub-region experiencing rapid industrialization in recent times (Gyapong et al., 2007).

Industrialization as discussed above comes with its own problems, one of which is occupational health and safety. In countries like Ghana with a fast growing labour force coupled with a growing informal sector as opposed to the formal sector, workers have tended to fight for job security while neglecting the need to promote the quality of work life, although the provision of a safe and healthy work environment is a human right issue, and investment in occupational health and safety yields improved working conditions, higher productivity and better quality of goods and services should not be neglected (Gyekye, 2007; Gyapong et al., 2007).

A commonly used argument has been that poor countries and companies cannot afford safety and health measures. However, there is no evidence that any country or company in the long run would have benefited from a low level of safety and health. On the contrary, studies by the ILO based on information from the world economic forum (2002) and the Lausanne Institute of Management (IMD) demonstrate that the most competitive countries are also the safest
Selecting a low-safety, low-health and low-income survival strategy is not likely to lead to high competitiveness or sustainability (ILO, 2012).

Lack of comprehensive occupational health and safety policy, poor infrastructure and funding, insufficient number of qualified occupational health and safety practitioners, and the general lack of adequate information are among the main drawbacks to the provision of effective enforcement and inspection services in most African countries (Muchiri, 2003). The republic of Ghana epitomizes the above assertion in its entirety. In spite of the numerous investments that the country attracts with its accompanying occupational health and safety related issues, Ghana as a nation still has no national policy on occupational health and safety. A draft occupational services policy jointly developed by the ministries of manpower youth & employment, health and lands, forestry & mines as far back as the year 2000 is yet to be adopted. The governments of Ghana, past and present, have not shown any political will, commitment and support for bold occupational health and safety policies. This is evident in the fact that out of over 70 conventions/recommendations of the ILO that are OHS related, only ten have been ratified by the government of Ghana (i.e., Conventions 45, 81, 89, 90, 103, 115, 119, 120, 147 & 148). Surprisingly the four core conventions on occupational health and safety (i.e., Conventions 155, 161, 170 and 174) have all not been ratified.

Though the recently promulgated labour Act 2003, Act 651 has a section which covers occupational health and safety (i.e., Section 15), it is amazing that the very tenets on which the section is built (i.e., ILO Conventions 155 and 161) have not been ratified by the government as yet. Indeed, the ratification of ILO conventions cannot be said to be the panacea to the numerous occupational health and safety issues that confront today’s organizations. However, it sends a
strong and clear message to investors and employers that the country attaches some importance to issues of occupational health and safety. This kind of message is bound to reflect in their commitment and approach towards occupational health and safety when in operation. The reverse is also a possibility. Two main statutes have informed the execution of occupational health and safety in Ghana. These are the factories, offices and shops Act 1970, Act 328 and the workmen’s compensation law 1987, PNDC Law 187. The main provisions of the factories offices and shops Act 1970 concerns improvements necessary to attain internationally accepted standards of providing for the safety, health and welfare of persons employed in factories, offices, shops, dock work and construction. Health goes hand in hand with the issue of safety as such; occupational health and safety are very much associated.

2.3.2. The concept of safety in occupational health and safety

Lund and Marriott (2005) explain safety as what is involved in the protection of people from physical injury. Hughes et al. (2008) and ILO, (2006) define safety as the science of anticipation, recognition, evaluation and control of hazards arising in or from the workplace that could impair the health and well-being of workers, taking into account the possible impact on the surrounding communities and the general environment. Thus, safety can be seen to concern the promotion and maintenance of the highest degree of physical, mental and social well-being of workers in all occupations (Towers, 2003). Safety thus transcends the common sense meaning of providing physical safety or physical well-being. It encompasses two other equally important dimensions that make it a comprehensive system of work practice; mental well-being and psycho-social wellbeing. It is in the interest of workers and their representatives to earn a living,
and also to reach old age in healthy conditions (WHO, 2007). These interests are not contradictory but complementary to company interests (Koopman et al, 2011).

Organizations have traditionally evaluated their health and safety in terms of the bottom line (Robin, 2003). However, with past research uncovering enormous financial and human costs associated with unhealthy organizations (Birn et al., 2009), human resource professionals have begun to position safer workplace programs and activities as a source of competitive advantage to curtail increasing health care costs; assist in the attraction, acquisition and retention of employees; better manage the employer-employee relationship; meet the needs of an increasingly diverse workforce, and boost employee morale (Fulmer, Gerhar & Scott, 2003; Robin, 2003; Birn et al., 2009).

The belief that manpower is expandable (Koopman et al, 2011)) and that organizations can afford to lose some of their personnel only to be replaced in no time appears to be a thing of the past in developed countries, but exact scenario can be witnessed in developing countries due to the high unemployment levels (Nyamekye et al., 2009). The emphasis is that organizations in developing countries must no longer afford to lose experienced and committed employees through injury or ill-health caused by unhealthy and unsafe working conditions as the cost of recruiting, selecting, developing, motivating and retaining new employees who take over from experienced employees lost through work related ill-health remains incalculable (Towers, 2003). Safety in organizations, therefore, remains an important consideration for all organizations, particularly organizations engaged in high risk operations like blue skies Ghana limited, the mining, and logging and construction industries.
Good safety work practices not only provide a safer working environment but also improve worker morale and productivity (Waddell & Burton, 2006). By pursuing good occupational health and safety practices, businesses face fewer workplace injuries and benefit from higher employee retention rates and enhanced corporate image. This reduces the costs associated with production delays, recruiting new staff and replacing equipment and avoids the resulting uncertainty and workload pressure placed on co-workers (Towers, 2003). Businesses who strive to improve their occupational health and safety performance create safer workplaces, which benefit not only employers and employees but their families, their communities and their economies at large (Waddell & Burton, 2006). This is evidenced by the effect of the Longford gas explosion in 1998, which left the state of Victoria in Australia without its primary gas supplier for 20 days. As natural gas was widely used in houses in Victoria for cooking, water heating and home heating, many families endured 20 days of cold showers and cold nights. Further loss to industries as a result of the crisis was estimated around 1.3 billion Australian dollars (Buck Consultants, 2009; Hopkins, 2011).

The growing importance of the concept of safety at workplace has led to some scholars advocating for it to be considered as a performance variable much like production, profits, sales, quality control or customer complaints (Koopman et al, 2011; Waddell, & Burton, 2006; Towers, 2003). Considering that working adults spend at least a quarter to a third of their waking life at work (Harter et al, 2003) and the fact that job satisfaction is estimated to account for a fifth to a quarter of the satisfaction in adults (Harter et al., 2003), occupational health and safety issues in organizations, that include the emotional, physical, chemical and biological exposures of work should be of interest to all employers not excluding employers at Blue Skies Ghana limited.
The sad case is that Ghana as a country has Acts relating to occupational health and safety on industries, but missing in the coverage of industries under the Act is the vast majority of industries including agriculture, and most of the organizations under the informal sector an area where the study is conducted blue skies Ghana limited. Provisions in the Act are also very limited in scope providing inadequately for prevention (Gyekye, 2007; Nyamekye et al., 2009). Preventive strategies like risk assessments, medical surveillance and control of hazards are not for instance catered for in the Act. Also missing in the factories offices and shops act are standards against which services and performance will be measured (Gyekye, 2007; Nyamekye et al., 2009). The lack of uniform standards against which organizations could be evaluated has resulted in factory inspectors assuming a lot of discretionary powers and falling to the temptation of abuse of power (Gyekye, 2007; Nyamekye et al., 2009).

Aside from the radiation protection convention, 1960 (No. 115) ratified in 1961, there are no regulations and rules for certain classes of hazardous work situations such as agriculture, construction and others. This makes it more difficult for employers to comply with laws and further add to the discretionary powers of inspectors. Gibb and Bust (2006) identified the following factors that could influence health and safety management of manufacturing sites in developing countries:

- poor infrastructure;

- problems of communication due to low literacy level;

- unregulated practices on construction sites;

- adherence to traditional methods of working;
• non availability of equipment;

• poor site security;

• extreme weather conditions

• improper use of equipment; and

• corruption (Koehn, Ahmed and Jayanti, 2000; Gibb and Bust, 2006).

In their expositions they mentioned difficulties in training due to illiteracy as a barrier to effective health and safety management in developing countries. Women may be marginalized from ASM, because the “work force” in various cultures, such as in Suriname, South America, tends to be dominated by males, and females are discouraged from engaging in mining activities (Heemskerk, 2000).

It is important to note that within the literature, there is a lack of consensus in whether women are allowed and encouraged to work in small-scale manufacturing industries, or they are discouraged from working in the production with the males and are therefore marginalized (Deb et al., 2008; Heemskerk, 2000). Education includes both the education of the manufacturing workers on safe practices and the formal school education of workers and their families who directly and indirectly participate in menial activities (Aryee et al., 2003). However, there are examples where education initiatives fail to achieve the objectives of information dissemination to the miners, especially in the field of mercury abatement (Hilson, 2006).

Employment or working conditions the main themes for employment as a determinant of health found within the body of literature regarding occupational health and safety are the lack of
employment opportunities in other sectors, unsafe working conditions and the increased health risks for people who work in such areas. As previously mentioned, working under poor conditions is a poverty-driven activity, and frequently occurs in developing countries where there is a lack of employment opportunities (Andrew, 2003). To combat this growing problem, policymakers, including governments and donor organizations, believe that creating alternative employment opportunities will reduce the incidence and prevalence of poor occupational health and safety accidents (Hilson & Banchirigah, 2009). Unsafe and stressful working conditions are associated with a decline in one’s health and well-being (Towers, 2003).

Admittedly, though some studies have been done in Ghana relating to occupational health and safety issues in the construction industry, these studies did not focus directly on health and safety issues affecting casual and permanent workers in the manufacturing industry such as blue skies Ghana limited. For example Kheni (2008) in his studies did mention how workers in their quest to meet their basic needs, such as food and shelter, have compromised their demand of health and safety rights. It is worth noting that the real issues of occupational health and safety affecting casual and permanent workers were not discussed.

Poor health and safety conditions in the workplace can also result in poor public relations. The consequences of occupational safety and health hazards, such as accidents and ill health, do not only encompass the company but also individual workers/victims as well as their families and social networks. Society as a whole has to deal with these negative outcomes of the production process. This means that the motives for developing an effective occupational safety and health policy stem from social as well as from economic objectives. If Ghanaians consider health and safety to be a basic right for every worker (Gyapong et al., 2007), the economic goals have to be embedded in the social policy at company and society level so that workers in Ghana, including
those of blue skies would feel that they are protected in their country by their laws (Iriart & Pamponet, 2010; Alfers, 2010).

2.3.3. The concept of work performance

Productivity is an expression of how efficiently and effectively goods and services (i.e. goods and services which are demanded by users) are being produced. Thus, its key characteristics are that it is expressed in physical or economic units –in quantities or values (money) -based on measurements which are made at different levels: on the level of the economy overall, that of a sector or branch of the economy, that of the enterprise and its individual plants/units and that of individuals (European Association of National Productivity Centre [EANPC] (2005). Moreover, productivity is not only measured by quantity and quality, but also by the benefit the customer obtains. This is especially true for the service industry. The concept of productivity is also increasingly linked with quality – of output, input and the process itself. An element of key importance is the quality of workforce, its management and its working conditions and it has been generally recognized that improving quality of working life and rising productivity do tend to go hand in hand.

Generally speaking, productivity could be considered as a comprehensive measure of how organizations satisfy the following criteria (Koopman et al, 2011):

2. Objectives: The degree to which they are achieved.
3. Efficiency: How effectively the resources are used. (Doing things right)
4. Effectiveness: What is achieved compared with what is possible. (Doing the right things)
5. Comparability: How productivity performance is recorded over time.
According to Oxenburgh et al. (2004), the health and safety of all employees is closely linked to the company’s productivity in all workplaces. As a finding of a study (Lamm, et al., 2007) there is increasing and compelling evidence that providing a healthy and safe working environment has the potential to increase labour productivity and in turn increase business profits. Lamm et al. (2007) also refer to the argument of some commentators that productivity gains are often at the expense of workers’ health and safety which had been supported by a study (Nyamekye et al., 2009) pointing organizations operating in Africa countries do not take occupational health and safety issues of their employees serious due to weak legal regime.

Businesses typically strive to become more productive and in doing so are driving their workers to work longer, harder and with higher utilization often in extremely hazardous conditions and only implement health and safety measures to keep compensation costs down (Lam, Massey and Perry, 2007; Koopman et al, 2011; Dorman 2000; Quinlan et al, 2009, 2001). As noted by Lamm et al. (2007), James (2006) observes that while exposure to risks associated with machinery and manual labour are being reduced, other risks related to the increase in labour productivity especially in production areas such as food and drinks are on the rise. Lamm et al. (2007) also suggest efforts to increase productivity through occupational safety and health can have contradictory results and point out the gaps in literature that while there is evidence that occupational injuries and illnesses impact on productivity losses, it is not clear whether or not reducing injuries and illnesses will automatically influence productivity gains.

Findings of another study (De Greef & Van den Broek, 2004) demonstrate that health and safety measures have a positive impact not only on safety and health performance, but also on company productivity. However, identifying and quantifying these effects is not always straightforward. In addition, although experience shows that in many cases proof of profitability can be given, it
might be rather difficult in a certain number of cases to develop solid evidence (Towers, 2003). The authors also state although the literature survey was fairly limited, research findings support the existence of an important link between a good working environment and the performance of a company. Thus, the quality of a working environment has a strong influence on productivity and profitability.

The study also suggests that poor occupational health and safety performance can lead to a competitive disadvantage impairing the firm’s status among stakeholders (Waddell & Burton, 2006). This is a motivating factor to company management to invest in occupational health and safety especially in developing countries as way of obeying the ILO regulations that talk about occupational health and safety of the worker (Gyapong et al., 2007). The findings of the literature survey (De Greef & Van den Broek, 2004) were also supported by the collection of case studies. By making the link between health and safety and the performance of the company, the case studies demonstrate that occupational health and safety should no longer be seen as purely a cost, but also as an instrument to improve the overall performance of a company, meaning that occupational health and safety should be an integral parameter in general management (Towers, 2003).

National economies also enjoy the benefits of a thriving occupational health and safety policy as the benefits accrued to industries tend to trickle down in the form of taxation and a reduction on other social services (e.g., health care facilities (NHIS), social support benefits) (Nyamekye et al., 2009). A high standard of occupational health and safety correlates positively with high GNP per capita (WHO, 2002). The countries investing most in occupational health and safety show the highest productivity and strongest economy, while the countries with the lowest investment have the lowest productivity and the weakest
economies (WHO, 2002). This assertion seemed to support the evidence on the ground where the least developed countries that did not take OSH seriously continue to struggle in every sphere of their economy including Ghana (Gyapong et al., 2009). Thus, active input in occupational health and safety is associated with positive development of the economy, while low investment in occupational health and safety is a disadvantage in the economic competition (Towers, 2003).

While the nature of the problems, hazards and risks has changed, the traditional hazards and particularly the new problems of work life still need much expert knowledge, research, training and information in order to be controlled, managed and prevented (Burton & Waddell 2006). These emotional statements further express the frustration faced by health and safety experts and other researchers engaged in finding an antidote to occupational health and safety related problems in the developing world just as is the case in Ghana’s health sector where a social intervention like national health insurance scheme (NHIS) in struggling to cope with the mounting health costs (Nyamekye et al., 2009). This challenge has arisen perhaps because of the rapid industrialization taking place in the developing world as a result of globalization with its attendant high unemployment figures (Nyamekye et al., 2009).

The globalization process has not succeeded in equalizing the condition of work, in fact, the opposite has occurred; the gaps are increasing (Nyamekye et al., 2009). Poverty, inequality and under-development are closely associated with poor safety, health and social conditions of work, as they are also linked with illiteracy, lack of education, poor access to health services and low or non-existent social protection.
Thus globalization and its associated changing nature of work have made the management of occupational health and safety more challenging than ever.

The majority of the developing countries has very poor investment in research and still has many unsolved problems (WHO, 2002) particularly in the area of occupational health and safety and the changing nature of work. Changes in production models lead to changes in working environment in terms of both better and worse conditions (Towers, 2003). The stress of global competition may lead employers to view the prevention of occupational injuries and the protection of workers’ health not as an integral part of quality management but as a barrier to production, trade and commerce. This is further expressed by Goldstein, et al (2001) who indicate that the global burden of occupational disease (Muchemedzi & Charamba, 2006) and work-related injury (Takala, 2000) remains unacceptably high because the majority of the world’s workforce is still not served by occupational health services (Goldstein et al., 2001).

According to Alhasan and Partanen (2009), the global corporate policy is not favourable for financing health facilities and safety services in many developing countries due to other pressures in global competition. It is however, not acceptable for employers to derive competitive advantage through economies in the areas of health and safety and well-being of employees (Stiglitz, 2001; Stokke 2001). This could lead to the global figures on occupational diseases and work-related injuries soaring further.

For the purpose of demonstrating the productivity benefits of occupational health and safety at enterprise level, the United Kingdom’s health and safety executive (HSE), collected the experience of over 20 major enterprises in Business of health and safety where workers were consulted at all stages of the initiatives. For instance, a large paper company, in concert with its
workers’ trade unions, invested £175,000 in management consultancy and training related to occupational health and safety and soon reaped a benefit of £500,000 (ILO, 2006). As Kirsten (2010) noted, the survey “working well: A global survey of health promotion and workplace wellness strategies” (Buck Consultants, 2009) which was responded by more than 10 million respondents from 45 different countries found that the most important strategic objective for offering a health promotion in most regions of the world is improving productivity and presenteeism.

Reducing health care costs remains the top objective for US employers while improving workforce morale and engagement is a priority for Asian employers. Another finding of the study is that only 22% of surveyed organizations report measuring financial outcomes of their health promotion programs. This goes in line with the number of employers from 33% to 47 % who do not know the impact of their health promotion initiatives on their organization’s strategic objectives (Waddell & Burton, 2006; Koopman et al, 2011).

As can be derived from the data and discussions above, integrating health and safety in company strategy and policy can be seen as a key to business excellence and success, allowing businesses to contribute to sustainable growth enhancing welfare and innovation. This idea is being discussed in this section which is also introducing an approach on how to integrate occupational health and safety in company strategy and policy in developing countries so that they can reduce health cost and increase workers morale and engagements.

Occupational safety and health programmes generate effects and outcomes that influence company performance positively and thus contribute to the company goals. In order to have an effective influence on company performance, the occupational safety and health programme
must be aligned with the company goals. In this respect, it forms part of the business strategy and also the continuous improvement circle that drives a company towards excellence. Outcomes are noticeable on organisational level since occupational safety and health measures lead to change by creating better working conditions, improving the social climate and the organisational process. The results are positive organisational outcomes such as less cost, improved company image, less staff turnover and higher productivity (Waddell & Burton, 2006; Koopman et al., 2011). On an individual level, an occupational safety and health programme leads to greater health awareness (healthier lifestyle) and an improved motivation and commitment. These changes result in several outcomes such as more job satisfaction. Moreover the framework shows that important additional effects and outcomes can be obtained since there is a clear link between the various outcomes and between the organisational and individual level.

The business arguments that can be derived from this excellence model are underpinned by many studies (e.g. Koopman et al., 2011; Aldana, 2011; Barling et al., 2003; De Greef & Van den Broek, 2004; Ervasti & Elo, 2006; Sockoll et al., 2009; Pot & Koningsveld, 2009) demonstrating the positive effects of investing in health and safety at work. Such investments result in business benefits as:-

- a reduction in sickness and absenteeism rates;
- a reduction in staff turnover;
- an increase in productivity;
- an improvement in the image presented to the customers;
- keeping qualified personnel in the long term.
The IGA Report (Gesundheit & Arbeit Health and Work Initiative) Sockoll et al. (2009) presents the results of a comprehensive search of literature into the effectiveness and economic benefits of workplace health promotion and prevention. The study found that in the field of preventive interventions aiming at the individual, there is strong evidence that exercise programs may increase the physical activity of employees and prevent musculoskeletal disorders (Koopman et al, 2011). For organisational and environmental interventions the evidence base is much weaker than for individual focused prevention approaches but this is mostly due to the lack of reliable studies (Sockoll et al., 2009).

Often studies focus on intermediate benefits such as absenteeism but it is clear that these benefits are linked with quantifiable financial outcomes that directly affect the bottom line. A reduction in absenteeism rates will lower personnel costs. Health and safety as well as economic efficiency thus go hand in hand. Demonstrating such intermediate business benefits such as lower accident and absenteeism rates is essential to show the impact on quantifiable financial outcomes and link occupational safety and health to economic performance (Towers, 2003). Evidence from 55 UK case studies by price water house coopers (2008) show that occupational safety and health programmes result in financial benefits, either through cost savings (e.g. less sickness and absence) or additional revenue generation (e.g. higher productivity), as a consequence of the improvement in a wide range of intermediate business measures.

Miller and Haslam (2008) state that prevention costs per se are a relatively low proportion of the total cost impact of employee health in many cases. They refer to a study of Loeppke et al. (2007) which found that health related productivity costs were four times greater than medical costs and that the full cost of poor health is driven by different health conditions than those driving medical and pharmacy costs alone. They add however, that there is evidence that many
organisations do not quantify the cost of employee ill health and refer to a national survey which concluded that most organisations found it difficult to estimate the cost impact of injuries and none of the organisations studied had attempted to measure the full cost impact of employee ill health. They explain that there are two main factors that motivate organisations to initiate health and safety improvements: the fear of loss of corporate credibility; and a belief that it is necessary and morally correct to comply with health and safety regulations (Towers, 2003), but in the developing world where employers think creating employment opportunities for people is like a favour the issue of morality is lost on them making the employee very vulnerable when it comes to occupational health and safety compliance (Gyapong et al., 2007; Gyekye, 2007).

Another study of Antonelli et al. (2006) which advocates use of cost benefit analysis to change business attitudes towards health and safety, showing it is not simply a compliance or staff welfare issue and conclude more empirical business cases that meet the needs of decision-makers are more likely to attract investment into employee health activities. The fact that health and safety at work is positively linked with productivity can also be found through looking at case studies. There are examples from companies that investing in better working conditions and an improvement of the quality of working life, show positive results.

De Greef et al. (2009) assessed the costs of 56 prevention projects in companies of different sizes and sectors. The case studies show the positive results of investing in occupational safety and health. The prevention measures were evaluated using a cost benefit analysis. A cost benefit analysis is a method that is commonly used on corporate level to make an economic evaluation of the costs and consequences of an action. By conducting a cost benefit analysis, in which all costs are balanced against future benefits, an economic assessment of the health and safety investment can be made. The majority of the case studies have clearly demonstrated that health
and safety interventions lead to positive economic indicators. Investments with positive net present values, internal rates of return outweighing the discount rate and payback periods clearly indicate that occupational safety and health is not only ethically and legally necessary, but also economically sounds (Birn et al., 2009). Especially when several measures are brought together into a comprehensive programme at blue skies Ghana limited, a positive return can be expected.

2.4. SUMMARY

It is necessary to develop the debate in companies in Ghana such as blue skies Ghana limited about the real drivers of performance. Empirical evidence is found of the economic advantages of adopting an adequate safety management system (Nyamekye et al., 2009; Koopman et al, 2011). The results of the study show that a highly developed management system increases the safety performance, as well as the competitiveness and the economic financial performance. The safety performance was related to outcomes such as injuries, material damage and absenteeism.

Competitive performance links with elements such as the quality of products and services, customer satisfaction, reputation and image. Also, the more advanced the occupational health and safety management system, the more satisfied these organisations are with their economic and financial indicators. Although there are some comments that productivity can be at the expense of workers' health and safety, research findings generally support that health and safety measures have a positive impact not only on safety and health performance but also on company productivity, as such any efforts on the part of companies operating in Ghana in this direction is worth making.
CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter describes the methods and tools employed in gathering and analysing the data about the occupational health and safety of employees of blue skies Ghana limited. It also describes the research design and approach, the setting, the study population, sample size and sampling strategy, as well as limitations and ethical considerations of the study. The method of data collection and the instrumentation, measures for ensuring reliability and validity as well as methods of data analysis have also been covered in this chapter.

3.1 Research Design and Approach

A research design is the master plan for the study spanning from the method of data collection through the method of data analysis. The cross-sectional survey design was employed for this study. This strategy was used because the study is carried out over a short period, data collected from different section of the firm and on individual characteristics concerning their risk factors at work. The study did not test a hypothesis but described the responses of a sampled population with respect to their health and safety issues (Levin, 2006).

The mixed method approach was used for the study. This method was chosen because there was the need to get in depth responses from the safety officer, the human resource manager and the line managers about the topic under study as well as responses from operational factory hands since they are involved in the production activities of the firm. Structured interview guides were used to gather responses from the safety officer, the human resource manager and nine (9) line
managers which were purposively chosen for the study. Their responses formed the qualitative data which were paraphrased and quoted in verbatim. Structured questionnaires were also administered to the operational factory hands to gather their views on the topic under discussion and their responses formed the quantitative data. Their responses were compared and a conclusion drawn.

### 3.2 Background of Study Area

The data was collected from blue skies Ghana limited. Blue skies Ghana was founded in 1997 by a British entrepreneur Anthony Pile. The company’s first factory was established in Ghana from where it started operating in 1998. With a humble beginning of employing only thirty six employees in Ghana, the factory in Ghana now employs over 1500 people and supplies prominent retailers in Europe such as Sainsbury’s, Waitrose and Albert Heijn. The company expanded its operations to Egypt, South Africa and Brazil as the years went by to enable the business offer a year round fresh-cut fruits because opening a factory in Brazil has strengthened supply of mangoes continuously which is only available seasonally in Ghana. Some of the fruits processed in Ghana include smooth cayanne pineapple, MD2 pineapple, organic sugarloaf pineapple, mango, papaya, coconut, passion fruit and banana.

Blue skies has grown to achieve a group turnover of over £50 million per year and the factory in Ghana accounts for approximately 50% of this turnover mainly through its export sales. Some of the company’s products are sold on the local market such as the fresh fruit juice which is becoming an increasingly important and part of the business in Ghana. By dint of hard work in both 2008 and 2011 the company received the England’s Queens award for enterprise in the category of sustainable development and several awards from the business community in Ghana.

50
Blue Skies Ghana limited is one of the biggest private sector employers in the country. It operates in a modern facility with state-of-the-art refrigeration systems and high tech communications. There is a library, an internet cafe, a laundry, a creche and a cafeteria to take care of the feeding of the workers. The company is located twenty miles north of Accra along the road to Nsawam.

3.3 The Study Population

A population is a set of specified group of human beings or non-human entities like objects, educational institutions, graphical areas etc, (Koul, 2009). Therefore the target population for this study comprised of one thousand and five hundred (1500) workers of blue skies, this was made up of management, line managers and operational factory hands of blue skies. Out of 1500 qualified staff that could be used for the study, only 151 staff was selected for the study. This number was made up of 9 line managers, the head of safety and the head of human resource unit of the firm as well as 140 operational factory hands.

3.4 Sample Size Determination and Sampling Strategy

According to Koul (2009), sampling is the selection of a small number of individuals from the study population and analysed to get better understanding of the entire population. The researcher arrived at a sample size based on the Roscoe (1975) rule of thumb for determining a sample size in behavioural research which states that a sample size greater than 30 and less than 500 is good enough for most studies. Again the use of about 10% of the total study population as sample size is also appropriate (Roscoe, 1975). From the above assertions a total of 151 respondents were used for the study. This was made up of 9 line managers from each department of the production unit, the head of safety and the head of human resource unit of the firm as well
as 140 operational factory hands. This figure (151) is a little above 10% of the study population and therefore believed that the respondents would provide enough information which could enrich the study. A purposive sampling technique was used to select the 9 line managers, the safety officer and the human resource manager for the study. This strategy was chosen because the researcher needed participants who had rich understanding of the topic under study and are decision makers in their respective units. Stratified sampling technique was used to put the operational factory hands into strata. This sampling strategy fits for the study because the factory is divided into different sections, random sampling technique was then used to select 140 operational factory hands from the company.
3.4.1 Calculation of the Sample Size from the Operational Factory Hands of the Firm

<table>
<thead>
<tr>
<th>Units of the production department</th>
<th>No. of workers in each unit</th>
<th>Proportionally allocated sample of the employees</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRONOMY</td>
<td>150</td>
<td>15</td>
<td>10.8</td>
</tr>
<tr>
<td>High care</td>
<td>500</td>
<td>50</td>
<td>36</td>
</tr>
<tr>
<td>Quality control</td>
<td>300</td>
<td>30</td>
<td>21.6</td>
</tr>
<tr>
<td>Dispatch</td>
<td>300</td>
<td>30</td>
<td>21.6</td>
</tr>
<tr>
<td>Engineering</td>
<td>15</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Operations</td>
<td>10</td>
<td>1</td>
<td>0.7</td>
</tr>
<tr>
<td>Hygiene(cleaners)</td>
<td>70</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Transport</td>
<td>20</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Canteen</td>
<td>25</td>
<td>3</td>
<td>1.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1390</strong></td>
<td><strong>140</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

**Source: Field Data, 2015**

From the above table the researcher was convinced that 140 participants from the production sector (operational factory hands) would give the information that he needed to enrich the study.

For example, the sample for the study from the production unit was obtained by dividing the stratum for each unit by 1500 and multiplying the result by 151, therefore the formula is:

\[
\text{Stratum} \div \text{Population Size} \times \text{Sample for the study}
\]

For instance from the Agronomy unit where there are 150 employees therefore the formula is:

\[
(150 \div 1500) \times 151 = 15
\]
3.5 Sources of Data

Data for the study was mainly from both primary and secondary sources. The primary data was gathered using structured questionnaire and structured interview guide. The secondary sources were from the annual reports of the company where necessary and policy documents on health and safety.

3.6 Instruments of Data Collection

The instrument used in gathering the primary data for the study was a structured questionnaire which contained a likert scale. The questionnaire was divided into sections based on the objectives of the study. Section A contained the biographical data of the respondents; section B contained nine (9) items that measured the second objective that is the Attitude of employees concerning occupational health and safety whilst section C had thirteen (13) items that measured the knowledge level of employees about occupational health and safety. Finally section DCFCGF contained six (6) items that gathered views from the employees about the effects of health and safety of the employees on their job performance. Structured interview guide was also prepared based on the objectives of the study to guide the respondents in their responses to avoid the temptation of interviewer bias. The guide contained two sections, section A covers the demographic characteristics of the respondents. Section B contained fourteen (14) items which measured the roles played by management to ensure the health and safety of the employees.

3.7 Data Collection Procedure

The questionnaires were administered to the operational factory hands and collected immediately after filling on the same day. This was done in order not to lose some of the questionnaires since
an exact sample size had already been determined by the researcher based on Roscoe’s (1975) rule of thumb. The questionnaires for the operational factory hands were made up of 35 items based on the objectives of the study. A face-to-face approach was adopted to administer the questionnaires to the selected respondents (operational factory hands) daily until the required number of 140 operational factory hands was obtained. The completed questionnaires were examined daily to find out whether they had been filled correctly. Structured interview guides which were made up of 21 items were administered to the 9 line managers, the head of safety department and the head of human resource unit. Copies of the structured interview guide were given to the purposively selected respondents. After one week the researcher went round to collect the completed structured interview guide from the 11 respondents. All the gathered information was organized for processing and analysis.

3.8 Data Management and Analysis

The structured questionnaires were edited, numbered serially and coded before entering into the computer software excel and analysed using the software statistical package for social sciences (SPSS) version 20. These findings were communicated in statistical tools such as frequency tables, charts and graphs. The structured interview guides were also edited, serially numbered and coded before analysing. The descriptive narrative approach was used for the qualitative data. Here the qualitative responses were transcribed and quoted in verbatim, the responses were grouped according to sub themes meanwhile the main themes were the objectives of the study. The findings from the responses for the quantitative and qualitative data were compared and inferences made.
3.9 Reliability, Pre-test and Validity

According to Wilson (1993), validity is when an instrument measures what it is designed to measure whilst reliability is achieved when an instrument of measurement produces a consistent results or data on repeated usage. Opoku (2005) asserts that one of the best ways to establish reliability is test-retest reliability. For this reason the researcher used a test-retest strategy. The questionnaire and the interview guide were administered to respondents selected randomly and purposively from a similar company engaged in fruit processing. A second company was used where the same instruments but having different numbering pattern were administered to a number of workers there and almost the same responses were given and this proved consistency.

For validity purpose, a pre-test was conducted on 10 respondents to determine the suitability or otherwise of the instruments in order to fulfil the objectives of the study. Ten questionnaires were administered to employees of a similar company operating in Ghana Bomarts Ghana limited. This helped to expose inconsistencies and vagueness in the questionnaires and the structured interview guide to check responses in line with the study objectives. So after the pre-test, the questions were rearranged, adding new questions and deleting old items that were not needed.

3.10 Ethical Considerations

In order not to abuse the cultural, social and emotional rights of respondents, respondent’s consent was sought before administering the questionnaire and their privacy respected. Measures were also taken to ensure that information gathered was protected against third parties accessing it. In addition the aim of the study was conveyed to all the relevant authorities during the process of acquiring permission to conduct the study. Respondents were assured that participation was
voluntary and that they had the right to withdraw from the study at any time if they so wished. Respondents were not required to write their names on the questionnaires in order to ensure the confidentiality and anonymity of subjects. Finally, a covering letter which explained the objectives of the study accompanied each questionnaire.
CHAPTER FOUR

RESULTS

4.0 Introduction

This chapter presents the results of the analysed data. The results were organized in line with the objectives of the study. The first comprises demographic characteristics of the respondents. The second section contains the relationship between employees’ age, sex and level of education and positions, the third contains employees’ mean responses on their job performance by age distribution. The fourth section covers the cross tabulation of participants mean responses on employees’ understanding of occupational health and safety OHS by sex. The fifth section explores participants’ responses on employees’ attitude to (OHS) by marital status.

The mean responses on Employees’ level of education and their attitude to OHS were also contained in the sixth section of this chapter. The employees’ responses on the issue of safety at the workplace were seriously explored in section seven. The eighth and ninth sections of the chapter contains the correlation between employees’ characteristics and issue of health and safety at workplace and the cross tabulation of participants mean responses on employees’ attitude to health/ safety at the workplace respectively.
4.1. Demographic characteristics of the respondents

Table 4.1: Demographic characteristics of the respondents, N=140

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Categories/Groupings</th>
<th>Number (n)</th>
<th>mean</th>
<th>SD</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex:</td>
<td>Male</td>
<td>116</td>
<td>1.17</td>
<td>0.378</td>
<td>82.9</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>24</td>
<td></td>
<td></td>
<td>17.1</td>
</tr>
<tr>
<td>Age group (Years):</td>
<td>20-25</td>
<td>31</td>
<td>2.43</td>
<td>1.005</td>
<td>22.1</td>
</tr>
<tr>
<td></td>
<td>26-30</td>
<td>40</td>
<td></td>
<td>2.11</td>
<td>28.6</td>
</tr>
<tr>
<td></td>
<td>36-40</td>
<td>47</td>
<td></td>
<td>1.4</td>
<td>33.6</td>
</tr>
<tr>
<td></td>
<td>41 and Above</td>
<td>22</td>
<td></td>
<td></td>
<td>15.7</td>
</tr>
<tr>
<td>Marital status:</td>
<td>Single</td>
<td>56</td>
<td></td>
<td>2.11</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>Widowed</td>
<td>14</td>
<td></td>
<td>0.968</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Married</td>
<td>68</td>
<td></td>
<td>2.59</td>
<td>48.6</td>
</tr>
<tr>
<td></td>
<td>Separated</td>
<td>2</td>
<td></td>
<td>1.112</td>
<td>13.6</td>
</tr>
<tr>
<td>Education level:</td>
<td>Basic</td>
<td>19</td>
<td></td>
<td>1.4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Secondary</td>
<td>69</td>
<td></td>
<td></td>
<td>49.3</td>
</tr>
<tr>
<td></td>
<td>Vocational</td>
<td>2</td>
<td></td>
<td></td>
<td>1.4</td>
</tr>
<tr>
<td></td>
<td>Tertiary</td>
<td>50</td>
<td></td>
<td></td>
<td>35.7</td>
</tr>
<tr>
<td>Period of working (Yrs.):</td>
<td>1-2</td>
<td>42</td>
<td></td>
<td>2.28</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>3-4</td>
<td>17</td>
<td></td>
<td>0.898</td>
<td>12.1</td>
</tr>
<tr>
<td></td>
<td>5 and Above</td>
<td>81</td>
<td></td>
<td></td>
<td>57.9</td>
</tr>
<tr>
<td>Department</td>
<td>Production</td>
<td>126</td>
<td></td>
<td>1.10</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td>Administration</td>
<td>14</td>
<td></td>
<td>0.301</td>
<td>10</td>
</tr>
<tr>
<td>Position held:</td>
<td>Junior staff</td>
<td>78</td>
<td></td>
<td>1.44</td>
<td>55.7</td>
</tr>
<tr>
<td></td>
<td>Senior staff</td>
<td>62</td>
<td></td>
<td>4.99</td>
<td>44.3</td>
</tr>
</tbody>
</table>

Field Data 2015

Table 4.1 summarizes the demographic characteristics of the respondents. The study showed that majority of the respondents were males 116(82.9%), and females 24(17.1%). Majority of the respondents 68(48.6%) were married, 56(40%) were single, 2(1.4%) were separated while 14(10%) were widowed. Most of the respondents had attained secondary level of education
69(49.3%) followed by tertiary education 50(35.7%), basic level education 19(13.6%) and 2(1.4%) had vocational education. The age of the respondents ranged from 20 years to 41 years and above. The age group with more respondents was 36 - 40 years 47(33.6%) followed by 26 - 30 years 40(28.6%), 20 – 25 years 31(22.1%) and the group with the least respondents was 41 and above years 22(15.7%).

Most of the respondents had worked with the company for 5 and above years 81(57.9%) followed by 1-2 years working experience with the firm 42(30) while 17(12.1%) had worked with the firm between 3-4 years. A greater number of the respondents 126(90) were from the core production unit of the firm while few 14(10%) were from the administrative wing. Majority of the subjects 78(55.7%) were junior staff rank while minority formed senior staff 62(44.4%).
### 4.2. Employees’ age, sex and level of education and OHS

#### Table 4.2 Correlation showing Relationship between Employees’ age, sex and level of Education and OHS, N=140

<table>
<thead>
<tr>
<th>Correlation between employees’ characteristics and OHS issues</th>
<th>Pearson Chi square coefficient (p)value</th>
<th>Interpretation</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orientation for staff.</td>
<td>Age 0.740</td>
<td>Strong</td>
<td>15.618</td>
</tr>
<tr>
<td></td>
<td>Sex 0.343</td>
<td>Weak</td>
<td>4.496</td>
</tr>
<tr>
<td></td>
<td>Education level 0.616</td>
<td>Strong</td>
<td>9.997</td>
</tr>
<tr>
<td>Job specification for staff</td>
<td>Age 0.506</td>
<td>Strong</td>
<td>19.247</td>
</tr>
<tr>
<td></td>
<td>Sex 0.754</td>
<td>Strong</td>
<td>1.901</td>
</tr>
<tr>
<td></td>
<td>Education level 0.753</td>
<td>Strong</td>
<td>8.399</td>
</tr>
<tr>
<td>Supervision on health and safety</td>
<td>Age 0.178</td>
<td>Weak</td>
<td>25.652</td>
</tr>
<tr>
<td></td>
<td>Sex 0.442</td>
<td>Weak</td>
<td>3.746</td>
</tr>
<tr>
<td></td>
<td>Education level 0.011*</td>
<td>Very weak</td>
<td>26.018</td>
</tr>
<tr>
<td>Enforcement of safety rules</td>
<td>Age 0.211</td>
<td>Weak</td>
<td>24.757</td>
</tr>
<tr>
<td></td>
<td>Sex 0.234</td>
<td>Weak</td>
<td>5.563</td>
</tr>
<tr>
<td></td>
<td>Education level 0.051</td>
<td>Very weak</td>
<td>20.833</td>
</tr>
<tr>
<td>Duration for orientation</td>
<td>Age 0.477</td>
<td>Weak</td>
<td>19.690</td>
</tr>
<tr>
<td></td>
<td>Sex 0.544</td>
<td>Strong</td>
<td>3.081</td>
</tr>
<tr>
<td></td>
<td>Education level 0.001*</td>
<td>No correlation</td>
<td>32.640</td>
</tr>
<tr>
<td>Declaration of risk associated with specific tasks</td>
<td>Age 0.504</td>
<td>Strong</td>
<td>19.270</td>
</tr>
<tr>
<td></td>
<td>Sex 0.218</td>
<td>Weak</td>
<td>5.762</td>
</tr>
<tr>
<td></td>
<td>education level 0.456</td>
<td>Weak</td>
<td>11.878</td>
</tr>
<tr>
<td>Laid down procedures for tasks performance.</td>
<td>Age 0.544</td>
<td>Strong</td>
<td>18.656</td>
</tr>
<tr>
<td></td>
<td>Sex 0.925</td>
<td>Very strong</td>
<td>0.898</td>
</tr>
<tr>
<td></td>
<td>Education level 0.824</td>
<td>Very strong</td>
<td>7.480</td>
</tr>
<tr>
<td>Involvement of staff on drawing safe work procedures</td>
<td>Age 0.913</td>
<td>Very strong</td>
<td>12.092</td>
</tr>
<tr>
<td></td>
<td>Sex 0.793</td>
<td>Strong</td>
<td>1.685</td>
</tr>
<tr>
<td></td>
<td>Education level 0.925</td>
<td>Very strong</td>
<td>5.823</td>
</tr>
<tr>
<td>Regular update of safe work procedures</td>
<td>Age 0.461</td>
<td>Weak</td>
<td>19.957</td>
</tr>
<tr>
<td></td>
<td>Sex 0.403</td>
<td>Weak</td>
<td>4.025</td>
</tr>
<tr>
<td></td>
<td>Education level 0.116</td>
<td>Weak</td>
<td>17.974</td>
</tr>
<tr>
<td>Workplace rules to keep staff healthy</td>
<td>Age 0.390</td>
<td>Weak</td>
<td>21.129</td>
</tr>
<tr>
<td></td>
<td>Sex 0.567</td>
<td>Strong</td>
<td>2.946</td>
</tr>
<tr>
<td></td>
<td>Education level 0.376</td>
<td>Weak</td>
<td>12.910</td>
</tr>
<tr>
<td>Food safety practices at workplace</td>
<td>Age 0.431</td>
<td>Weak</td>
<td>20.438</td>
</tr>
<tr>
<td></td>
<td>Sex 0.597</td>
<td>Strong</td>
<td>2.773</td>
</tr>
<tr>
<td></td>
<td>Education level 0.368</td>
<td>Weak</td>
<td>13.017</td>
</tr>
</tbody>
</table>

Source: Author’s calculation based on field data 2015.

Pearson Correlation: Significant at p<0.05. *categories column do differ significantly from each other at the level of 0.05.
Table 4.2 shows that there is a strong relationship between respondent’s age and level of education and orientation training. This might be so because ones level of education and age affects the reasoning and worldview of issues. The age factor here may also be due to the work experience of the employees in the firm or similar company. There is a weak correlation between supervision on health and safety issues and the demographic characteristics of the participants. This is so because some tasks are performed not based on gender. Similarly, there is no correlation between educational level and duration for orientation of newly employed staff, this is so because there is a standard period for orientation for newly recruited staff irrespective of educational level.

4.3 Employees’ understanding of OHS by sex.

Table 4.3: Cross tabulation of participants mean responses on employees’ understanding of OHS by sex, N=140.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Sex</th>
<th>Total mean</th>
<th>ANOVA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td></td>
</tr>
<tr>
<td>Rules relating to workplace health</td>
<td>2.47(81.8)</td>
<td>2.59(18.2)</td>
<td>3.39</td>
</tr>
<tr>
<td>Rules and regulation for workers wellbeing</td>
<td>2.86(79.1)</td>
<td>3.32(20.9)</td>
<td>3.46</td>
</tr>
<tr>
<td>Prevention of workplace fire outbreak</td>
<td>2.93(82.1)</td>
<td>3.15(17.9)</td>
<td>3.18</td>
</tr>
<tr>
<td>Food safety practices at workplace</td>
<td>2.77(81.4)</td>
<td>2.97(18.6)</td>
<td>2.56</td>
</tr>
<tr>
<td>Preventing road accidents</td>
<td>2.34(80.5)</td>
<td>2.69(19.5)</td>
<td>2.40</td>
</tr>
<tr>
<td>Do not know the actual meaning</td>
<td>2.30(80.5)</td>
<td>2.62(19.5)</td>
<td>2.42</td>
</tr>
</tbody>
</table>

Source: Author’s calculation based on field data 2015.

The numbers in parentheses () denotes percentages %. Significant at p<0.05
Table 4.3 is the interpretation of the respondents mean responses of the meaning of OHS in relation to their gender. Section C looked at respondents own meaning of OHS. The figures in the table 4.3 show that sex has no influence on one’s own understanding of OHS. Respondents always held the meaning of OHS as ‘rules and regulations to ensure our wellbeing’. This was statistically supported by the P value from the table 0.02 which is less than the P value of 0.05.

4.4. Employees’ attitude to OHS by marital status

Table 4.4: Cross tabulation of Participants responses on Employees’ attitude to OHS by marital status. N=140

<table>
<thead>
<tr>
<th>Variables</th>
<th>Marital status</th>
<th>Total mean</th>
<th>ANOVA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Single</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td></td>
<td>married</td>
<td>Widowed</td>
<td>separated</td>
</tr>
<tr>
<td>Staff training on safety</td>
<td>2.55(43.8)</td>
<td>2.13(11.9)</td>
<td>2.86(15.3)</td>
</tr>
<tr>
<td>Declaration of risk associated with specific tasks</td>
<td>2.80(45.0)</td>
<td>2.88(11.6)</td>
<td>3.37(16.1)</td>
</tr>
<tr>
<td>Rules at the workplace to ensure staff wellbeing</td>
<td>2.80(40.8)</td>
<td>3.00(13.9)</td>
<td>3.38(14.9)</td>
</tr>
<tr>
<td>Supporting coworkers in safety practices</td>
<td>2.63(40.4)</td>
<td>2.70(13.4)</td>
<td>3.09(14.7)</td>
</tr>
<tr>
<td>Increase in productivity of the firm</td>
<td>2.25(40.1)</td>
<td>2.17(12.5)</td>
<td>2.73(15.0)</td>
</tr>
<tr>
<td>I always see OHS as very important</td>
<td>2.30(41.9)</td>
<td>2.30(13.6)</td>
<td>2.76(14.9)</td>
</tr>
</tbody>
</table>

Source: Author’s calculation based on field data 2015.

The numbers in parentheses () denotes percentages %. Significant at p<0.05
Table 4.4 is showing participants responses on the relationship between employees’ attitude to OHS and their marital status. The marital statuses of respondents have no significant influence on their attitude to OHS because the P values are greater than the value 0.05.

4.5. Employees’ attitude to OHS by level of education.

Table 4.5: Cross tabulation of Participants mean responses on Employees’ attitude to OHS by level of education, N=140

<table>
<thead>
<tr>
<th>Variables</th>
<th>Level of Education</th>
<th>Total mean</th>
<th>ANOVA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Basic</td>
<td>Secondary</td>
<td>Vocational</td>
</tr>
<tr>
<td>Orientation for staff.</td>
<td>2.63(10.2)</td>
<td>2.76(19.4)</td>
<td>2.17(28.3)</td>
</tr>
<tr>
<td>Declaration of risk associated with specific tasks</td>
<td>3.13(11.8)</td>
<td>3.14(17.3)</td>
<td>2.72(29.4)</td>
</tr>
<tr>
<td>Rules relating to workplace health</td>
<td>3.70(10.1)</td>
<td>3.07(18.7)</td>
<td>2.85(31.8)</td>
</tr>
<tr>
<td>Supporting coworkers in safety practices</td>
<td>2.94(10.2)</td>
<td>2.86(17.9)</td>
<td>2.69(31.3)</td>
</tr>
<tr>
<td>Increase in productivity of the firm</td>
<td>2.69(10.8)</td>
<td>2.38(17.3)</td>
<td>2.35(31.8)</td>
</tr>
<tr>
<td>I always see OHS as very important</td>
<td>2.44(10)</td>
<td>2.50(18.1)</td>
<td>2.22(30.8)</td>
</tr>
</tbody>
</table>

Source: Author’s calculation based on field data 2015. The numbers in parentheses () denotes percentages %. Significant at p<0.05
The level of respondents’ educational and its influence on the mean responses on Employees’ attitude to OHS were also examined in table 4.5 above. The table shows that respondents’ educational level affects their orientation training; this is because one’s educational level helps to read and comprehend issues of OHS better. Statistically this is proven significantly as the P value 0.013 or 0.01 is less than P value 0.05. The above finding was confirmed by the production supervisors in their responses. Anecdotal evidence from one of the respondents aptly puts it:

‘Our staff have positive attitude to health and safety issues they know the consequences of violating safety rules at work. They are trained to be aware of the dangers of such acts. They have embraced the safety rules and regulations at the workplace and behave as such because they know safety cannot be compromised in the company and any violation comes with a price to pay. It is compulsory to every staff to wear personal protective equipment at work’
4.6 Employees’ responses on safety at the workplace.

Table 4.6 Employees’ responses on the issue of safety at the workplace, N=140

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>N</th>
<th>Never (1)</th>
<th>Sometimes(2)</th>
<th>Usually(3)</th>
<th>Always(4)</th>
<th>Average Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard training manual for safety</td>
<td>140</td>
<td>8(5.7%)</td>
<td>48(34.3%)</td>
<td>27(19.3%)</td>
<td>57(40.7%)</td>
<td>2.95</td>
</tr>
<tr>
<td>Involvement of staff on drawing safe work procedures</td>
<td>140</td>
<td>12(8.6%)</td>
<td>25(17.9%)</td>
<td>42(30%)</td>
<td>61(43.6%)</td>
<td>3.09</td>
</tr>
<tr>
<td>Workplace food safety</td>
<td>140</td>
<td>27(19.3%)</td>
<td>53(37.9%)</td>
<td>14(10.0%)</td>
<td>46(32.9%)</td>
<td>2.56</td>
</tr>
<tr>
<td>Preventing road accidents</td>
<td>140</td>
<td>29(20.7%)</td>
<td>52(37.1%)</td>
<td>33(23.6%)</td>
<td>26(18.6%)</td>
<td>2.40</td>
</tr>
<tr>
<td>Do not know the actual meaning</td>
<td>140</td>
<td>34(24.3%)</td>
<td>49(34.4%)</td>
<td>21(15.0%)</td>
<td>36(25.7%)</td>
<td>2.42</td>
</tr>
<tr>
<td>Meeting production targets</td>
<td>140</td>
<td>19(13.6%)</td>
<td>16(11.4%)</td>
<td>40(28.6%)</td>
<td>65(46.4%)</td>
<td>3.08</td>
</tr>
<tr>
<td>Increases productivity</td>
<td>140</td>
<td>2(1.4%)</td>
<td>46(32.9%)</td>
<td>17(12.1%)</td>
<td>75(53.6%)</td>
<td>3.18</td>
</tr>
<tr>
<td>Orientation for staff</td>
<td>140</td>
<td>11(7.9%)</td>
<td>30(21.4%)</td>
<td>12(8.6%)</td>
<td>87(62.1%)</td>
<td>3.25</td>
</tr>
<tr>
<td>Declaration of risk associated with specific tasks</td>
<td>140</td>
<td>1(0.7%)</td>
<td>51(36.4%)</td>
<td>39(27.9%)</td>
<td>49(35%)</td>
<td>2.97</td>
</tr>
</tbody>
</table>

Source: Author’s calculation based on field data 2015.

Table 4.6 is the analysis of the employees’ views on the issue of safety at the workplace. With average response mean of 3.09 looked at the involvement of staff in decision making concerning health and safety, most of the respondents 61(43.6%) asserted that they are always involved in safety decision making, followed by 42(30%) with the view that they are usually involved in such decision making. Sometimes employees are involved in the safety decision making, this is the assertion by 25(17.9%) while a few 12(8.6%) of the respondents said they are never involved
in the decision process. The attitude of employees to OHS was also analyzed in the table, with a mean response rate of 3.25, majority of the respondents 87(62.1%) said their supervisors always ensures their safety by assigning them to jobs that they can perform safely while a few 11(7.9%) said their safety is never considered by their managers when assigning them a duty. The views of the respondents were also sought on the effects that OHS has on their job performance. One of the items measured was job performance, majority 65(46.4%) of the participants believed that by observing OHS guide lines always enabled them to meet set targets by their departments while minority of 19(13.6%) had opposing views. The effect of OHS on individual performance was also measured, with a mean response rate of 3.18, majority 75(53.6%) of the respondents believed that this practice increased their unit output.

From the table above it is clear that the knowledge level of employees on OHS is high. This is due to the involvement of staff in safety decision making and continuous training on health and safety. Majority (82.61%) of the respondents mentioned that there is continuous training of staff on OHS and majority (73.04%) of them expressed similar sentiment in the level of employee autonomy at the workplace adding more facts that staffs are conscientized on the need for safety at work. These responses by the factory hands were confirmed by responses from supervisors as:

‘We put enough time and resources into safety by training our staff in health and safety, reporting of accidents and diseases and role assessment of the staff, supervisors mean and do what they say in safety matters and reported safety incidences are fixed immediately. Workers are made aware that safety matters cannot be compromised. They are given personal protective equipment and other safety gargets that it is compulsory to use when performing a role’.
4.7 Employees’ characteristics and health and safety

Table 4.7 Correlation between Employees’ characteristics and issue of health and safety at workplace, N=140

<table>
<thead>
<tr>
<th>Correlation between Employees’ characteristics and issue of health and safety at workplace.</th>
<th>Pearson Chi square coefficient (p) value</th>
<th>Interpretation</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard training manual for safety</td>
<td>Age</td>
<td>0.542</td>
<td>Strong</td>
</tr>
<tr>
<td>Sexual</td>
<td>0.037*</td>
<td>Very weak</td>
<td>8.511</td>
</tr>
<tr>
<td>Education</td>
<td>0.079</td>
<td>Very weak</td>
<td>15.443</td>
</tr>
<tr>
<td>Involvement of staff on drawing safe work procedures</td>
<td>Age</td>
<td>0.251</td>
<td>Weak</td>
</tr>
<tr>
<td>Sexual</td>
<td>0.057</td>
<td>Very weak</td>
<td>7.518</td>
</tr>
<tr>
<td>Education</td>
<td>0.053</td>
<td>Very weak</td>
<td>16.750</td>
</tr>
<tr>
<td>Workplace food safety</td>
<td>Age</td>
<td>0.016*</td>
<td>Very weak</td>
</tr>
<tr>
<td>Sexual</td>
<td>0.264</td>
<td>Weak</td>
<td>3.977</td>
</tr>
<tr>
<td>Education</td>
<td>0.500</td>
<td>Strong</td>
<td>8.345</td>
</tr>
<tr>
<td>Preventing road accidents</td>
<td>Age</td>
<td>0.032*</td>
<td>Very weak</td>
</tr>
<tr>
<td>Sexual</td>
<td>0.165</td>
<td>Weak</td>
<td>5.092</td>
</tr>
<tr>
<td>Education</td>
<td>0.872</td>
<td>Strong</td>
<td>4.546</td>
</tr>
<tr>
<td>Do not know the actual meaning</td>
<td>Age</td>
<td>0.046*</td>
<td>Very weak</td>
</tr>
<tr>
<td>Sexual</td>
<td>0.823</td>
<td>Very strong</td>
<td>0.912</td>
</tr>
<tr>
<td>Education</td>
<td>0.347</td>
<td>Weak</td>
<td>10.049</td>
</tr>
<tr>
<td>Meeting set targets</td>
<td>Age</td>
<td>0.590</td>
<td>Strong</td>
</tr>
<tr>
<td>Sexual</td>
<td>0.277</td>
<td>Weak</td>
<td>3.859</td>
</tr>
<tr>
<td>Education</td>
<td>0.702</td>
<td>Strong</td>
<td>6.376</td>
</tr>
<tr>
<td>Increases productivity</td>
<td>Age</td>
<td>0.573</td>
<td>Strong</td>
</tr>
<tr>
<td>Sexual</td>
<td>0.396</td>
<td>Weak</td>
<td>65.310</td>
</tr>
<tr>
<td>Education</td>
<td>0.186</td>
<td>Weak</td>
<td>271.852</td>
</tr>
</tbody>
</table>

Source: Author’s calculation based on field data 2015.

Pearson Correlation: -1=perfect negative correlation, +1=perfect positive linear correlation, 0= no correlation, <0.5=weak correlation and >0.5 strong correlation, significant at p<0.05. *categories column do differ significantly from each other at the level of 0.05.
Table 4.7 shows the results of correlational analysis between Employees’ characteristics (sex, age and educational level) and issue of health and safety at the workplace, the duration for orientation regarding OHS at the work place was looked at, the results from the table shows that there is very weak correlation between one’s educational level and sex and time used to learn about safe work procedures. On the contrally, there is a strong relationship between the age of the staff and duration for training on OHS because the Pearson correlation coefficient (p) value 0.542 is greater than 0.05.

The researcher also sought to know from the respondents their own meaning of OHS, the table showed that there is a strong correlation between one’s educational level and his/her understanding of the meaning of OHS however, a person’s age and sex have weak correlation to the understanding of the meaning of OHS.
4.8 Employees’ attitude to health and safety.

Table 4.8: Cross tabulation of participants mean responses on Employees’ attitude to health/ safety at the workplace. N=140

<table>
<thead>
<tr>
<th>variables</th>
<th>Ages of the Respondents</th>
<th>Total mean</th>
<th>ANOVA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>20-25</td>
<td>26-30</td>
<td>36-40</td>
</tr>
<tr>
<td>Orientation for staff</td>
<td>3.23(30.2)</td>
<td>3.28(14.7)</td>
<td>3.38(9.7)</td>
</tr>
<tr>
<td>Staff training on safety</td>
<td>3.21(30.4)</td>
<td>3.48(15.8)</td>
<td>3.13(9.1)</td>
</tr>
<tr>
<td>Supervision on health and safety</td>
<td>3.17(29.9)</td>
<td>3.60(16.3)</td>
<td>3.56(10.3)</td>
</tr>
<tr>
<td>Enforcement of safety rules</td>
<td>3.25(30.5)</td>
<td>3.67(15.9)</td>
<td>3.80(10.3)</td>
</tr>
<tr>
<td>Duration for orientation</td>
<td>3.15(30.1)</td>
<td>3.52(16.2)</td>
<td>3.63(10.7)</td>
</tr>
<tr>
<td>Declaration of risk associated with specific tasks</td>
<td>3.23(29.2)</td>
<td>3.60(15.7)</td>
<td>3.94(11)</td>
</tr>
<tr>
<td>Laid down procedures for tasks performance</td>
<td>3.25(29.3)</td>
<td>3.96(16)</td>
<td>3.95(10.9)</td>
</tr>
<tr>
<td>Involvement of staff on drawing safe work procedures</td>
<td>3.62(30.4)</td>
<td>3.96(16)</td>
<td>4.13(10.7)</td>
</tr>
<tr>
<td>Standard training manual for safety</td>
<td>3.13(28)</td>
<td>3.88(16.6)</td>
<td>4.19(11.5)</td>
</tr>
</tbody>
</table>

Source: Author’s calculation based on field data 2015. The numbers in parentheses () denotes percentages %. Significant at p<0.05

Employees’ attitude to health/ safety at the workplace was also measured from participants based on participants mean responses on employees’ attitude to health/ safety at the workplace. From the table 4.8 it is clear that the company has safety protocols for every department based on the
risk factors associated with the tasks performed there and every employee is expected to follow these protocols. This is because the existence of safety protocols at the workplace was looked at and the P value of 0.022 is statistically significant as it is less than 0.05. The responses of respondents show that the firm is serious with health and safety issues as the protocols are updated from time to time to meet modern times.

4.9. Demographic characteristics and attitude to OHS.

Table 4.9. Chi-square analysis of respondents’ demographic characteristics and attitude to OHS issues in the firm. N=140

<table>
<thead>
<tr>
<th>Respondents’ demographic characteristics</th>
<th>Chi-square value</th>
<th>d/f</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>24.507</td>
<td>12</td>
<td>0.017</td>
</tr>
<tr>
<td>Sex</td>
<td>8.064</td>
<td>8</td>
<td>0.427</td>
</tr>
<tr>
<td>Educational level</td>
<td>10.353</td>
<td>8</td>
<td>0.002</td>
</tr>
<tr>
<td>Marital status</td>
<td>37.078</td>
<td>16</td>
<td>0.241</td>
</tr>
</tbody>
</table>

Table 4.9 depicts chi-square values, degree of freedom as well as probability of respondents’ demographic characteristics to their attitude to OHS issues in the firm. The statistics show that there is a significant relationship between respondents’ age and educational level and their attitude to occupational health and safety in the firm. With age almost two-thirds (68%) of respondents showed positive attitude to OHS at the workplace. There seem to be no significant relationship between sex and marital statuses of respondents’ and their attitude to OHS issues in the firm.
4.10: Employees skills Development, Autonomy and Communication flow.

Table 4.10: Employees skills Development, Autonomy at workplace and Communication flow N= 140

<table>
<thead>
<tr>
<th>Employees skills Development, autonomy and Communication flow</th>
<th>never</th>
<th>sometimes</th>
<th>usually</th>
<th>always</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skills development</td>
<td>3.48</td>
<td>12.17</td>
<td>49.57</td>
<td>33.04</td>
<td>3.087</td>
<td>0.864</td>
</tr>
<tr>
<td>Autonomy</td>
<td>8.70</td>
<td>13.91</td>
<td>47.82</td>
<td>25.22</td>
<td>3.809</td>
<td>1.051</td>
</tr>
</tbody>
</table>

Table 4.10 summarizes the statistical information on respondents’ skill development, their level of autonomy at workplace and communication flow between superiors and subordinates at blue skies Ghana limited. The mean derived from responses on employee skills development and the mean for level of employee autonomy indicate that the respondents agreed that they get training and are allowed to work independently once they have been trained for a particular tasks. Supervisors do not interfere unless the employee encounters problems performing a particular task. An overwhelming majority (82.61%) of the respondents mentioned that there is continuous training of staff on OHS. Also an overwhelming majority (73.04%) expressed similar sentiment in the level of employee autonomy at the workplace. However, the mean for communication flow indicates that an appreciable number of respondents who represented 60.87%, were of the view that communication flowed usually from the supervisors to the employees through the display of posters at vantage point in the firm, circulars and memos are also released from time to time.
4.11: Chi-square analysis of employee skill development.

Table 4.11: Chi-square analysis of employee skill development by demographic data, N=140.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Chi-square value</th>
<th>d/f</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>19.248</td>
<td>12</td>
<td>0.083</td>
</tr>
<tr>
<td>Sex</td>
<td>6.413</td>
<td>8</td>
<td>0.601</td>
</tr>
<tr>
<td>Educational level</td>
<td>5.716</td>
<td>8</td>
<td>0.679</td>
</tr>
<tr>
<td>Marital status</td>
<td>19.444</td>
<td>16</td>
<td>0.246</td>
</tr>
</tbody>
</table>

In table 4.11, the chi-square value, degree of freedom and probability level of respondents’ rate of skill development are displayed. The statistics show that there are no significant relationships between employees’ skills development and all the personal information of respondents.
4.12: Chi-square analysis of information flow on OHS

Table 4.12: Chi-square analysis of information flow on OHS
N=140

<table>
<thead>
<tr>
<th>Variable</th>
<th>Chi-square value</th>
<th>d/f</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy documents</td>
<td>7.878</td>
<td>12</td>
<td>0.795</td>
</tr>
<tr>
<td>Posters</td>
<td>18.020</td>
<td>8</td>
<td>0.021</td>
</tr>
<tr>
<td>Circulars</td>
<td>7.245</td>
<td>8</td>
<td>0.510</td>
</tr>
<tr>
<td>In service training.</td>
<td>23.800</td>
<td>16</td>
<td>0.094</td>
</tr>
</tbody>
</table>

Table 4.12 indicates the flow of information about OHS at the workplace. The information contained in the table includes the chi-square value, degree of freedom as well as probability level of respondents’ thoughts on how communication about OHS issues flow. According to the statistics, almost all the information flow variables do not register any significant relationship with how often communication flows between the respondents and their superiors save posters that showed a significant relationship of sometimes communication flow with (81.6%) for males as against (44%) for females.
4.13. Chi-square analysis of respondents consulting supervisor.

Table 4.13: Chi-square analysis of respondents consulting supervisors by demographic data. N=140

<table>
<thead>
<tr>
<th>Demographic variable</th>
<th>Chi-square value</th>
<th>d/f</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>5.470</td>
<td>12</td>
<td>0.940</td>
</tr>
<tr>
<td>Sex</td>
<td>8.018</td>
<td>8</td>
<td>0.432</td>
</tr>
<tr>
<td>Educational level</td>
<td>16.020</td>
<td>8</td>
<td>0.042</td>
</tr>
<tr>
<td>Marital status</td>
<td>15.527</td>
<td>16</td>
<td>0.486</td>
</tr>
</tbody>
</table>

Table 4.13 indicates that there is a significant relationship between respondents’ dependence on supervisors and their level of education but there is no significant relationship between respondents’ age, sex as well as marital status and their dependence on supervisors for direction and guidance.

A cross-tabulation involving personal data of respondents and the rate of their dependence on superiors produced a chi-square value of 5.470, d/f of 12 and probability level of 0.940 for age, meaning no significant relationship. Sex produced chi-square values of 8.018, d/f value of 8 and level of probability value of 0.432. This also indicates no significant relationship between the two variables. Again, there is no significant relationship between marital status and dependence on supervisors. However, there is a significant relationship between respondents’ educational level and their dependence on supervisors. The higher the educational level of the employees, the lesser the dependence on their supervisors.
4.14. Chi square value showing OHS issues

Table 4.14: Chi square value showing OHS issues and demographic characteristics

N=11

<table>
<thead>
<tr>
<th>Demographic characteristics</th>
<th>Mean</th>
<th>Chi-square value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy on OHS issues in the firm by sex</td>
<td>1.36</td>
<td>9.538</td>
</tr>
<tr>
<td>Meaning of OHS in the firm by Age</td>
<td>3.73</td>
<td>7.909</td>
</tr>
<tr>
<td>Implementation of OHS by Marital status</td>
<td>1.82</td>
<td>11.251</td>
</tr>
<tr>
<td>Employees attitude to OHS by Educational level</td>
<td>3.82</td>
<td>22.279</td>
</tr>
<tr>
<td>Employees attitude to OHS by Number of years at work</td>
<td>3.00</td>
<td>9.538</td>
</tr>
<tr>
<td>Meaning of OHS in the firm by department</td>
<td>1.09</td>
<td>7.909</td>
</tr>
<tr>
<td>Employees attitude to OHS by position</td>
<td>1.18</td>
<td>9.538</td>
</tr>
</tbody>
</table>

Multiple responses

Table 4.14 indicates that apart from respondents’ educational level, age and years in service the rest of the demographic characteristics such as sex, marital status, department and position have no significant relationship to OHS issues in the firm. With a mean value of 3.82 and a chi square value of 22.279 there is a significant relationship between respondents’ Educational level and their attitude to OHS issues. Similarly employees attitude to OHS is influenced by their number of years at work, this is depicted by the mean of 3.00 and a chi square value of 9.538 from the table above, there is also a significant relationship between the employees meaning of OHS in the firm and their Ages 3.73 7.909.
4.15. Chi square values showing respondents’ roles in association with OHS

Table 4.15: Chi square values showing respondents roles in association with OHS

N=11

<table>
<thead>
<tr>
<th>Respondents roles of OHS</th>
<th>Mean values</th>
<th>Chi square values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time and resources into safety</td>
<td>3.82</td>
<td>7.909</td>
</tr>
<tr>
<td>Safety is a priority area of the firm</td>
<td>3.82</td>
<td>11.251</td>
</tr>
<tr>
<td>Managers /supervisors practice what they preach in safety issues</td>
<td>3.55</td>
<td>22.279</td>
</tr>
<tr>
<td>We have standard procedures for reporting accidents</td>
<td>3.91</td>
<td>9.538</td>
</tr>
<tr>
<td>We encourage our staff to report accidents promptly</td>
<td>4.00</td>
<td>7.909</td>
</tr>
<tr>
<td>We fix reported safety incidences immediately</td>
<td>3.36</td>
<td>11.251</td>
</tr>
</tbody>
</table>

Multiple responses

Table 4.15 summarizes chi square values and mean responses of respondents on their roles in association OHS. The mean values from the table shows that participants played their roles seriously to ensuring OHS at the work place.
4.16 Description of health and safety and awareness creation amongst staff.

The description of health and safety from the company’s perspective was also explored. It revealed that the health and safety have been integrated into the daily activities of the firm, the health of the staff is seen as the life of the firm and therefore safety issues are not overlooked at all. One respondent in stating that stated that:

“Health and safety is seen as an integral part of the operations of the company, the health and safety of the staff is the life of the company hence it is not seen as an issue that has to do with common sense but as a company’s policy”

Another respondent came up with a more stronger position and had this to say with an anecdotal evidence:

“Our awareness is increased through seminars, workshops, posting of notices at vantage places in the working environment, role plays and drill performances by expects for the workers to learn from them and organizing health talks on topical issues like outbreaks and issuance of weekly safety slogans”
CHAPTER FIVE

DISCUSSION OF MAJOR FINDINGS

5.0 Introduction

This chapter discusses the findings of the study. The discussion was done with the objectives in mind. The discussions were done around the main thematic areas which include the workers knowledge about health and safety at the workplace, the attitude put up by the staff concerning occupational health and safety, employees’ job performance (Productivity) and the management’s role to ensure occupational health and safety of the staff.

5.1 Employees knowledge about health and safety at the workplace

The study revealed that there is an enthusiastic interest in the staff as far as health and safety is concerned in the workplace as evidenced by the meaning of occupational health and safety given by the employees. The study revealed the mean response on the meaning of occupational health and safety is 3.46 at a P value of 0.020. The workers gave an understanding of occupational health and safety as ‘Rules and regulations for workers wellbeing’. This shows that they have a fair idea about occupational health and safety in the working environment. Majority (82.61%) of the respondents mentioned that there is continuous training of staff on occupational health and safety and the majority (73.04%) of them expressed similar sentiment in the level of employee autonomy at the workplace adding more facts that staffs are conscientized on the need for safety at work. This might have influenced the attitude of the workers of Blue Skies Ghana limited towards occupational health and safety. This is consistent with Alfers (2010) position that
workers would adopt good occupational health and safety practices based on the knowledge that, they are vulnerable to accidents at the work place. Again, this view supports that of Mills (2007), who sees investing in training activities that provide relevant information to staff to promote health and safety reduces the level of risk that employees will face. Furthermore, this is in congruent to Gyapong et al (2009) that employees can only fall victim if they are not aware of the potential danger that is lurking because the worker’s knowledge that there is a possible danger to life in itself is a form of accident prevention.

5.2 Employees attitude towards health and safety regulations at the workplace

Observations made during the data collection period shows that staff of blue skies Ghana limited take safety and health issues serious, they were always in safety dresses depending on their department. This positive attitude by the workers might be due to the rigorous orientation all newly employed staffs are taken through before they start work and the regular in service training organized for staff of blue skies. The statistics from table 4.10 show that there is a significant relationship between respondents’ age and educational level and their attitude to occupational health and safety in the firm. With age almost two-thirds (68%) of respondents showed positive attitude to occupational health and safety at the workplace. This positive attitude of blue skies workers can be linked to the measures put in place by the firm to make them aware of the dangers associated with disregarding safety rules. This is supported by Alfers, (2010) position that if an employee knows a faulty plant can cut off his or her hand or kill him or her, he or she will change his or her attitude, observe safety measures and become vigilant.
5.3. Employees job performance (Productivity)

Performance is a key factor when it comes to the growth of an organization. The study showed that, majority 65(46.4%) of the participants believed that by observing occupational health and safety guide lines always enabled them to meet set targets by their departments because there is no absenteeism, they feel fit and work well. The effect of occupational health and safety on individual performance was also measured, with a mean response rate of 3.18, majority 75(53.6%) of the respondents believed that this practice increased their unit output. This assertion by the employees was also corroborated by the heads of departments that a healthy staff is a productive staff.

The management of blue skies recognizes the impact of health and safety on meeting the targets of the firm or improving upon the job performance of the workers. This has made them to put in place measures like developed better working conditions and purchased safer equipment, redesigned the management process, modified site and invested in training activities that provide relevant information to promote health and safety (Mills, 2007). This reduces the level of risk that employees face and increase net production.

Again, this action by management is supported by Burton (2006) assertion that good safety work practices not only provide a safer working environment but also improve worker morale and productivity because by pursuing good occupational health and safety practices, businesses face fewer workplace injuries and benefit from higher employee retention rates and enhanced corporate image. This reduces the costs associated with production delays, recruiting new staff and replacing equipment and avoids the resulting uncertainty and workload pressure placed on co-workers (Towers, 2009). Lamm, Massey and
Perry (2006) supports the action of blue skies management that providing a healthy and safe working environment has the potential to increase labour productivity and in turn increase business profits. In addition, findings of another study by De Greef and Van den Broek (2004) are in congruence with the assertion that health and safety measures have a positive impact not only on safety and health performance, but also on company productivity. It stands to reason that since the employees of blue skies are observing safety rules strictly, the organization has the potential to grow.

5.4 Roles played by management to ensure health and safety of employees

The mean values from table 4.16 shows that participants played their roles seriously to ensuring occupational health and safety at the work place. They perform the role by ensuring that workers are well orientated, periodically organize workshops about safety at the workplaces and even sponsor some of the safety officers to get training from safety consultants. Management provides the right equipment for the workers to work with and undertakes periodic shutdowns to do serious maintenance of the machines used for the work. Medical examinations are organized yearly for staff to know their health statuses.

Due to the need for continuous training of staff in safety issues blues skies Ghana limited management has reviewed the minimum employment requirement for productive staff now to be the secondary level education, this action at blue skies is supported by the findings of Heemskerk (2000) that illiteracy was a barrier to staff training and effective health and safety management in developing countries.

Management at blue skies recognizes that safety issues cannot be left to the discretion of the staff so enforcement measures are put in place in each department and this responsibility is on the
heads of department to properly supervise their subordinates to observe safety rules. This practice by blue skies management is backed by Buck Consultants (2009) and Jamison (2006) that the individual employee cannot be expected to achieve a transformation towards a healthier lifestyle on his or her own without the employer providing policies, information, resources and good working environment to enable behavior change.

The findings from this study are in contrast to the assertion by Andrew (2003) that working under poor conditions are a poverty-driven activity, and frequently occur in developing countries where there is a lack of employment opportunities. Even though Ghana is a developing country the management of blue skies Ghana Limited has not used that as an excuse but has put in safety measures to keep workers healthy. At blue skies, management believes that exposing staff to injuries or the occurrence of accidents affects the corporate image and this was expressly evident by respondents who think that their external image is important just as their internal image. This was what they have to say:

‘Our corporate credibility is at stake and therefore we are morally and duty bound to ensure safety and health at the workplaces to give us a competitive advantage over our competitors’

The above assertion by these respondents is in support of the views of Towers (2009) who opined that fear of loss of corporate credibility and a belief that it is necessary and morally correct to comply with health and safety regulations make employers ensure safety at workplaces but in contrast to findings of Gyapong et al (2007) and Gyekye (2007) who hold the views that employers in developing countries think creating employment opportunities for people is like a favour and therefore the issue of morality is lost on them making the employee very vulnerable when it comes to occupational health and safety compliance.
CHAPTER SIX
SUMMARY, CONCLUSION AND RECOMMENDATIONS

6.0 Introduction

This chapter presents the summary of the study as well as the conclusions drawn from the results of the whole study and recommendations for future research are also made.

6.1 Summary

The study looked at the effect of occupational health and safety on the job performance (productivity) of employees of blue skies Ghana limited. It specifically looked at the knowledge level of employees and their attitude to occupational health and safety issues in the company. The role of management of the firm to ensuring health and safety of the employee was also examined in the study. The study adopted the mixed method approach and a cross sectional survey as the design. In all 151 respondents were used. This comprised 140 factory hands randomly selected after stratification of the production unit of the firm and 11 heads of department who were purposively sampled for the study. Even though the study is limited to the company under review, the findings can serve as bases for future similar research work in occupational health and safety in other not much researched companies. The key findings are summarized along the objectives of the study as follows.

There is a high knowledge level of occupational health and safety among the workers of blue skies Ghana limited and because they know the consequence of this they abide by the safety rules of the firm to ensure that they are not in danger. Through continuous training and
workshops the workers are made aware of the dangers of engaging in unsafe acts, the effect on
the individual worker, his family, the firm and the society as a whole.

As the adage goes knowledge is power and as stated in the Bible without knowledge my people
perish, because these workers are aware of the dangers of unsafe acts they have positive attitudes
towards occupational health and safety issues since injury at work affects their life and that of
their families as well. As is the aim of every manufacturing company to increase output the
management of blue skies know that healthy staff can increase production and so measures have
been put in place to ensure the health and safety of the employees. Policies have been put in
place and there is strong enforcement to the rules. Safety at the workplace is never compromised
at all.

6.2 Conclusions

The staffs of blue skies Ghana know their individual responsibilities as far as health and safety is
concerned, for this reason they have positive attitude towards occupational health and safety
rules in the firm. They have been enlightened to know that it is their hands and legs involved in
case of any accident but not the managers. The study has discovered that making employees
aware of the dangers associated with any unsafe acts eventually alters their attitude to safety and
health for the better. The role of management in health and safety issues cannot be overlooked as
the enforcement and supervision of staff rests on the efforts of the management, provision of safe
working processes and environment depends largely on management decisions.
6.3. Recommendations

Based on the findings of this study, the following recommendations were made:

- Future researchers should consider a comparative study involving an indigenous Ghanaian and a multinational company.

- Policy makers should use Blue Skies Ghana Limited as prototype for other companies in Ghana in terms of health and safety.

- Ghana’s draft policy on occupational health and safety should be fast-tracked to ensure that employers are bound by the rules to take health and safety of staff seriously.
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APPENDIX A

QUESTIONNAIRES FOR EMPLOYEES

Dear Respondent,

I am currently carrying out a study for the purpose of writing a thesis as a requirement for the award of Masters of Philosophy in health service management at university of Ghana business school. The study is the impact of occupational health and safety on job performance (productivity) of employees of blue skies Ghana limited. You have been selected to participate in this study due to the importance of your information in the study. The information you provide will only be used for the purpose of this study and will be treated with utmost confidentiality. Please feel free and answer all the questions truthfully.

Thank You.

SECTION A:

Demographic characteristics of respondents

1. Sex: Male [   ] Female [   ]
2. Age:  20-25 [   ] 26-30 [   ] 31-35 [   ] 36-40 [   ] 45 and above [   ]
4. Education level:  Basic [   ] Secondary [   ] Vocational [   ] Tertiary [   ]
5. How long have you been working with this organisation ..................
6. What department are you assign ..........................................
7. Position if applicable..........................................................
## SECTION B
Attitude of employees concerning Occupational Health and Safety

*Please tick (√) one answer*

<table>
<thead>
<tr>
<th>STATEMENTS</th>
<th>NEVER</th>
<th>SOMETIMES</th>
<th>USUALLY</th>
<th>ALWAYS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. We get induction training when we start,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. We all get training for safe work procedures for our job</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Our supervisor /manager makes sure we can do the work safely</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. We are always made aware of safety issues</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. We have enough time to learn about safe work procedures</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Our company has worked out all the job/tasks in my area that has safety risks</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Our company has safe work procedures for all tasks based activities in my area that have safety risks</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Staff are always involved in reviewing safe work procedures</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Our company reviews and updates our safe work procedures regularly</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SECTION C

KNOWLEDGE LEVEL OF EMPLOYEES ABOUT OHS

Occupational Health and Safety means

*Please tick (✓) one answer*

<table>
<thead>
<tr>
<th>OCCUPATIONAL HEALTH AND SAFETY MEANS................</th>
<th>NEVER</th>
<th>SOMETIMES</th>
<th>USUALLY</th>
<th>ALWAYS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Rules or regulations relating to the workplace health</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Rules and regulations to ensure our general wellbeing. E.g. Good health</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Fire Precautions at the work place. E.g. switching off all electrical gadgets not in use</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Food safety practices. E.g. Eating wholesome food</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Road Safety. E.g. preventing road accidents</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Bureaucracy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
What do you do to ensure proper occupational health and safety at your work place?  
*Please tick (√) one answer*

<table>
<thead>
<tr>
<th>STATEMENTS</th>
<th>NEVER</th>
<th>SOMETIMES</th>
<th>USUALLY</th>
<th>ALWAYS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I assist others to make sure they perform their work safely</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I take actions to stop safety violation in order to protect the well-being of my co-workers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I assist other staff members to learn about safety work practices</td>
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<td>4. I see myself to have a responsibility for ensuring occupational health and safety at the workplace</td>
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<td>5. I advise all employees to insist on occupational health and safety measures</td>
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<td>6. I engage in exercises more regularly/ once a month that are meant to ensure safety</td>
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<tr>
<td>7. I see occupational health and safety as very necessary</td>
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</table>
**SECTION D:**

Impact of Occupational Health and Safety on Productivity/Job performance
I see that if I observe occupational health and safety rules/guidelines I am able to:

<table>
<thead>
<tr>
<th>Elements of Productivity/Job Performance</th>
<th>NEVER</th>
<th>SOMETIMES</th>
<th>USUALLY</th>
<th>ALWAYS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To meet set targets</td>
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<tr>
<td>2. Increase my units output in terms of production</td>
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<td>3. Improves on my efficiency and effectiveness during work</td>
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<td>4. Help increase general profitability for the organization</td>
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<tr>
<td>5. Increase units of output</td>
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<tr>
<td>6. Reduces my absenteeism from work due to illness/ work place injury</td>
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</tbody>
</table>
APPENDIX B

INTERVIEW GUIDE
FOR SUPERVISORS, HUMAN RESOURCE MANAGER, AND HEALTH AND SAFETY OFFICER

Dear Respondent,
I am currently carrying out a study for the purpose of writing a thesis as a requirement for the award of Masters of Philosophy in health service management at university of Ghana business school. The study is on the impact of occupational health and safety on job performance (productivity) of employees of blue skies Ghana limited. You have been selected to participate in this study due to the importance of your information in the study. The information you provide will only be used for the purpose of this study and will be treated with utmost confidentiality. Please feel free and answer all the questions truthfully.

Thank You.

MANAGEMENT ROLES FOR OCCUPATIONAL HEALTH AND SAFETY
Demographic characteristics of respondents
1. Sex: Male [ ] Female [ ]
2. Age: 20-25 [ ] 26-30 [ ] 31-35 [ ] 36-40 [ ] 45 and above [ ]
4. Education level: Basic [ ] Secondary [ ] Vocational [ ] Tertiary [ ]
5. How long have you been working with this organisation ……………
6. What department are you assigned …………………
7. Position if applicable…………………………

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Please tick (√) one answer

ROLES PLAYED BY MANAGEMENT TO ENSURE HEALTH AND SAFETY OF EMPLOYEES

<table>
<thead>
<tr>
<th>STATEMENTS</th>
<th>NEVER</th>
<th>SOMETIMES</th>
<th>USUALLY</th>
<th>ALWAYS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. We put enough time and resources into safety</td>
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<tr>
<td>2. The health and safety of our staff matter to us</td>
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<tr>
<td>3. Managers/supervisors mean and do what they say in safety matters</td>
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<td>4. We have safety reporting procedures and use them</td>
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<td>5. We encourage our staff to report safety incidence</td>
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<tr>
<td>6. Reported safety incidences are fixed immediately</td>
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</table>

7. Do you have policies and guidelines for ensuring occupational health and safety in your company? List three key issues they seek to address.

8. How is occupational health and safety described in your company?

9. How do you make employees aware of health and safety policies and guidelines?

10. Do you have regular simulation exercises on health and safety measures throughout the company, what do you do?

11 How will you describe the employee’s behavior towards health and safety regulations in the company?

12 What impact has the health and safety practices in the company have on the employees’ job performance?

13 List some of the safety practices in your company.

14 What challenges do you face when implementing occupational health and safety in your company in relation to the employees?