

**UNIVERSITY OF EDUCATION, WINNEBA**  
**COLLEGE OF TECHNOLOGY EDUCATION, KUMASI.**

**EXAMINE SAFETY AWARENESS AND ACCIDENT PREVENTION AMONG  
WORKERS IN THE CATERING INDUSTRY WITHIN THE BOLGATANGA  
MUNICIPAL ASSEMBLY**



**WECHENG JULITTA APURI**

**APRIL, 2021**

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**WECHENG JULITTA APURI  
(190011068)**

**A Dissertation in the Department of Catering and Hospitality Education, Faculty of  
Technical and Vocational Education submitted to the School of Graduate Studies,  
University of Education, Winneba, in fulfillment of the requirement for the award  
of Degree of Masters in Catering and Hospitality Education**

**APRIL, 2021**

## DECLARATION

### CANDIDATE'S DECLARATION

I, hereby declare that this dissertation is my own original research. With the exception of quotations and references contained in published works (which have all been identified and acknowledged in this work) the entire dissertation is my own original work, and it has not been submitted, either in part or whole for another degree elsewhere.

.....  
**WECHENG JULITTA APURI**

.....  
**DATE**

### SUPERVISOR'S DECLARATION

I, hereby declare that the preparation and presentation of this dissertation was supervised in accordance with guidelines and supervision of dissertation laid down by the University of Education, Winneba.

.....  
**DR. MRS. ELLEN OLU**

.....  
**DATE**

## **DEDICATION**

I dedicate this piece of work to my children; Florentine, Isidore and Fulgentius.

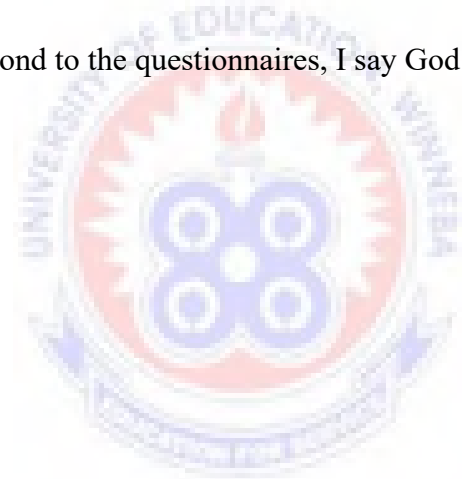


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## ABSTRACT

Safety awareness and accident prevention is very vital aspect at all establishment including catering and hospitality industry. The purpose of the study is to improve the situation of safety awareness and accident prevention among workers in the hospitality and catering industry in the Bolgatanga Municipal Assembly. Besides, the study seeks achieve on factor causing accidents among workers in the catering industry in the Bolgatanga Municipal Assembly. The challenges associated with safety awareness and accident preventions among workers in the catering industry in the Bolgatanga Municipal Assembly and lastly, management strategies to create safety awareness and accident preventions among workers in the catering industry in the Bolgatanga Municipal Assembly. Descriptive research design was used for the study. Questionnaires were used as data collection instrument in obtaining information from the respondents. convenience sampling method was used for the study to reach out respondent. Specifically, a sample size of 80 respondents were used from the entire population. The field data or responses were further analyzed using Social Package for Scientific Studies (SPSS) and Excel. The study revealed factors such as wrong attitude towards work, alcoholism and drugs, limited resources for implement safety and lack of education and safety awareness were the causes of accident in the hospitality and catering industry. The study recommended that, stakeholders involved in the hospitality and catering industry must adopt plans and policies to ensure the safety of catering staffs in the Bolgatanga Municipal Assembly. The managers must provide in-service training to the catering staffs about accident and safety preventions in the kitchen.

## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background to the Study

According to Chen & Chow, (2006), the rapid economic development and improved living standard in the world, the catering industry is growing fast, especially in major cities. However, the catering industry is one of the largest industries in the world. The industry is also earning reputation as a risky or highly dangerous industry due to the extremely high rate of accidents and deaths as a result of poor safety awareness and accident prevention among workers in the catering industry around the world.

Safety awareness and accident prevention is very vital aspect at all establishment including catering industry. The management of all establishment should be aware of laws, concerning safe work environment & should be concerned about the safety of employee within the organization (BNG, 2020). According to the statistics of the China Cuisine Association, there were more than 3.5 million dining places in China in 2002, hiring over 18 million people. At the same time, there have been growing concerns about the occupational health and safety (OHS) problems in the catering industry.

This has made researchers to constantly research into safety awareness and accident prevention among workers in the catering industry. Examples can be found in research work; A Discussion of Occupational Health and Safety Management for the Catering Industry in China (Qiang & Ki Chow, 2007). Qiang & Ki Chow, (2007), stated that, technical problems and the lack of proper management result in health damage and frequent occurrence of accidents in the kitchens and factors such as lighting, noise, high

temperature, and high concentration of carcinogenic substances in the air in the kitchen environment pose serious threats to the safety and health of kitchen staff.

According to Occupational Safety and Health Council, (2007), lack of directional signs to emergency exits, smoke doors kept open all the time, stagnant water and slippery floor, blocked emergency routes, piling up of objects to heights, improper way of lifting heavy objects, and lack of training and emergency drills are possible reasons leading to industrial accidents and occupational diseases. These problems not only endanger the health and safety of the staff but they may also significantly affect the public environment. In fact, this has become one of the concerns of the society. Therefore, it is necessary to look for solutions to OHS problems in the catering industry (Qiang & Ki Chow, 2007).

Accidents occur in many ways but most often can be traced back to one of two basic factors: ignorance or carelessness. You must always be concerned with your own safety and with the safety of others around you. However, there is limited knowledge in safety awareness and accident prevention among workers in the catering industry. This informs the researcher and made it very necessary to conduct a research on the topic.

## **1.2 Statement of the Problem**

The principles of sustainable living are firmly entrenched within ethics, as ethical behaviors form the building blocks of human society (Chawla, 2015.). Catering industry is one of the largest industries in the world. The industry involves dynamic of working environments that present new hazards to workers on a daily, or even hourly basis as a result of the complicated and constantly changing nature of catering industry. Although an array of safety practice, safety devices and safety procedures are currently.

It is found out that, most food organization such as restaurants, hotels and food sellers sited in Bolga Municipality operate in unsafe conditions and environment such as poor ventilated and enclosed areas. It was also found out that, most food sellers are not practicing hygiene so it is lead to dangers and health issues. As a way of improving the situation, the researcher decided to conduct a survey into safety awareness and accident prevention among workers in the catering industry.

#### **1.4 Scope of the Study**

The study is focused on questionnaire survey on safety awareness and accident prevention among workers in the catering industry.

#### **1.5 Purpose of the Study**

This research seeks to improve the situation of safety awareness and accident prevention among workers in the hospitality and catering industry in the Bolgatanga Municipal Assembly.

#### **1.6 Objectives of the Study**

Objectives of the study are;

- a) To identify factors causing accidents among workers in the catering industry in the Bolgatanga Municipal Assembly.
- b) To identify the challenges associated with safety awareness and accident preventions among workers in the catering industry in the Bolgatanga Municipal Assembly.
- c) To devise management strategies to create safety awareness and accident preventions among workers in the catering industry in the Bolgatanga Municipal Assembly.

### **1.7 Research questions**

The following research questions are intended to help achieve the objectives of this study.

- a) What factors causing accidents among workers in the catering industry in the Bolgatanga Municipal Assembly?
- b) What are the challenges associated with safety awareness and accident preventions among workers in the catering industry in the Bolgatanga Municipal Assembly?
- c) What management solutions will help create safety awareness and accident preventions among workers in the catering industry in the Bolgatanga Municipal Assembly?

### **1.8 Significance of the study**

This study will be useful tools to the personals in the catering industries, which will serve as a guideline for all personnel involved in the catering activities with regard to safety practice measures in the catering and hospitality industry. The study will also educate the general public on the importance of effective safety practice management which will increase safe working condition in the catering and hospitality industry.

### **1.9 Limitations and Delimitations of the Study**

Insufficient fund tends to impede the efficiency of the researcher in sourcing for the relevant materials, literature or information and in the process of data collection (internet, questionnaire and interview). Also, the researcher will simultaneously engage in this study with other academic work. This consequently will cut down on the time devoted for the research work. The study was limited to hospitality and catering industries precisely some selected hotels within the Bolgatanga Municipal. However, the criteria for the

selection of the respondents with respect to the objectives of this research was based on the homogeneity of their characteristics in line with their work, roles, responsibilities, experience, leadership skills, to mention but a few. Hence, the limitedness as far as the scope of the study is concerned.

### **1.10 Organization of the Study**

The study comprises of five chapters. Chapter one comprises background of the study, statement of the problem, scope of the study, purpose of the study, objectives of the study, research questions, significance of the study, scope of the study and organization of the study. Chapter two brings into bear, the views of other researches on the topic in a nutshell, the literature reviews in this chapter. Chapter three comprises the methodology used in the study. Chapter four comprises data analysis, presentation and discussing obtained from results. Finally, chapter five being the final chapter summarizes the findings, conclusions and recommendations of the study.

## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1 Concept of Safety Awareness

The set of practices associated with the preservation of health and healthy living is generally referred to as hygiene. Safe hygiene practice includes a wide range of healthy behaviors, such as hand washing and safe disposal. One of the most important practices that is central to the prevention of the spread of infectious diseases in the home and everyday life settings is hand hygiene.

In Ghana, safety practices have become relevant in the hospitality industry due to the increasing inflow of tourists coupled with people's continuous demand for food outside their homes which is synonymous with modern lifestyle trends. It is quite obvious that modern lifestyles have propelled most people in the working class, especially urban dwellers, to depend on nourishment outside home. Such people depend on the hospitality industry for breakfast, lunch, supper, and even late-night snacks (Alagiyawanna 2017). They, like tourists, are therefore equally vulnerable to incidences of food poisoning. It is worth noting that in large scale cooking such as that evident in the hospitality industry, food is manipulated by a lot of persons, which increases the plausibility of food contamination (F. Akabanda 2017). Despite the seemingly increasing risks of foodborne diseases, studies to investigate food safety practices in Ghana's hospitality industry have not been extensive enough. Furthermore, ever since the adoption of the national food safety policy by the Food and Drugs Authority in 2015, official reports or research to access its implementation seems to be elusive. Moreover, several related studies available are narrowed to specific food centres which barely highlight the hospitality industry. For



instance, various studies conducted Aovare & Odonkor (2017), were mostly focused on street food vendors, which constitute a meagre fraction of the many food sectors which serve the hospitality industry. This leaves a wide gap in catering safety practice studies in Ghana's hospitality industry.

Catering and hotel business have grown in the nineteenth century arisen formal and legitimate institutions to teach craft cooking (Müller et al., 2009). Even so these institutions have produced culinary student, it is not uncommon for people or industry itself to complained about incompetent graduates. Giritlioglu et al. (2011) report students had poor knowledge in several regards, and that, on the other hand, they rightly considered the practices of personal hygiene to be important in food production. Safety constitutes one of the essential human needs, as proposed by Abraham Maslow in his theory of needs hierarchy. Kreitner (2007) indicated that the most vital issue in an organization which an employee will satisfy is being safe at work. In achieving this objective, Kreitner stated that, certain organizations incorporate workers' safety into their policy framework. According to Khan (2013), the hospitality industry is governed by a number of regulations that must be followed in order to ensure that the food provided is safe for consumers to eat. These regulations cover all steps in food-related activities, including delivery, storage, preparation, cooking and serving.

The International Labour Organization (ILO) estimates that approximately 2.3 million men and women die each year from occupational injuries and diseases, including close to 360,000 fatal injuries and an estimated 1.95 million fatal work-related diseases (Seoul Declaration on Safety and Health at Work, 2008). The consequences of occupational injuries can be appreciable: lost work time and income, health care

expenses, compensation costs, long-term health problems or disability, and the burden of injured and ill workers on family and friends (Wilkins & Mackenzie, 2007). Workplace safety has many stakeholders: workers, organizational leaders, and policy makers (DeJoya, Della, Vandenberg, & Wilson, 2010; McGonagle & Kath, 2010). In recent years, occupational health and safety has become a significant measure of organizational performance, partly because of health and safety costs to workers and their families, employers, and governments (Egan et al., 2007; Luria, Zohar, & Erev, 2008; Morillas, Rubio-Romero, & Fuertes, 2013).

Improvements in workplace safety are necessary for both economic and legal reasons. Exposure to hazardous working conditions, the nature of work assignments, and lack of experience and training are factors associated with negative safety and health outcomes and increased injury risk among informal and temporary workers (Hintikka, 2011). Every year, millions of workers experience occupational injuries and diseases and many dies as a result of industrial accidents and exposures (Luria, 2008; Parejo-Moscoso, Rubio-Romero, & Pérez-Canto, 2012). Workers employed predominantly in housekeeping and maintenance departments, laundry, and catering exhibit the highest number of workplace injuries; physicians experience the lowest number of accidents but the reverse is true with respect to injury severity (Vaz, McGrowder, Crawford, Alexander-Lindo, & Irving, 2010). In several studies, informal and temporary work was associated with occupational injuries and health (Hintikka, 2011; Laberge, MacEachen, & Calvet, 2014). The social and economic costs resulting from workplace accidents and injuries are generally not traceable to a single factor. Instead, multiple interrelated factors including those related to the physical and psychosocial working environment, aspects of

the job, and individual differences affect worker safety (Wilkins & Mackenzie, 2007). Men experience work accidents more frequently than women and their injuries are more severe. Male workers younger than 25 years are most prone to work accidents than the rest of the workforce (Safe Work Australia, 2013). Training can reduce the incidence of occupational accidents (Christian, Bradley, Wallace, & Burke, 2009; Jacobsson, Sales, & Mushtaq, 2010; Jensen et al., 2014; McGonagle & Kath, 2010). Many types of injuries occur in the kitchen, such as burns and scalds from hot surfaces, food and liquids, and caustic chemicals; fire dangers from grills and fryers; strains, sprains, and stresses from slips, trips, and falls on wet or greasy surfaces or from ladders or step stools in cluttered space; and cuts from machines or knives in commercial kitchens (Le, Bazger, Hill, & Wilcock, 2014; Nenonen, 2013). The aim of this study was to determine the knowledge and practices of food handlers regarding kitchen safety in Turkish catering kitchens.

### **2.3 Accident and Safety**

An accident is an unexpected, unplanned event in a sequence of events that occurs through a combination of causes that may result in physical harm such as injury or fatality to an individual, damage to property, a near miss, a loss, or a combination of these effects (Makhonge, 2009). In otherwise, accident is an unforeseen, adverse event that causes harm or has the potential to cause harm (Kiwekete, 2009). From the perspective of the work environment, accident can be described as an unexpected occurrence as a result of human and/or workplace factors causing harm or having the tendency to cause harm to the worker, visitor, work equipment or a combination of these. Such events include fires, explosions, leakages or release of toxic or hazardous

substances that can cause illness, injury, disability or death among people, damage to property and environment (Makhonge, 2009). The work accidents involve falls, accidents while using machines or equipment, manual handling of equipment, driving or motor vehicle.

They may in some cases include stress related incidents, verbal and physical abuse (Hrymak, & Pérezgonzález, 2007). Workplace accident statistics estimate indicate that accidents resulted in over 300,000 annual worker deaths worldwide. Accidents also caused more cases of disability. In the European Union these fatalities amounted to nearly 5000 cases annually, with a much higher number of disability cases each year (Eurostat, 2004). In addition to human costs these deaths and injuries also impose economic burden to the worker, the family, the organization and the society. Whereas accidents previously were seen from a technical, legal or human factors perspective, in recent years cultural and organizational factors have become important additional perspectives included in safety intervention programs in the workplace (Spangenberg, 2010). Safety interventions for the prevention of accidents at work are thus characterized as a complex process, which usually integrates a number of components such as safety campaigns, safety training, legislation or machines guarding.

Research has emphasized the importance of integrating these various components to achieve a high level of safety at work (DeJoy, 2005). A review of safety intervention programs by Lund & Aarø (2004) concludes that the largest effect is obtained by a combination of attitudinal, behavioral and structural approaches, thus multi-faceted interventions. A safety intervention may consist of a single component such as a safety campaign within the workplace aimed at changing attitudes or safety training aimed at

changing behavior or it can consist of a combination of such components, involving safety climate, attitudinal, behavioral or structural components. A safety intervention may run for a shorter or longer period of time or represent a permanent change, as for example new regulations or legislation. A safety intervention program can be initiated at the workplace by the employer or the employees, or initiated from outside the workplace by public authorities, social partners or other stakeholders. However, the intervention must take place and aimed at improving safety in the workplace or during work (Dyreborg, et al., 2011).

Accordingly, European Agency for Safety and Health at Work (2014) outlined that employers have clear procedures and responsibilities for health and safety and that everyone be made aware of their own and others' responsibilities to safety. Thus, employers must take actions to identify the main risks to health and safety and taken action to eliminate or reduce them, make arrangements for the maintenance of work equipment adequate and provide workers with suitable personal protective equipment (PPE) and train the workforce in the use of such devices. Additionally, workers be provided information on the risks and be trained in safe working, emergency procedures and reporting unsafe conditions and accidents. Moreover, taken prompt actions to investigate accidents, near misses and reported problems, regularly inspecting workplace, and checking that workers are following safe working procedures are acts responsible safety management practices (Ansah, & Mintal, 2012). Having a system for reviewing health and safety policy and working procedures are equally relevant to accident prevention and safeguarding workers' lives.

## **2.4 Factors causing accidents among workers in the catering industry.**

A commercial kitchen is one of the busiest and most hectic places in the hospitality industry. Restaurant chefs spend all day in there, dealing with the stresses of creating the perfect meal in a busy restaurant while hungry customers wait. This high-pressured environment can be hazardous unless proper care and attention is taken.

Anyone working in the catering industry such as a chef, waiters, waitresses, may be entitled to file a catering injury claim if their injury was caused not because of anything they did but because of inappropriate health and safety measures in the workplace. Burns from hot surfaces such as hobs, hot plates and ovens, Scalds from hot liquids, Cuts from sharp knives and other sharp kitchen equipment, Faulty kitchen appliances.], Electrocutation from exposed wiring, Bruises, sprains, and fractures from slipping and falling on wet surfaces and Back injuries from lifting heavy objects (CKdirect, 2020).

As in every field of work, technological developments occur in institutional kitchens and rapid improvements in production methods may increase productivity and quality but also create new occupational health and safety risks. Occupational accidents frequently occur among kitchen workers (Christian et al., 2009; Haukka et al., 2010). Occupational accidents in institutional kitchens result from lack of precautions in the production area and unsafe behaviors by unqualified staff; accidents not only affect productivity and quality but may result in worker disability or death. Therefore, necessary precautions should be taken to prevent accidents from occurring in institutional kitchens (Niu, 2010). It is widely recognized that safety management systems play a role in company safety, especially in high-risk industries (Jacobsson, Sales, & Mushtaq, 2010).

The identification of hazards and corresponding control measures provide the foundation for safety programs and essentially determine the scope, content, and complexity of successful occupational health and safety management systems (Makin & Winder, 2008). Occupational health and safety management systems have become more common over the past 20 years. A variety of standards, guidelines, and audits based on occupational health and safety management systems have been developed within the public, private, and not-for-profit sectors and many have been adopted by workplaces.

Most countries have legislation protecting workers from hazards at work, but no legislation to protect workers' safety has been adopted in Turkey. In this study, kitchen safety practices were low for both on-premise and off-premise hospital kitchens. Kitchen safety practices with machinery tools, electricity, gas, and fire were lower for workers in off-premise hospital kitchens than in on-premise kitchens. The score for heat hazards was the same in both groups. Food and beverage industry employees are subject to health and safety hazards, including hot cooking equipment, knives, mechanical slicers and grinders, heavy lifting tasks, and slippery floors (Le et al., 2014; Unsar & Sut, 2009). Food manufacturing has one of the highest injuries and illness rates in all industries (Christian et al., 2009).

Prevention of these injuries depends on a coordinated effort between managers and workers. Among prevention strategies, safety training can be used to teach safe behaviors, provide practice time, and motivate employees to work safely. In this study, food handlers answered all kitchen safety knowledge questions correctly (food handlers from on-premise and food handlers from off-premise kitchens). The workers earned the lowest scores on preventing musculoskeletal injuries, but the highest scores on preventing

burns and scalds. Significant differences were found in food handlers' knowledge of preventing slips and falls between those who worked in on-premise and off-premise kitchens. These findings were paralleled by another study that showed that food service staff in hospitals had insufficient knowledge about the basics of food hygiene (Tokuc, Ekuklu, Berberoglu, Bilge, & Dedler, 2009).

A wide range of personal and occupational factors, such as age, gender, education, occupational status, and lifestyles, have been found to be related to the risk of fatal occupational injuries (Gyekye & Salminen, 2009; Villanueva & Garcia, 2011). In addition, many younger, older, and inexperienced workers are employed in the food service industry; high turnover is a hallmark of the industry. All of these factors contribute to occupational injuries, and injuries in this industry are frequent (Laberge et al., 2014). Several studies have reported increased risk of fatal accidents by gender; gender is often related to hazard exposure and different mechanisms (e.g., falls, strikes, and cuts) of injury occurrence (Villanueva & Garcia, 2011). Previous researchers found that the risk of occupational injuries was related to age. Some studies found an increased risk of nonfatal occupational injuries for younger workers and a relationship between older workers and fatal occupational injuries.

The risk of fatal occupational injuries by age could be explained by exposures specific to particular age groups, decreasing capability of sense organs and speed of response, and less ability to survive trauma. Older workers have fewer opportunities to secure safe jobs with few occupational hazards. The majority of 63 nonfatal studies reviewed showed that young workers had a higher injury rate than older workers. However, 29 of 45 studies on fatal occupational injuries reported that younger workers



had a lower fatality rate than older workers. These results are clearer for men than for women; young men were an at-risk group for occupational injuries (Jensen et al., 2014; Lin, Chen, & Luo, 2008). Some studies showed an association between workers' education and safety perceptions. The more educated workers expressed more positive perceptions about workplace safety than their less educated counterparts. A dissection of this group revealed fascinating findings: workers with vocational or professional educational backgrounds were the most enthusiastic about safety programs, followed by workers with university educations. When compared to their more highly educated colleagues with university educations, workers with vocational or professional education and formal education in occupational health and safety expressed the highest perceptions of safety.

Although much attention has been given to employee age and job experience, the impact of formal education on accident prevention is neither straightforward nor well documented. Research is also lacking regarding the relationship between workers' educational attainment and safety perception (Gyekye & Salminen, 2009; Lin et al., 2008). In the current study, university-educated workers were more likely to earn perfect scores on the kitchen safety scale than others; a significant relationship was found between kitchen safety scores and education. In addition, it has been reported that workers with less than 3 years' work experience were significantly more likely to have accidents in the workplace than other groups of employees (Christian et al., 2009).

The kitchen is the heart of every great restaurant, but it can also be a very dangerous place and there are many accidents that may occur. Ensuring that you are

taking the necessary precautions and dealing appropriately should these accidents happen is essential for the health and safety of both your staff and customers.

### ***Cutting fingers or hands***

A dull blade is more dangerous than one that is sharp. A blunt knife can easily slip from the food you are preparing and slice the skin of the user instead. It is therefore important that you make sure the knives within your commercial kitchen are sharp, so that they can slice the surface of the food you are cutting more easily. Nevertheless, when using any type of knife, care should be taken to slice away from the hand that is holding the food. When holding food that is being sliced, you should curl your fingers and only hold the food with the tip of your thumb and forefinger. Knives are also a hazard when washing up. Many people fill their sink with warm soapy water and put their dirty dishes in to soak. This, however, can result in cut fingers if the person is not careful when putting their hands into the water. It is a good idea to empty the soapy water from the sink and rinse the dishes in warm water, as this will allow the sharp objects to be seen before being removed from the sink (CKdirect, 2020).

### ***Slipping on wet floors or tripping over obstructions***

When there is a spillage in your commercial kitchen, it is imperative that you clean this up immediately in order to reduce the risk of a fall. Take care when washing up to avoid spilling water and make sure that boiling pots do not overflow and spill on to the floor. A commercial kitchen is a high-pressure environment and people will often move through the kitchen quickly. It's therefore important that all walkways are clear and that obstructions are removed. As well as the chance of injuries from a fall, there is also the

risk of knocking over items such as boiling pans during the fall, which could result in severe burns. Restaurant floors are often slick with oil or water, and in older kitchens the floors themselves may be uneven. All of these things can lead to employees slipping or falling, which is extremely dangerous when you're working with sharp blades and hot implements. You can install non-slip flooring materials and mats to make the floors safer, and train your employees to clean the floors immediately after a spill. When they need to transport large quantities of hot liquids or used oil, provide safe transport methods – pots or sturdy buckets with well-fitting lids for the liquids, and carts to wheel them – rather than requiring employees to carry them. Non-skid footwear should also be mandatory in your kitchen, and it can help a lot (Smallbusiness, 2020). Floors that are structurally uneven pose a tripping hazard, but redesigning them may not be a practical option. Instead, install a small ramp over the uneven part of the floor to make a smooth transition or simply paint the uneven part of the floor with brightly colored paint to remind your staff about the danger of tripping.

### ***Fires and burns***

Cooking in the kitchen inevitably means dealing with hot surfaces. Hot water or oil, naked flames, and hot pots are just some of the ways that people can be burned in the kitchen. Gloves should be used when taking items out of the oven and you should make sure that gas flames on the cooker top are not too high to avoid oil or fat from food splashing on to skin. 70% of fires in commercial kitchens are caused by a build up of fat and grease in a faulty extraction ventilation system (Kent Fire & Rescue). Over time, the traces of grease and dirt in your commercial kitchen can form a substance on the walls of ventilation ducts, canopies and extraction fans. This substance is highly flammable and

increases the threat of a fire dramatically (CKdirect, 2020). Restaurant kitchens are packed with hot surfaces, hot liquids and oils, and hot foods that spatter their surrounding area. Long-sleeved chef jackets are the industry standard for a reason, and cooks in high-splatter areas should wear bib aprons as well. Be sure your cooks have safe work habits, and plenty of hot pads, side towels or heatproof gloves for handling hot pans. Chemicals, in the form of cleaning supplies and sanitizers, present another hazard. Your supplier will provide data safety sheets for all of your chemicals, and will usually offer periodic training for your staff as well. Your in-kitchen first aid kit should include everything you need to treat burns and cuts, as well as an eye-washing station in case your cooks are splashed with cleaning chemicals (Smallbusiness, 2020).

### ***Dangerous Machinery and Equipment***

Commercial kitchens are filled with equipment that's designed to cut, chop or sear foods, and they'll do the same to an unwary line cook. The potential for accidents is huge, so it's important to train your staff to use equipment safely. Make sure kitchen supervisors, who serve as role models for the other staff, always observe the best practices when using kitchen equipment. Employees who use prep equipment with blades, such as mandolines and motorized slicers, should ideally wear cut-resistant gloves that cover their wrists and fit snugly (Smallbusiness, 2020). Warn employees of the hazards of not using the equipment's supplied safety guards, or of allowing loose clothing to get caught in machinery. Keep safety manuals for kitchen equipment in a designated place so that employees can refer to them if they have any questions or concerns. Post signs to remind workers of hazards such as "Unplug machine before cleaning blades."

### ***Injuries from Heavy Lifting***

Sprains and strains can result from heavy lifting in the kitchen, and that leads to injuries. Make back belts available to our employees on delivery or inventory days, to help reduce the risks. Train employees to pull or wheel the load as close as possible to them before lifting. Teach them to keep their heads up, backs straight and lift the load with their leg muscles. When putting items down, they should use their leg muscles as they squat, not their backs. Make dollies or hand trucks available whenever possible (Smallbusiness, 2020).

### ***Crowded Kitchen Risks***

A cramped and crowded work area increases the risk of injury or accidents from all sources. Always make sure that walkways are clear and surfaces are clutter-free. Empty boxes and containers should be removed as soon as possible, and you should try to organize the work flow to space your cooks evenly throughout the kitchen.

### ***Food Safety Hazards***

Food safety is another notable kitchen hazard, one that poses a risk to your customers and in a worst-case scenario – to your business itself, cross-contamination between high-risk and low-risk foods is a common danger, often caused by using the same equipment or prep surfaces without cleaning and disinfecting them between tasks. Improper thawing of frozen foods, or improper storage and reheating of prepared foods, are also common mistakes. Hot foods should always be held at a temperature of 140 degrees Fahrenheit or higher, and cold foods at 40 degrees or lower, to limit bacterial

growth (Smallbusiness, 2020). Training your staff on food safety, closely monitoring temperatures, and enforcing good hand-washing habits, will go a long way to preventing any unfortunate incidents. Post informational signs in restrooms and next to food prep areas, as reminders.

## **2.5 Challenges associated with safety awareness and accident preventions among workers in the catering industry.**

Catering Business is one of the fastest growing businesses hence managing this with limited resources in tough market conditions is a big challenge for entrepreneurs. Every business has its own unique set of challenges, just as each has its own particular rewards. Within the foodservice industry, for example, a catering business runs differently from a restaurant or cafeteria. And though the game is different, some of the moves and strategies are the same. With this in mind, taking a look at the key challenges of owning and operating a catering company can provide a fresh vantage point from which to consider your own business (Trimarkusa, 2020). There are some common and obvious problems associated with the business of catering such as preparation of food in bulk for several customers, especially when you are working off-premises it is very difficult to manage. Hence it is an obligation for caterers to enhance the level of technology especially in the category of logistics (Schmidt, 2017). Moreover, issues associated with fixed and variable salaries are also creating issues and due to these issues, caterers sometimes outsource some jobs like waiters etc. In addition to this lack of training and behaviour of waiters are also fostering serious problems, even sometimes resulted in penalization of the company. □us one must be very careful in the selection of

human resources for enhancement of business. Recent research-based analysis given by Concept Analytics pinpointed factors which foster demands and challenges for a catering business, classified as under (Schmidt, 2017).

Security has long been recognized as a necessity for the overall growth and development of the hotel industry both in developed and developing societies. This growing recognition has led to the commitment of most hotel enterprises towards strengthening their security systems in terms of advanced security arrangements to ensure increased confidence on the part of hotel investors, employees, and guests, who form the core elements that foster industry development. In the major safety issue, hotels are one of the most demanding categories of business, as their needs are numerous and hoteliers are called upon to provide solutions to key issues that require high expertise. Safety at hotels is an undeniable requirement for travellers, which has become a powerful marketing reference point in recent years as it affects travellers' reviews in various Review Websites and in many cases even the final decision to complete a booking.

At the same time, however, the Safety issue and the way it is communicated to hotel guests is an issue that needs discrete management, as the travellers wish to be protected, without however underlining the possible risks that may disturb their stay. Hotels are transformed into travellers' "temporary homes" and the whole safety issue should be implied and not highlighted. Preventing food safety problems should be every caterer's top priority as it takes only one sick customer with a social media platform to ruin a catering business. Catering and restaurant food safety procedures are very similar, but there are additional considerations like transport procedures, which must be taken

into account. When you open your catering business, think about these seven pillars of food safety.

### ***Sanitary Suppliers***

Any great catering business starts with good food. Your food suppliers should already have a food safety certification process in place, something which is especially important for high-risk foods. Make sure that your suppliers follow HACCP guidelines for food safety and ask about the procedures they follow. By starting with great food, that removes one piece of the contamination puzzle. Preparing food for catering is no different than preparing food for any restaurant. Employees must follow standard food sanitation procedures like regular hand washing and using gloves to avoid cross-contamination. Foods thawing for transport must be kept away from raw foods and no wood must be used in the preparation of food (Globalfood, 2020).

### ***Sanitary Transport***

This is the tricky part for caterers. Hot and cold foods must be held at the proper temperature (Above 145 F for hot, below 40 F for cold) during transport and checked afterward to make sure they stayed there. All food must be kept in food-safe containers and stored in a location that can be sanitized. The foods which are likely to cross-contaminate should be separated from each other during transportation. Temperature controls must be maintained throughout the entire catering event, so it's necessary for caterers to have the proper equipment on hand for that proper serving. Chafing dishes can keep hot foods at the right temperature. All temperatures should be checked with a



probe thermometer at regular intervals. Also, all serving dishes must have their own utensils. Depending on local laws, a sneeze guard might need to be employed (Globalfood, 2020).

### ***Training***

All staff and volunteers must be thoroughly trained on food temperatures, safe preparation, and safe transportation. Refresher courses might be needed for those experienced within the field, as the regulations occasionally change. Make sure that ‘not knowing’ isn’t an excuse.

### ***Full Menu for Food Allergy Checking***

One thing which caterers regularly encounter is food allergens. If possible, caterers must disclose the ingredients of the dish to the patrons, so that they are aware of any potential reactions. The servers also need to know what is in each dish, and if there are any known allergens which could cause a reaction. Finally, you will want to thoroughly document all your food safety procedures and temperature checks (Globalfood, 2020). These not only confirm that your employees and volunteers are following their training, but also provide a way to show a health inspector that you are following local laws if you get audited. There are several sources for catering food safety check lists that you can use as inspiration.

## **2.6 Management strategies to create safety awareness and accident preventions among workers in the hospitality and catering industry.**

Workplace safety is of paramount importance. Hazards exist in all workplaces in every industry, risk assessments and hazard management are designed to lower those workplace risks. How we manage those risks as business owners or employees dramatically impacts on the overall safety within our workplace. The foodservice industry, like other industries, are required to meet compliance guidelines set by Safe work to ensure workplace safety for both employees and the customers we serve. Commercial kitchens have numerous hazards which, when not managed correctly result in severe injury or loss of life (Norris, 2020).

Employee safety training or education has been recognized since the era of industrial revolution as an effective instrument in promoting workers' safety practices (Jensen, 2005). Occupational Health Safety (OHS) training embodies instructing workers to recognizing known hazards and assisting them to use available work processes and procedures to protect themselves. In addition, worker education prepares them to deal with potential hazards or unforeseen problems at workplaces. Thus, training or education gives guidance in ways to become better or informed worker that takes action(s) aimed at eliminating workplace hazards and protecting lives and property. Generally, training refers to instruction and practice for acquiring skills and knowledge of rules, concepts or attitudes necessary for workplace hazard recognition and measures taking to controlling such hazards.

Workers training also involve learning safe work practices, proper usage of PPE, acquiring knowledge of emergency procedures and preventive actions necessary for

safety (Health and Safety Executive, 2008). In addition, training provides workers with ways to obtain additional information about potential occupational health hazards and how to control these hazards (Kitchener, & Jorm, 2004). Furthermore, training provides workers with skills to assume a more active role in implementing hazard control programs or to effect organizational changes that enhance worksite protection (Burke, et al., 2006). Occupational Safety and Health Administration “OSHA” (2010) recommends that employers provide training for their employees on the hazards of their jobs in a language that the workers understand. The workers must be trained after being hired and before they begin their job especially in the jobs perceived to having high risks to health (Health and Safety Executive, 2009). For example, training in first aid might be essential. The availability of first aid facilities with trained person encourages provision of health assistance to injured or ill workers before professional help is sought (Salwa, Abu-Elseoud, Heybah, & Azhar, 2010). According to Lingard (2002), first aid training is important to increase workers’ knowledge about their likelihood of suffering from work-related injury or illness. In addition, workers willingness to accept the levels of OHS risks could be minimized through first aid training. Moreover, first aid training provides workers with the ability to control the workplace risks and also safeguard their well-being (Salwa, et al., 2010).

Training and intervention efforts designed in whole or in part are also believed to enhance worker knowledge of workplace hazards and affect behavior change that ensure compliance with safe work practices. Training also prompts other actions aimed at improving workplace safety and health protection and reducing the risk of occupational injury or disease. Evidence also suggest that most training interventions can lead to

positive effects on safety knowledge, adoption of safe work behaviors or practices and safety outcomes at workplaces (Colligan, & Cohen, 2004). According to Health and Safety Executive (2010), person should not be employed in connection with the storage, conveying or dispensing of petroleum (fuel) until he has received adequate training. Such training should be provided to newly recruited employees. In addition, regular refresher courses are important for all other employees. All staff who may have a role in dealing with an emergency should receive comprehensive training on the procedures for dealing with such emergency situations. For instance, such training should involve functions, operations and use of electrical devices for regulating delivery of petrol to underground storage tanks or fuel tanks of vehicles, in the case of fuel station attendants (Health and Safety Executive, 2008). Cooper, and Phillips (2004) concluded that training workers in safety techniques of their jobs has a strong influence on the actual levels of their safety behaviors. In the relationship between occupational and organizational factors and work-related injuries, Gimeno, Felknor, Burau, and Delclos (2005) pointed out that employees reporting lack of safety training had higher work-related injuries rate ratios than those who did report some amount of training.

Moreover, workers reporting lack of safety training were more exposed to chemical and physical hazards than employees who received safety training. In the views of Gimeno et al., lack of safety training remains significant risk factors for determining work related injuries (Trepka, et al., 2008). Moreover, training workers in the appropriate use of PPE is strongly advised (Tsung-Chih, et al., 2008). On-time training is also likely to provide adequate preparation for groups of workers requiring the use of specialized PPE during work (Knight, & Goodman, 2009). The protective capability of the PPE may

otherwise be defeated by improper handling, incorrect assembly, maintenance, improper put on and take off procedures. Stress, discomfort and physical hindrance may also weaken performance in the use of PPE. However, acclimatization through training will mitigate these effects and enhance the compliance with the appropriate use of PPE among workers.

## **2.7 Summary**

From the literature, there were many factors which causes accidents among workers in the catering and hospitality industry. The findings from the literature revealed the following as causes of accident; burns from hot surfaces such as hobs, hot plates and ovens, Scalds from hot liquids, Cuts from sharp knives and other sharp kitchen equipment, Faulty kitchen appliances, Electrocution from exposed wiring, Bruises, sprains, and fractures from slipping and falling on wet surfaces and Back injuries from lifting heavy objects (CKdirect, 2020). Others are hot cooking equipment, knives, mechanical slicers and grinders, heavy lifting tasks, and slippery floors. Besides, there were many challenges which were associated with safety awareness in the catering and hospitality industry and these were revealed from the literature; Security systems in terms of advanced security arrangements to ensure increased confidence on the part of hotel investors, employees, and guests, who form the core elements that foster industry development.

Training. All staff and volunteers must be thoroughly trained on food temperatures, safe preparation, and safe transportation. Full Menu for Food Allergy Checking. One thing which caterers regularly encounter is food allergens. If possible,

caterers must disclose the ingredients of the dish to the patrons, so that they are aware of any potential reactions. Many strategic solutions were also revealed from the literature and there were; Workers training also involve learning safe work practices, proper usage of PPE, acquiring knowledge of emergency procedures and preventive actions necessary for safety. On-time training is also likely to provide adequate preparation for groups of workers requiring the use of specialized PPE during work



## CHAPTER THREE

### METHODOLOGY

#### 3.1 Research Design

To achieve the research objective, the researcher will employ descriptive survey and Likert scale approach in the study. Descriptive survey method of research which concerns itself with the present phenomena in terms of conditions, practices beliefs, processes, relationships or trends invariably is termed as “descriptive survey study”

The researcher’s choice for a descriptive survey emanates from the fact that, descriptive survey research intends to present facts concerning the nature and status of a situation, as it exists at the time of the study. Descriptive survey research permits the researcher to presents a picture of the specific details of a situation.

When the issue under investigation is quite new, descriptive survey permits the researcher to explore the issue first and then describe it. Descriptive survey however permits the researcher to begin with a well-defined subjects/participants and conduct research to describe it, the outcome of a descriptive survey is a detailed in the form of tables and chart.

#### 3.2 Population of the Study

The target populations for the study will be all the hotels and restaurants within the research area. Only the staffs working in the hotels and restaurants (Bolgatanga Municipality). In all, eight hotels and restaurants will be visited be the researcher within the research area.

### **3.3 Sampling Technique and Sample Size**

The researcher employed convenience sampling method for the study because the respondents were based on their convenient accessibility and proximity to the researcher, convenience sampling is fast and inexpensive in recruiting the respondents for the study. A certain number of construction workers were drawn from the target population to make up a sample size of 100, confidence level of (95%), margin of error of (5%) and a sample size of 80 will be obtained with the help of sample size calculator the survey monkeys (survey-monkeys, 2020). Allocation of questionnaires distributed to respondents is summarized in table 3.1.

### **3.4 Data collection Instrument**

Data collection instruments used in the study is questionnaires.

#### **3.4.1 Questionnaires**

Questionnaires were design for respondents within the research area. The questionnaires items contain rating using a scale of 1 to 4 where each scale represents the following rating: 4-Strongly agree (**SA**), 3-Agree (**A**), 2-Disagree (**D**), 1-Strongly disagree (**SD**).

There was checklist for respondents within the research area to tick [] in the options provided for the questionnaire's items. The checklist question format was used because it is specially designed for a group of respondents who have accurate information and can answer the questions with a high degree of certainty. Questionnaire facilitated the collection of data that ensured the best matching of concepts with reality, it provided the different responses from a given set of respondents and helped reduce inconvenience caused by unfavorable interview times and busy schedules.



### **3.5 Data Collection analysis**

The researcher employed the use of descriptive statistics such as tables, pie chart and bar chart to analyses and present data in a logical manner for easy interpretation and understanding. The data collected with the questionnaires was analyzed using computer software; SPSS and Microsoft Excel. The analysis procedure first prepares the data obtained from the study to ensure the correctness of the questionnaires results. This involves a process of questionnaire coding, recoding on the software, data sorting and cleaning to remove any outliers and also to prepare a data set fit for purpose.



## CHAPTER FOUR

### RESULTS AND DISCUSSION

#### 4.1 Results of Questionnaires

The following below were the responses obtained from the respondents in relation to the research questions which were presented before them.

#### 4.2 Profile of Respondents

The researcher wanted to find out the profile of the respondents who were asked to answer the questionnaire. Below were the responses from the respondents within the research area which revealed the following?

**Table 4.1: Employment Position of Respondents**

Position	Frequency	Percent
Manager	8	10.0
Chef/Waiter	41	51.3
Receptionist	8	10.0
Bar Attendant	23	28.8
Total	80	100.0

Table 4.1 shows the role of the respondents in the hospitality and catering industry in Bolgatanga Municipal. The survey shows that 8 respondents held managerial position in the hospitality and catering industry which represents 10%. 41 respondents were in the role of chefs/waiters' position in the hospitality and catering industry which

also represents 51.3% of the study. Moreover, 8 respondents were also in the role of receptionist position in the hospitality and catering industry at Bolgatanga Municipal which represents 10%. Lastly, 23 respondents were also bar attendants in the hospitality and catering industry with a percentage of 28.8%. In view of this survey, it can be concluded that majority of the respondents who subjected themselves for this study were chef/waiters in the hospitality and catering industry.

**Table 4.2 Gender of Respondents**

	Frequency	Percent
Male	24	30.0
Female	56	70.0
Total	80	100.0

Table 4.2 shows the gender of respondents. Out of the 80 respondents who were selected for the study, 24 of them were males representing 30%, of the total respondents' while 56 of the respondents were females' counterpart representing 70%. This therefore implies that, majority of the respondents who subjected themselves for this study were females more than their males counterpart. Possibly, this is evidence contribute to the fact that, more females are into hospitality and catering industry more than males.

**Table 4.3: Ages of Respondents**

Ages	Frequency	Percent
Between 21-30 Years	48	60.0
Between 31-40 Years	24	30.0
Between 41-50 Years	8	10.0
Total	80	100.0

The table shows the ages of the respondents in the hospitality and catering industry in the Bolgatanga Municipal. The survey shows that, 48 of the respondents were between the ages of 21-30 years which represent 60%. 24 respondents were also between the ages 31-40 years represents 30% of the study and finally, 8 of the respondents were between 41-50 years represent 10%. Those respondents who were between the ages of 21-30 were more in numbers as compared to other age groups. This is an evidence that, in catering industry, the managers do employ people who are in their early youthful age which they can help attract more customers.

**Table 4.4: How long have you been working in the catering industry**

Experience	Frequency	Percent
Between 1-4 Years	64	80.0
Between 5-8 Years	16	20.0
Total	80	100.0

Table 4.4 shows the years of working experience of the respondents in the hospitality and catering industry in Bolgatanga Municipal. The survey shows that 64

respondents had 1-4 years working experience in the hospitality and catering work which represent 80% whiles 16 of the respondents who had 5-8 years working experience were 20% of the study. This clearly shows that, those respondents who had 1-4 years working experience in the hospitality and catering industry were the majority.

**Table 4.5: Education of the respondents**

Qualification	Frequency	Percent
WASSCE	48	60.0
HND/DIPLOMA	24	30.0
DEGREE	8	10.0
Total	80	100.0

Table 4.5 shows that, 48 respondents representing 60% have had their WASSCE certificate. Moreover, 24 respondents representing 30% also had their HND/DIPLOMA education and finally, 8 respondents had Degree. It can therefore be concluded that, majority of the respondents who took part of the survey have had WASSCE education which represents 60%. This implies that, in hospitality and catering industry do employ people who are semi-literate and can read and communicate with customers.

**Table 4.6: Safety measures whiles working**

	Frequency	Percent
Yes	80	100.0

Table 4.6 shows whether employees in the hospitality and catering industry follow safety measures when working. Out of the 80 respondents who took part of the survey, all the employees did follow safety measures when working with a percentage score of 100%. This clearly shows that, safety is one of the most crucial precautions which must be consider when working.

**Table 4.7: Wear safety clothes whiles working**

	Frequency	Percent
Yes	80	100.0

Table 4.7 shows whether employees in the hospitality and catering industry wear safety clothes when working. Out of the 80 respondents who took part of the survey, all the employees did wear safety clothes when working with a percentage score of 100%. This clearly shows that, safety is one of the most crucial precautions which must be consider when working and the needed uniform should be put on when working.

**Table 4.8: Safety training for the workers**

	Frequency	Percent
Yes	80	100.0

Table 4.8 shows whether employees in the hospitality and catering industry organized safety training regularly for the employees. Out of the 80 respondents who took part of the survey, management do organize safety training for employee with a percentage score of 100%. This clearly shows that, safety is one of the most crucial precautions which must be consider when working and the needed training should be organized for the employees to help improve safety awareness in the hospitality and catering industry.

**Table 4.9: Factors causing accidents among workers in the catering industry.**

No	Item Statement	Frequency (F)							
		1 Strongly Disagree		2 Disagree		3 Agree		4 Strongly Agree	
		Feq	%	Feq	%	Feq	%	Feq	%
1)	Lack of personal protection	-	-	-	-	72	90%	8	10%
2)	Lack of safety training and education	-	-	-	-	56	70%	24	30%
3)	The use of drugs and alcohol on site.	-	-	-	-	72	90%	8	10%
4)	Limited resources for implement safety and accident standards.	-	-	8	10%	64	80%	8	10%

5)	Poor choice of protective equipment system	-	-	8	10%	48	60%	24	30%
6)	Lack of effective checks on safety practice	8	10%	16	20%	40	50%	16	20%
7)	Carelessness while working	-	-	-	-	40	50%	40	50%
8)									
9)	Hatred for the work.	-	-	-	-	56	70%	24	30%

Table 4.9 revealed the factors causing accident among workers in the hospitality and catering industry in the kitchen. The study revealed that, 72 agreed that, lack of personal protection was one of the factors causing accident in the hospitality and catering industry which represent 90% while 8 respondents strongly agreed that, lack of personal protection was one of the factors causing accident in the hospitality and catering industry which indicate 10%. However, majority of the respondents who took part of the survey agreed that, lack of personal protection can cause accident in the hospitality and catering industry. According to Haukka et al., (2010), occupational accidents in institutional kitchens result from lack of precautions in the production area and unsafe behaviors by unqualified staff; accidents not only affect productivity and quality but may result in worker disability or death.

The study also revealed that 56 agreed that, lack of safety training and education can cause accident in the hospitality and catering industry which represent 70% while 24 respondents strongly agreed that, lack of safety training and education can cause accident in the hospitality and catering industry which indicate 30%. Research is also lacking regarding the relationship between workers' educational attainment and safety perception



(Gyekye & Salminen, 2009). However, majority of the respondents who took part of the survey agreed that, lack of safety training and education can cause accident in the hospitality and catering industry.

The study again revealed that 72 agreed that, the use of drugs and alcohol during working hours can caused accident in the hospitality and catering industry which represents 90% while 8 respondents strongly agreed that, the use of drugs and alcohol during working hours can caused accident in the hospitality and catering industry which indicate 10%. However, none of the respondents did oppose the fact that the use of drugs and alcohol cannot cause accident in the catering industry precisely when working in the kitchen.

Furthermore, the study revealed that, 8 respondents opposed the motion that limited resources for implement safety standards cannot cause accident in the hospitality and catering industry which represents 10%, 64 respondents represents 80% also supported the motion that, limited resources for implement safety standards can cause accident in the hospitality and catering industry and 8 respondents added in support of the motion that limited resources for implement safety standards can cause accident in the hospitality and catering industry. Though, majority of the respondents who took part of the survey highly supported the motion that limited resources for implement safety standards can cause accident in the hospitality and catering industry.

The study once more revealed that 8 respondents represent 10% disagreed that poor protective equipment system cannot cause accident in the hospitality and catering industry 48 respondents represent 60% agreed that poor protective equipment system can cause accident in the hospitality and catering industry and lastly, 24 respondents

represent 30% also strongly supported the motion that poor protective equipment system can cause accident in the hospitality and catering industry. Although, majority of the respondents who took part of the survey agreed that, poor protective equipment system can cause accident in the hospitality and catering industry.

Finally, the study revealed that 8 respondents represent 10% strongly disagreed that, lack of effective checks like kitchen equipment, wiring and installation cannot cause accident in the catering industry, 16 respondents disagreed that lack of effective checks like kitchen equipment, wiring and installation cannot cause accident in the catering industry which indicate 20%, 40 respondents represent 50% also argued in support of the motion that, lack of effective checks like kitchen equipment, wiring and installation can cause accident in the catering industry while 16 respondents also added in favor of the motion that lack of effective checks like kitchen equipment, wiring and installation can cause accident in the catering industry. Although, majority of the respondents who took part of the survey were in support that, lack of effective checks like kitchen equipment, wiring and installation can cause accident in the catering industry.

**Table 4.10: Challenges associated with safety awareness and accident preventions among workers in the catering industry.**

No	Item Statement	Frequency (F)							
		1		2		3		4	
		Strongly Disagree	Disagree	Disagree	Agree	Agree	Strongly Agree	Strongly Agree	
		Feq	%	Feq	%	Feq	%	Feq	%
1.	Working conditions	-	-	-	-	56	70%	24	30%
2.	Individual working history	-	-	-	-	32	40%	48	60%
3.	Accessibility of safety clothing	-	-	-	-	40	50%	40	50%
4.	Working environment	-	-	-	-	72	90%	8	10%
5.	Education and training concerns	-	-	-	-	64	80%	16	20%
6.	Workplace culture	40	50%	32	40%	8	10%	-	-
7.	Proper personal protective equipment.	-	-	-	-	56	70%	24	30%

Table 4.10 revealed the challenges associated with safety awareness and accident preventions among workers in the catering industry. The study revealed that, 56 agreed that, lack of good working condition in the hospitality and catering industry is one of the challenges which was associated among workers which represent 70% while 24 respondents strongly agreed that, lack of good working condition in the hospitality and catering industry is one of the challenges which was associated among workers which indicate 30%. However, majority of the respondents who took part of the survey agreed

that, lack of good working condition in the hospitality and catering industry is one of the challenges which was associated among workers.

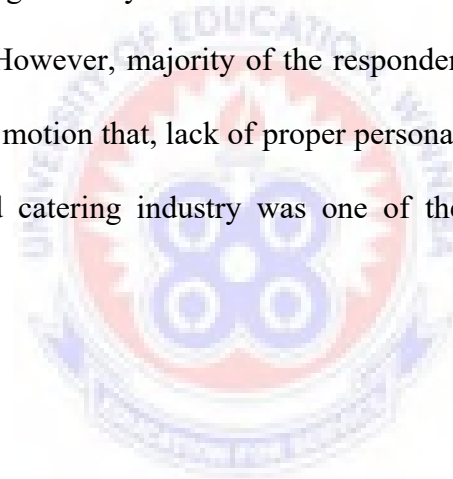
The study again revealed that, 32 respondents agreed that, lack of good safety policies in the hospitality and catering industry is one of the challenges which was associated among workers which represent 40% while 48 respondents strongly agreed that, lack of good safety policies in the hospitality and catering industry is one of the challenges which was associated among workers which indicate 60%. However, majority of the respondents who took part of the survey agreed that, lack of good safety policies in the hospitality and catering industry is one of the challenges which was associated among workers.

Moreover, the study revealed that, 40 respondents agreed that, lack of access to safety equipment and protective clothes were major challenges in the hospitality and catering industry which was associated among workers which represent 50% while 40 respondents strongly agreed that, lack of access to safety equipment and protective clothes were major challenges in the hospitality and catering industry is one of the challenges which was associated among workers which indicate 50%. However, majority of the respondents who took part of the survey agreed that, lack of access to safety equipment and protective clothes were major challenges in the hospitality and catering industry which was associated among workers.

Furthermore, the study revealed that, 64 respondents agreed that, lack of education and training on safety awareness in the hospitality and catering industry was one of the challenges associated among workers which represent 80% while 16 respondents strongly agreed that, lack of education and training on safety awareness in

the hospitality and catering industry was one of the challenges associated among workers which indicate 20%. However, majority of the respondents who took part of the survey were in support of the motion that, lack of education and training on safety awareness in the hospitality and catering industry was one of the challenges associated among workers.

Finally, the study revealed that, 56 respondents agreed that, lack of proper personal protective on safety awareness in the hospitality and catering industry was one of the challenges associated among workers which represent 70% while 24 respondents strongly agreed that, lack of proper personal protective on safety awareness in the hospitality and catering industry was one of the challenges associated among workers which indicate 30%. However, majority of the respondents who took part of the survey were in support of the motion that, lack of proper personal protective on safety awareness in the hospitality and catering industry was one of the challenges associated among workers.



**Table 4.11 Management strategies to create safety awareness and accident preventions among workers in the hospitality and catering industry.**

No	Item Statement	Frequency (F)							
		1 Strongly Disagree		2 Disagree		3 Agree		4 Strongly Agree	
		Feq	%	Feq	%	Feq	%	Feq	%
1.	Develop the right attitude in the kitchen	-	-	-	-	64	80%	16	20%
2.	Junior staff should be well supervised as possible	-	-	8	10%	40	50%	32	40%
3.	Keep kitchen floors tidy	-	-	-	-	56	70%	24	30%
4.	Wearing of kitchen safety clothing should be enforced	-	-	-	-	40	50%	40	50%
5.	Regularly organize safety training for workers	-	-	-	-	24	30%	56	70%
6.	Motivate workers who demonstrate safe working attitude	-	-	-	-	48	60%	32	40%
7.	Kitchen equipment should always be kept in good working condition	-	-	-	-	56	70%	24	30%
8.	Accidents should be reported as soon as they occur	-	-	-	-	40	50%	40	50%

Respondents were asked strategies used to minimize the causes of accidents in the hospitality and catering industry, precisely Bolgatanga Municipal: Management strategies to create safety awareness and accident preventions among workers in the hospitality and catering industry.

From table 4.11, the study revealed that 64 respondents represent 80% agreed that develop the right attitude in the kitchen and encouraging workers on safety issues is one of the strategies that can be used to minimized the rate of accidents in the hospitality and catering industry while 18 respondents represent 20% strongly agreed that develop the right attitude in the kitchen and encouraging workers on safety issues is one of the strategies that can be used to minimized the rate of accidents in the hospitality and catering industry. However, majority of the respondents who took part of the survey were in support of the motion that develop the right attitude in the kitchen and encouraging workers on safety issues is one of the strategies that can be used to minimized the rate of accidents in the hospitality and catering industry.

The study also revealed that 40 respondents represent 50% agreed that junior staff should be well supervised as soon as possible to help reduce to risk of accident in the hospitality and catering industry, 32 respondents represent 40% also strongly supported that junior staff should be well supervised as soon as possible to help reduce to risk of accident in the hospitality and catering industry while 8 respondents represent 10% argued against the motion that junior staff should be well supervised as soon as possible cannot help reduce to risk of accident in the hospitality and catering industry. However, majority of the respondents who took part of the survey agreed that, junior staff should be

well supervised as soon as possible to help reduce to risk of accident in the hospitality and catering industry.

Moreover, the study revealed that 56 respondents represent 70% agreed that keeping the kitchen floor clean may help reduce accident in the kitchen at the hospitality industry encouraging workers on keeping kitchen floor tidy is one of the strategies that can be used to minimized the rate of accidents in the catering industry whiles 24 respondents represent 30% strongly supported the motion that keeping the kitchen floor clean may help reduce accident in the kitchen at the hospitality industry. However, majority of the respondents who took part of the survey were in support that, keeping the kitchen floor clean may help reduce accident in the kitchen at the hospitality industry.

Notwithstanding, the study revealed that 40 respondents represent 50% agreed that wearing of safety clothes may help reduce accident in the kitchen at the hospitality industry encouraging workers on keeping kitchen floor tidy is one of the strategies that can be used to minimized the rate of accidents in the catering industry whiles 40 respondents represent 50% strongly supported the motion that wearing of safety clothes may help reduce accident in the kitchen at the hospitality industry. However, majority of the respondents who took part of the survey were in support that, wearing of safety clothes may help reduce accident in the kitchen at the hospitality industry.

Again, the study revealed that 24 respondents represent 30% agreed that organizing regular safety training for the staffs will also help reduce accident in the kitchen at the hospitality industry encouraging workers on keeping kitchen floor tidy is one of the strategies that can be used to minimized the rate of accidents in the catering industry whiles 56 respondents represent 70% strongly supported the motion that



organizing regular safety training for the staffs may help reduce accident in the kitchen at the hospitality industry. However, majority of the respondents who took part of the survey were in support that, organizing regular safety training for the staffs may help reduce accident in the kitchen at the hospitality industry. This prove by a survey which was conducted by Jensen (2005), worker education prepares them to deal with potential hazards or unforeseen problems at workplaces. Thus, training or education gives guidance in ways to become better or informed worker that takes action(s) aimed at eliminating workplace hazards and protecting lives and property.

Furthermore, the study revealed that 40 respondents represent 50% agreed that accident should be reported to the higher authority which will also help reduce accident in the kitchen at the hospitality industry while 40 respondents represent 50% strongly supported the motion that accident should be reported to the higher authority may help reduce accident in the kitchen at the hospitality industry. However, majority of the respondents who took part of the survey were in support that, accident should be reported to the higher authority.

Lastly, the study revealed that 56 respondents represent 70% agreed that kitchen equipment should be kept in good condition which will also help reduce accident in the kitchen at the hospitality industry while 24 respondents represent 30% strongly supported the motion that kitchen equipment should be kept in good condition may help reduce accident in the kitchen at the hospitality industry. However, majority of the respondents who took part of the survey were in support that, kitchen equipment should be kept in good condition in the hospitality industry.

## CHAPTER FIVE

### SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

#### 5.1 Summary of Findings

The following are the summary of findings revealed from the study;

The study revealed that, factors wrong attitude towards work, lack of personal protection, lack of education and safety awareness, limited resources for implement safety and accident standards, poor choice of protective equipment, hatred for the job and alcoholism were the causes of accident among workers in the hospitality and catering industry. However, majority of the respondents' agreed that, wrong attitude towards work, alcoholism and drugs, limited resources for implement safety and accident standards and lack of education and safety awareness were the major causes of accident in the hospitality and catering industry.

The study again revealed that, challenges such as good working conditions, accessibility of safety clothing, working environment, education and training concerns, workplace culture and proper personal protective equipment were challenges associated among workers in the hospitality and catering industry. However, majority of the respondents agreed that, good working conditions, working environment, education and training concerns and proper personal protective equipment were the major challenge faced in the hospitality and catering industry in the Bolgatanga Municipal in the Upper East Region.

Finally, the study also revealed that there are various strategies which can be used to minimize the causes of accident in the hospitality and catering industry in the

Bolgatanga Municipal in the Upper East Region. Strategies which can be used to minimize accident causes such as developing the right attitude in the kitchen, junior staffs should be well supervised, keep kitchen floor tidy, regular organize of training and kitchen equipment should always be in good condition. However, majority of the respondents agreed that, developing the right attitude in the kitchen keep kitchen floor tidy, regular organize of training and kitchen equipment should always be in good condition were the major strategies to be use if some selected hotels in the Bolgatanga Municipal wants to minimize accidents in the hospitality and catering industry.

## **5. 2 Conclusion**

The study can be concluded that wrong attitude towards work, alcoholism and drugs, limited resources for implement safety and accident standards and lack of education and safety awareness were the major causes of accident in the hospitality and catering industry.

The study can also be concluded that, good working conditions, working environment, education and training concerns and proper personal protective equipment were the major challenge faced in the hospitality and catering industry in the Bolgatanga Municipal in the Upper East Region.

Finally, it can be concluded that developing the right attitude in the kitchen keep kitchen floor tidy, regular organize of training and kitchen equipment should always be in good condition were the major strategies to be use if some selected hotels in the Bolgatanga Municipal wants to minimize accidents in the hospitality and catering industry.

### **5.3 Recommendation**

The following recommendations were made to address the findings of the study;

1. The stakeholders involve in the hospitality and catering industry must adopt plans and policies to ensure the safety of catering staffs in the Bolgatanga Municipal is at their heart. The managers must provide in-service training to the catering staff about accident and safety preventions in the kitchen.
2. Various managers and owners in the catering industry must do thorough health and safety inspection to ensure the safety of the workers in the catering industry in the Bolgatanga Municipal. Such as ensuring the hotels have fire extinguisher, an assemble point in case of emergence and a structured wiring. Checking the safety of every staffs will help the workers to know more about safety and accident prevention in the catering industry.
3. Managers, hotels owners must provide all the necessary resources to aid the safety of the workers in the Municipality. The managers must provide the workers with safety boots; eye protective equipment, hand protective and a well quality uniform for the workers in the catering especially those employees at the kitchen to help minimized the rate of accident in the kitchen.

### **5.5 Suggestions for Further Research**

The study was limited to Bolgatanga Municipality. It is suggested that, similar studies should be conducted in other Metropolitans, Municipals and Districts to create much awareness about accident prevention and safety procedures in the hospitality and catering industry in Ghana.

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**APPENDIX**

**AKENTEN APPIAH-MENKA UNIVERISTY OF SKILLS TRAINING AND**

**ENTREPRENEURIAL DEVELOPMENT**

**COLLEGE OF TECHNOLOGY EDUCATION, KUMASI**

**SCHOOL OF GRADUATE STUDIES**

**DEPARTMENT OF CATERING AND HOSPITALITY MANAGEMENT**

**EDUCATION**

**QUESTIONNAIRE FOR RESPONDENTS**

I am a student of Akenten Appiah-Menka University of Skills Training and Entrepreneurial Development, elsewhere University of Education, Winneba - Kumasi Campus. I am conducting a research on the topic: *Examine Safety Awareness and Accident Prevention Among Workers in The Catering Industry Within the Bolga Municipality.*

Please help me classify your response by supplying the following facts about yourself and opinion on the raised issues by ticking [] the appropriate corresponding box and write your opinions, views and comment where applicable.

The research work is solely for academic purposes and your responses are going to be treated with utmost confidentiality.

Thank You!

**KINDLY TURN OVER TO BEGIN**

**SECTION – A**

**Respondents' Profile**

*Please fill in the blank and tick [✓] in the options provided.*

1. What is your position?

Manager

chef/Waiter

Receptionist

Bar Attendant

Specify (others).....

2. What is your gender?

Male

Female

3. What is your age?

Between 21-30years

Between 31-40years

Between 41-50 years

More than 50 years

4. How long have you been working in the catering industries?

Between 1-4years

Between 5-8years

Between 9-12years

Specify (others).....



5. What is your highest educational qualification?

- i. BECE
- ii. WASSCE
- iii. HND/DIPLOMA
- iv. DEGREE
- v. MASTERS
- vi. PhD
- vii. Specify (others).....

6. Do you follow safety measures while working?

YES

NO

7. Do you wear safety clothing while working?

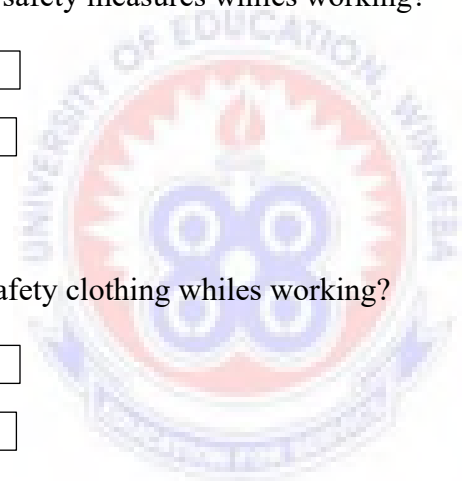
YES

NO

8. Does your organization regularly organize safety training for the workers?

YES

NO



**SECTION – B**

**Causes of Accidents Among Workers in The Catering Industry**

Please, tick [ $\surd$ ] in the appropriate column from 1 to 4 to indicate how much you agree to the following causes of accidents among workers in the catering industry. Each scale represents the following rating: 4 - Strongly agree (SA), 3 - Agree (A), 2 – Disagree (D), 1- Strongly disagree (SD).

No	Item Statement	Frequency (F)			
		1 Strongly Disagree	2 Disagree	3 Agree	4 Strongly Agree
1.	Lack of personal protection				
2.	Lack of safety training and education				
3.	Lack of access to safety clothing.				
4.	The use of drugs and alcohol on site.				
5.	Limited resources for implement safety and accident standards.				
6.	Lack of effective checks on safety practice				
7.	Carelessness whiles working				
8.	Hatred for the job				

**SECTION – C**

**Challenges Associated with Safety Awareness and Accident Preventions Among Workers in The Catering Industry**

Please, tick [√] in the appropriate column from 1 to 4 to indicate how much you agree to the following challenges associated with safety awareness and accident preventions among workers in the catering industry. Each scale represents the following rating: 4 - Strongly agree (SA), 3 - Agree (A), 2 – Disagree (D), 1- Strongly disagree (SD).

No	Item Statement	Frequency (F)			
		1 Strongly Disagree	2 Disagree	3 Agree	4 Strongly Agree
1.	Working conditions				
2.	Individual working history				
3.	Type of accident and safety policies				
4.	Accessibility of safety clothing				
5.	Working environment				
6.	Education and training concerns				
7.	Workplace culture				
8.	Proper personal protective equipment.				

**SECTION – D**

**Strategies to Create Safety Awareness and Accident Preventions Among Workers in  
The Catering Industry**

Please, tick [] in the appropriate column from 1 to 4 to indicate how much you agree to the following strategies to create safety awareness and accident preventions among workers in the catering industry. Each scale represents the following rating: 4 - Strongly agree (SA), 3 - Agree (A), 2 – Disagree (D), 1- Strongly disagree (SD).

No	Item Statement	Frequency (F)			
		1 Strongly Disagree	2 Disagree	3 Agree	4 Strongly Agree
1	Develop the right attitude in the kitchen				
2	Junior staff should be well supervised as possible				
3	Keep kitchen floors tidy				
4	Wearing of kitchen safety clothing should be enforced				
5	Regularly organize safety training for workers				
6	Motivate workers who demonstrate safe working attitude				
7	Kitchen equipment should				

	always be kept in good working condition				
8	Accidents should be reported as soon as they occur				

**THANK YOU!**

