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## Occupational Health and Safety Management Practices and Employee Safety Behavior: Evidence from Accra Technical University, Ghana

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### **Abstract:**

*This present study aimed at investigating the relationship between Occupational Health and Safety (OHS) management practice (OHS policies and regulations, workplace safety inspection, and OHS induction and training) and employee safety behavior among the non-teaching staff of Accra Technical University in Ghana. This present study employed a descriptive survey research design. In addition, one hundred and ninety-six (196) respondents were sampled using the convenience sampling technique. Data retrieved were analyzed using the standard multiple regression analysis. The findings of the study showed that OHS policies and regulations, workplace safety inspection, and OHS induction and training had a significant positive impact on employee safety behavior. Overall, the findings of this present study give credence to the fact that OHS management practices aid in enhancing the safety behavior of employees. It is recommended that designing and implementing safety policies and guidelines management must ensure that it is properly enforced, and followed.*

**Keywords:** OHS Policies and regulations, workplace safety inspection, OHS induction and training, and employee safety behavior

### **1. Introduction**

Safety is the state of being protected from a possible source of hazard or risk, and it is a basic, fundamental human necessity in all parts of our existence (Wehmeier, McIntosh, & Turnbull, 2005). According to Abraham Maslow's 1943 theory of needs pyramid, the feeling of safety at work is a critical aspect in employees' job satisfaction (Bergheim *et al.*, 2015). The simplest approach to express how much you respect your employees is to provide an environment where they feel physically and mentally comfortable (Pilbeam & Corbridge, 2006). Accidents endanger employees' safety, and workers, like any other living person, expect their institutions to put in place necessary safeguards to ensure that these people come home safely at the end of each day's work. However, occupational accidents and fatalities are on the rise. As a result, employee safety and well-being are critical disciplines for any company's development and success. Occupational health and safety (OHS) is the science of predicting, recognizing, assessing, and regulating hazards that arise in the workplace and have the potential to harm employees' safety and well-being, while also considering the impact on nearby communities and the environment as a whole (Kumar, Goud & Joseph, 2014). Workplace safety refers to the policies and procedures in place to protect the health and safety of employees in the workplace (Yanar & Smith, 2019). It entails identifying and managing dangers in compliance with national standards, as well as ongoing staff health and safety education and training. Occupational health and safety have been outside the forefront of management studies for a long time (Bérastégui & Garben, 2021). In reality, occupational health and safety concerns account for less than 1% of organizational research (Stowell & Warren, 2018). Given the considerable social and economic consequences associated with occupational safety, such as occupational deaths, work-related injuries (Ali *et al.*, 2021), and lost productivity, this figure is shockingly low. Given the social and economic implications of workplace accidents, researchers must better understand the organizational elements that may influence an individual's workplace safety behavior. After accident data indicated that 95 percent of workplace accidents were caused by inappropriate employee actions, safe workplace behavior was first created in the 1930s (Geller, 2001).

Employee attitudes and actions have been found to predict how people perceive hazards in the workplace, according to Kleine, Rudolph & Zacher (2019), hence a behavior-oriented strategy is critical. According to DeJoy *et al.* (2004), there is a growing emphasis on enhancing compliance with safety standards and regulations. Other safety researchers, on the other hand, concluded that compliance alone would not be enough to prevent workplace accidents and other undesirable effects; workers needed to be proactive and participate in workplace safety management. Safety participation refers to proactive safety actions such as supporting coworkers, advocating safety programs, demonstrating initiative, and making modifications to enhance safety. The organization's current health and safety standards have an

impact on how employees view safety at work. Health and safety procedures impact workers' attitudes toward safety, perceived safety norms, and perceptions of control over safe working behaviors (Morrow, Koves, Valerie, & Barnes, 2014). Working in a strong, positive health and safety environment, for example, increases the likelihood of employees having good attitudes about safety measures. Workers eventually believe that working safely is the norm, and that safe work habits take precedence over other workplace needs (Sorensen *et al.*, 2011). As a result, the quality of current health and safety procedures is a significant predictor of how people act in the workplace when it comes to their safety. Organizational health and safety management strategies (Boyle, 2019), organizational safety commitment (Curcuruto & Griffin, 2018), and personality variables all appear to impact safety behavior (Ledesma *et al.*, 2018). Indeed, in human-related incidents in the workplace, Shuck *et al.*, (2021) stressed the relevance of organizational effect on individual behavior. A lot of research looked at the impact of organizational characteristics on workplace safety behavior in diverse contexts and found that they had a significant impact.

The management of employee well-being and workplace safety is one of the demands of human distress. The economic, human, and social consequences of work-related injuries, errors, and illnesses, as well as critical industry-related travesties, have long been a source of concern at the organizational, national, and international levels, because industrial or occupational accidents and injuries not only affect the victim worker's mental health and productivity but also have financial consequences for the injured worker and the employer (Sam-Mensah, 2018). It would not be an exaggeration to say that, like high-risk industries like construction, mining, and aviation, a technological university's occupational health and safety issues cannot be overlooked. 'Every individual has the right to work in safe and healthy circumstances,' according to Ghana's 1992 constitution (section 24:1). Administrators, secretaries, engineers, storekeepers, healthcare professionals, drivers, security guards, cleaners, and other non-teaching staff members work at the technological university. Even though the majority of study in the occupational health and safety literature focuses on the formal sector, little attention has been paid to specific areas such as this. Furthermore, a dearth of studies on the health and safety among technical university personnel in Ghana has been acknowledged in the extant literature; consequently, there is a scarcity of research on the health and safety management practices among technical university's non-teaching staff in Ghana. It would be erroneous to believe that all jobs and occupations have the same level of safety behavior. As a result, the focus of this study is to determine the influence of occupational health and safety management practices on the safety behavior of non-teaching of Accra Technical University.

Overall, this present study would be extremely useful in developing safety training programs targeted at assuring employee safety in technical university work environments and related disciplines, resulting in a significant boost in employee productivity and well-being. This investigation could also be used as background material for both organizational management and policymakers, as well as scholarly research understudies. Top managers will use this study to help them evaluate their existing safety strategy, policy, tactics, and practice by learning more about the impact of occupational safety and wellbeing on workers' safety behavior.

## 2. Literature Review and Hypothesis Development

### 2.1. Theoretical Review

The expectancy theory was used in this study to elucidate the theoretical correlations between the variables. Because of its theoretical relationship to the variables under examination in the investigation, this theory was deemed relevant for this study. A good understanding of the intricate interaction and interconnectedness of the work environment, workplace safety inspection and training, and their impact on employees' safety behaviors at work can enable Ghanaian workers to promote high workplace safety and healthy work (Ledesma *et al.*, 2018).

Victor Vroom's expectancy theory, developed in the 1960s, clarifies worker motivation, particularly to workers' perceptions of their circumstances. As a result, their actions in light of these situations are influenced by their judgments. According to the theory, people have different goals and objectives and can be persuaded if they believe that there is a positive relationship between hard work and performance, that perfect implementation or execution of an assignment will result in an appealing prize, that the reward will satisfy an urgent need, and that the desire to meet the need is strong enough to make the hard work worthwhile. The desirability of the outcome determines the incentive for behavior choices (Ajzen, 2020). Vroom (1960) recognized that an employee's performance is influenced by a variety of factors, including his or her identity, aptitudes, knowledge, experience, and capacities. He believed that aptitude and inspiration go hand in hand with execution. Expertise is associated with both inherent and acquired abilities. The information depended on by the incentive to be inferred because of the exertion, as well as the quality of the relationship between exertion and reward, are all included in inspiration (Reeve, 2018). According to the expectancy theory, three criteria must be met at all times to achieve a higher level of workplace inspiration. To begin, a worker's performance must be rewarded in a meaningful way. Second, the reward employees receive for completing the errand must be equal to or a reasonable trade. Third, there must be a high possibility that a worker will receive the reward if the task is completed or the goal is met. Surprisingly, all three elements must be satisfied to maintain a high level of employee motivation (Stamolampros *et al.*, 2019).

To improve safety work motivation in OHS, employees must believe that if they put in more effort, the safety goals will be met and rewarded. Furthermore, the employee must be confident that they will receive fair and equitable meaningful compensation as soon as the safety objectives are met. In any case, a worker's harmful behavior is unmistakably influenced by his or her perception of risk or expectation of damage, as well as the seeming likelihood of how genuine the damage may be managed in a given situation (Sunstein, 2020). The theory's implications for this endeavor are that the expectancy theory has some important implications for OHS inspiration. When laying out work

procedures or selecting hazard management methods, one must be cautious and take reasonable precautions to ensure that there are no disincentives to work safety. Employees will be motivated to ignore safe and healthy work practices and take the risk if playing it safe causes anxiety or is tedious. Sherrard (2018) believes that where OHS activity is under the volitional control of employees, motivating strategies must be persuasive, and care must be made to ensure that impetuses to work safely are not outweighed by motivating factors to accept the risk.

## 2.2. Occupational Health and Safety

The International Labour Organization (ILO) defines occupational health and safety (OHS) as 'the science of anticipating, recognizing, evaluating, and controlling risks emerging in or from the worksite that may endanger the health and well-being of workers while also taking into account the potential impact on surrounding neighborhoods and the general environment' (ILO, 2008). According to Carnevale and Hatak (2020), occupational health and safety include an employee's emotional and physical well-being while at work. Badri *et al.* (2018) describe occupational health as a discipline associated with health in the context of work or the workplace. In all work environments, as per Anwar and Abdullah (2021), all workers' well-being and security are confidently related to the organization's profitability. Work-related wellness, according to Salas-Vallina *et al.* (2021), refers to an employee's entire physical, psychological, and emotional well-being. The effective use of information and communication networks in businesses helps to reduce the incidence of accidents while also improving workers' perceptions of management's devotion to OHS (Gyekye *et al.*, 2012). A unified system of rules, plans, and processes promotes uniformity and synchronization (Fernández-Muniz *et al.*, 2009). Positive health and safety practices should be incorporated into the firm and have binding power. Management of health and safety combines procedures for reducing threats to workers' health and safety within the workplace while also ensuring that the firm conforms to rules. An effective safety and health management framework include policies and procedures for health and safety. General health and safety rules indicate management's commitment to providing a safe and healthy work environment for employees (Christian *et al.*, 2009).

According to a survey of occupational injuries and health issues related to employment, individuals who had accidents in the gas, steam, water, electricity, and sewage system areas, as well as those who had accidents in the building industry, rank highest (TUIK, 2015). According to Albert and Hallowell (2013), using safety-related measures, following instructions, disconnecting electrical lines, and stopping the operation of equipment to prevent accidents is a cost-inefficient method, but it is extremely successful in preventing injuries. The study's findings revealed that the cost of implementing injury prevention techniques was minimal when compared to other industries. As a result, while investments in safety measures may not outweigh economic gains, they do provide value in the form of non-monetary advantages (e.g., reduced worker turnover) and reduced societal costs connected with injuries. According to Turner (2019), concentrating on safety helps to prevent accidents. Organizations need to engage in health and safety procedures to promote employee safety behavior in general. This notion is backed up by the fact that businesses that prioritize safety in their everyday operations and working techniques have fewer accidents and lower related expenses. Additionally, management commitment towards safety and the significance of safety in the organization can improve employee safety behavior dramatically.

## 2.3. Occupational Health and Safety Management Practices

Occupational health and safety operating standards are usually established by law. Legal justifications for OHS policies include safety awareness campaigns and the preventative, corrective, and compensating effects of regulations that protect employees' health and safety. A part of the effective safety and health management structure is the strategy and systems for well-being and security. In general, workplace health and safety frameworks determine management's readiness to provide employees with a healthy and safe working atmosphere (Christian *et al.*, 2009). OHS Policies and Regulations attempt to change workplaces and work practices to reduce work-related injuries and diseases. Many nations have enacted legislation to guarantee that all employees are protected from harm and that all workplaces are respected. The Occupational Health and Safety Act (OHSA) and its rules aim to protect workers' health and safety while also improving the working environment. It aims to determine the extent to which companies have different risk relay and reporting frameworks and procedures, as well as the use of personal defensive gear and overall safety systems built inside the firm. Managers, according to reading, Naweed, and Salmon (2019), should communicate and enforce security concepts and arrangements. The management commits workers to follow security regulations, and the director will use the disciplinary system to penalize dangerous work behaviors in big projects. Impetuses, rewards, and positive reinforcement are used to encourage safe conduct. They pay workers for their concerns or suggestions concerning their well-being and security. According to Zhang *et al.* (2020), the goal of workplace inspections is to find and remedy any possible or real hazards in the workplace before they cause injuries and accidents to employees and others. According to Kabil and Sundararaju (2019), including workers at all levels of an organization in safety audits gives them the power to make observations, provide comments, and then use behavioral-based data to target areas for safety improvement. As per Mohammadi *et al.* (2018), encouraging occupational safety inspections is the only way to enhance employee productivity and performance in any firm, as well as the only way to avoid the bad consequences and potential tragedies that can result from workplace dangers.

Training is, without a doubt, widely considered an important element of OHS programs. However, reliable data on the efficacy of OHS training is still being compiled. According to Ilalah and Ali (2019), training is any learning activity aimed at acquiring specific information and abilities for the goal of completing a task. The requirement for efficiency and safety in the operation of certain tools or equipment, the need for an efficient sales force, and the need for skilled

management in the organization are all examples of training demands. OHS training refers to organized activities that aid in the acquisition of certain OHS skills (Laroche & Patoine, 2020). This training usually includes rules for recognizing and controlling dangers, safe work procedures, the proper use of personal protective equipment, and crisis management and prevention activities. It may also connect workers to further resources for learning more about potential dangers. Safety and health training is a critical component of the safeguard program, according to Yiu, Sze, and Chan (2018). It should be included in the induction program. It should also happen after a shift of staff to a particular institution or a shift in working method. Health and safety training clarifies the rules and provides information on potential threats and how to keep a safe distance from them. Additional refresher training should be provided in a unique course to deal with new aspects of health and security or areas where security risks have arisen. This entails instilling safety awareness in the workforce so that they can do their duties safely and with their health in mind (Umugwaneza, Nkechi & Mugabe, 2019).

#### 2.4. Employee Safety Behaviour

Heinrich (1931) accident causation model stated that risky actions are the actual cause of accidents, which sparked safety behavior research. Neal and Griffin (2006) suggested a two-factor safety behavior model that included safety compliance and participation (Griffin & Neal, 2000). Both components are linked to work-related accidents and injuries, according to the literature (e.g., Clarke, 2013). Certain particular acts and voluntary extra-role behaviors that indirectly lead to the development of a safe and healthy work environment are referred to as safety participation. These actions include things like volunteering for safety events and programs, assisting others, raising safety concerns, assisting coworkers with safety issues, advocating safety programs and policies, attending safety meetings, and looking out for others' well-being (Mullen, Kelloway & Teed, 2017; Neal & Griffin, 2000; Tucker & Turner, 2015). On the other side, safety compliance refers to following corporate safety standards and practices, as well as engaging in activities that promote workplace health and safety, such as wearing safety equipment. The difference between compliance and safety participation is that compliance is mandated in-role safety conduct, whereas safety participation is a voluntary extra-role action undertaken by the individual (Curcuruto, Parker & Griffin, 2019). Safety compliance entails conforming to institutional standards, position obligations, and specific work needs, whereas safety participation entails proactive activity that helps to the development of a safe environment (Newaz et al., 2019; Smith et al., 2019). According to the expectancy theory, if one offers others support, resources, or benefits, the recipients must reciprocate them to achieve reciprocal gain. Employees may be obligated to reciprocate by engaging in positive safety behaviors if their bosses show them support (Dartey-Baah, Quartey & Adotey, 2020). Organizational citizenship behavior and safety participation have similar characteristics (Jafarpanah & Rezaei, 2020). Organizational citizenship behaviors are voluntary work activities that benefit the organization but aren't formally acknowledged, rewarded, or promoted. Non-compliance with such behaviors is not penalized (Bisack & Clay, 2021), and promoting them through formal channels is difficult.

#### 2.5. Occupational Health and Safety Management Practices and Employee Safety Behaviour

A great deal of research delved into the impact of organizational factors on workplace safety behavior in diverse settings and found that organizational factors had a significant impact. Because safety-related behavior has a direct correlation with safety outcomes, it has been identified as a critical component in accident prevention and so demands special consideration (Jiang, Lavaysse & Probst, 2019). Concerning dangers and their management, it has been highlighted that organizations operate within a host of different ideas and practices. According to Falcone *et al.* (2019), an organization's health and safety procedures impact employees' safety perceptions, ideals, and attitudes because 'it provides benefits and drawbacks based on the information it sends to group members.' Accidents are almost invariably accompanied by disruptions or a breakdown in current safety beliefs and risk norms, according to Pidgeon (2019). This shows that the type of safety-related beliefs, values, and attitudes has an impact on workplace safety behavior, which in turn has an impact on safety effects. Jiang, Yu, Li, and Li (2010) distinguished between safety behavior and safety performance, looking at safety climate as a predictor of both safety behavior (compliance and involvement) and safety performance. The findings revealed that safety practices and safety behavior have a good link. Safety compliance and involvement were also found to be favorably connected to safety performance. Lu and Tsai (2011) investigated seafarers' views of health and safety practices, as well as their influence on safety behaviors, in the setting of container shipping, and discovered a positive relationship between safety practices and their safety behaviors. The findings of Lu and Tsai support those of Clarke (2006), who discovered that a favorable safety climate had a beneficial effect on both components of employee safety behavior (safety participation and compliance).

Health and safety practices have regularly been found to play a significant role in worker safety. Employees' health and safety behaviors are influenced by the kind of safety practices. Curcuruto, Guglielmi, and Mariani (2013) found that team safety atmosphere influenced proactive behavior by enhancing proactive orientation, but affected prosocial behavior by increasing affective commitment, demonstrating that safety practices had a beneficial effect on safety behavior. Workers' safety behavior was favorably influenced by health and safety practices, according to Amponsah-Tawiah and Mensah (2016), since practices provide signals about the ultimate relevance of safety at their company. The relationship between safety audits and organizational results has been studied empirically. In a cross-sectional study to evaluate safety procedures and injuries in Ghana, Mitchual *et al.* (2015) discovered that while employees in the wood industry rarely report hearing damage, eye irritation, neck pains, or poor vision, they frequently report minor illnesses like headaches, respiratory problems, small cuts, and back pains. They indicated that sawmill management should make a greater effort to implement safety procedures, notably the use of personal protective equipment, to reduce occupational risks and injuries associated with wood handling businesses. According to Bluff (2019), non-attendance reduces the key

beneficial influence of work-related health and safety on productivity. He demonstrates that the risks and dissatisfaction of workers with health and safety advancement initiatives are linked to high levels of employee absenteeism. In Uganda, research by Ndejjo *et al.* (2015) analyzing OHS risks faced by healthcare workers and their mitigation methods discovered that healthcare professionals face a variety of hazards at work, negatively impacting service delivery. They discovered that some correlating factors include healthcare personnel ignoring the necessary protective equipment, overtime work, and job-related demands. According to the findings, several intermediations, such as personal protective equipment, job stress, and poor adherence to mitigation measures, should be tailored to reduce the risks. As a result of this discussion above, the study hypothesizes that;

- H1: OHS policies and regulations significantly predict employee safety behavior
- H2: Workplace safety inspection significantly predicts employee safety behavior
- H3: OHS induction and training significantly predict employee safety behavior

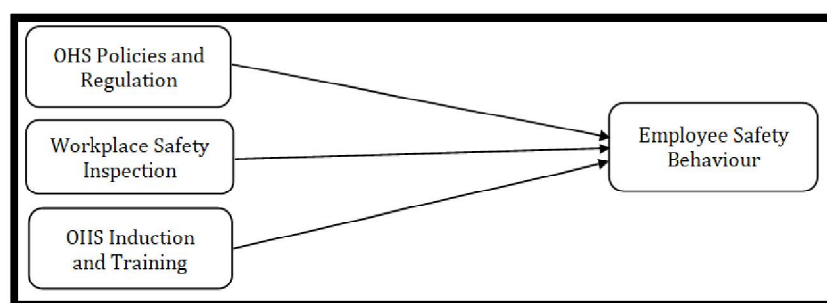


Figure 1: Hypothesized Model  
Source: Author's Construct (2022)

### 3. Methodology

#### 3.1. Design, Sample, and Procedure

The study falls within the quantitative research paradigm and adopted a descriptive survey research design. The population for the study involved non-teaching staff of technical universities in, Ghana. Respondents for the study were sampled using the non-probability convenience sampling technique. One hundred and ninety-six (196) respondents were selected for the study using Krejcie and Morgan's (1970) mathematical formula for selecting a sample size. Respondents personally consented to the responding of the questionnaire without coercion. Two hundred and thirty-seven (237) questionnaires were personally administered to the respondents by the researchers and after scrutiny of the questionnaires returned, one hundred and ninety-six (196) retrieved questionnaires were fit for analysis. The rejected questionnaires were those with double answers and were incomplete. Multiple regression statistical test with the aid of the Statistical Package for Social Sciences (SPSS) was used to analyze the retrieved questionnaires that passed the inclusion criteria.

#### 3.2. Measures

##### 3.2.1. Occupational Health and Safety Management Practices

Mowabe & Atambo (2016) occupational health and scale were adopted and slightly modified. The scale was measured on three dimensions namely; OHS policies and regulations (9-item scale), workplace safety inspection (7-item scale), and OHS induction and training (7-item scale). Sample items include 'My institution has safety and health policy in place' and 'I know the content of the safety and health policy' (OHS policies and regulations); 'Safety audits and inspections are carried out as planned' and 'Timely inspections to detect faults in systems/equipment/machine' (workplace safety inspection); 'Training and/or inducting newly recruited staff on OHS before officially allocated duties' and 'Conducting OHS training/refresher courses/seminars regularly' (OHS induction and training). The responses from the respondents were anchored on a 5-point Likert scale ranging from 1 'Strongly Disagree' to 5 'strongly Agree'

##### Employee Safety Behavior

Neal and Griffin's (2006) six-item scale for measuring safety behavior was adopted for this study. The safety behavior scale was measured on two dimensions namely; safety compliance (3-item scale) and safety participation (3-item scale). Sample item includes 'I am using all the necessary safety equipment to do my job' and 'I am using all the correct safety procedures for carrying out my job' (safety compliance); 'I am promoting prevention and safety programs within my institution' and 'I am voluntarily carrying out tasks or activities that help to help safety' (safety participation). The responses from the respondents were anchored on a 5-point Likert scale ranging from 1 'Strongly Disagree' to 5 'strongly Agree'

### 4. Results

The descriptive statistics, reliability of the constructs as well as the correlation among the study construct under study are shown in Table 1. All the constructs under study showed a good internal consistency which was above the acceptable threshold of .70 suggested by Nunnally and Bernstein (1994). Also, it can be seen that OHS policies and

regulations ( $r = .19, p < 0.001$ ), workplace safety inspection ( $r = .22, p < 0.001$ ), and OHS induction and training ( $r = .34, p < 0.001$ ) were positively related with employee safety behavior.

		Mean	Standard Deviation	1	2	3	4
1	OHS Policies and Regulations	17.39	4.109	(0.88)			
2	Workplace Safety Inspection	16.51	5.137	0.34***	(0.86)		
3	OHS Induction and Training	12.36	5.988	0.17**	0.75**	(0.91)	
4	Employee Safety Behavior	14.06	4.608	0.19**	0.22***	0.34***	(0.93)

Table 1: Descriptive Statistics, Cronbach's Alpha and Correlation among Study Constructs

NB: \*\* $p < 0.01$ , \*\*\* $p < 0.001$

#### 4.1. Testing of Hypothesis

In assessing the impact of OHS policies and regulations, workplace safety inspection, and OHS induction and training on employee safety behavior, a standardized multiple regression was used.

	B	Std Error	$\beta$	Decision
(Constant)	19.284	9.279		
OHS Policies and Regulations	1.813	0.446	0.261***	Supported
Workplace Safety Inspection	1.934	0.307	0.391***	Supported
OHS Induction and Training	.967	0.285	0.236**	Supported

Table 2: Results of Multiple Regression Analysis for Occupational Health and Safety Management Practices as a Predictor of Employee Safety Behavior

$R^2 = .407$  \*\* $p < .01$ , \*\*\* $p < .001$

The results as shown in Table 2 indicate that OHS policies and regulations, workplace safety inspections, and OHS induction and training made a significant contribution to the model [ $F(5,192) = 21.275, p < .05$ ]. A critical look at the study variables individually shows that OHS policies and regulations significantly predicted employee safety behavior ( $\beta = 0.261, p < .001$ ), indicating support for  $H1$  of the study which states that OHS policies and regulations will significantly predict employee safety behavior. Also, the results revealed that workplace safety inspection significantly predicts employee safety behavior ( $\beta = 0.391, p < .001$ ), indicating support for  $H2$  of the study which states that workplace safety inspection significantly predicts employee safety behavior. Further, the results revealed that OHS induction and training significantly predict employee safety behavior ( $\beta = 0.261, p < .01$ ), indicating support for  $H3$  of the study which states that OHS induction and training significantly predicts employee safety behavior.

## 5. Discussion and Conclusion

The study aimed at investigating the impact of occupational health and safety management practices on the safety behavior of non-teaching staff of Accra Technical University in Ghana. The prediction that OHS policies and regulation will lead to employee safety behavior was met indicating support for hypothesis one of this present study. This finding is a result of the fact that the University has a policy on health and safety that is in operation, therefore serving the safety of the employees. This tutor and direct employees in the course performing their duties as well as serve as a mentoring and motivating tool that supervisors use in ensuring safety. Further, these policies and regulations make employees cognizant of the possible hazards at the workplace and the surest way to go about it. These findings are consistent with the findings of prior studies (Morwabe & Atambo 2016; Pidgeon, 2019) which postulated that OHS policies and regulations influence the safety of employees and argued that numerous welfare preparation by an employer will instantaneously influence mental efficiency, health, higher efficiency hence underwriting to higher efficiency. This is also an indication that occupational health and safety management practices and decipher into employee safety behavior and safer working practices. The findings of this study, however, contradict the findings of (Silaparasetti *et al.*, 2017) assertion that OHS policies and regulations significantly predict the safety behavior of employees. This may be as a result of the fact the employees of the university may not see the mere existence of the policies and regulations and as such the significance of the safety procedures and rules in the university.

Further, the prediction that workplace safety inspection will lead to employee safety behavior was met indicating support for hypothesis two of this present study. This depicts that when organizations conduct safety audits and inspections within a work setting will lead to an improvement in workplace safety and yield results in a conducive work environment. This also created an impression in the minds of the employees and enhance their performance leading to satisfactory productivity. These significant findings conform to the literature (Amponsah-Tawiah & Mensah, 2016; Morwabe & Atambo 2016) assert that workplace safety inspection influences employees' safety behavior. They were of the view that employers getting employees to be involved at every level of an organization's safety inspection encourage them to monitor and provide feedback to mark areas that require safety improvement. This finding is also contradicted by the findings of Jiang *et al.*, (2019) and Akweenda *et al.*, (2016) postulation that workplace safety inspection does not significantly predict the safety behavior of employees.

Finally, the prediction that OHS induction and training will lead to employee safety behavior was met indicating support for hypothesis three of this present study. These findings are consistent with the findings of Kirombo (2015) and Morwabe and Atambo (2016) assertion that OSH training and induction provide cognizance in respect of health and safety practices, procedures, and practices in an organization. This by and large enables employees of an organization to undertake certain safety measures to ensure their security. Again, these findings empirically support the findings of Boughaba *et al.* (2014) and Keffane (2020). This suggests that employees in the university are conscientious of the requisite for the core of workplace safety and therefore incorporate the acquired skills through numerous training programs implemented by the management of the university. As such management of the university should pay much attention to the training of employees on health and safety issues. These calls for management of universities to continuously conduct training on occupational health and safety that will engender them to exert more effort into formulating an enhanced policy and regulation on health and safety.

To conclude, occupational health and safety management practices have gained attention among scholars as a result of the rise in accident rates. This calls for industry-specific policies and regulations to deal with issues about occupational health and safety in organizations to guarantee the work environment is free of an unwelcome element. This to an extent motivated the authors to contribute to the extant literature by examining how occupational health and safety management practices influence employee safety behavior in public technical universities. Employees will be willing to perform better when there is the existence of an OHS governance plan in place that fosters a favorable work environment to protect work undue injuries. As a result, safety policies and guidelines must be developed, properly enforced, and followed. Supervisors with the help of management are responsible for ensuring that those under supervision follow safe work policies and practices.

## 6. Implications for Practice and Future Research

The findings of these have several practical implications. Management of Accra Technical University should design strategies on occupational health and safety management practices to promote employee safety behavior. In respect of the health and safety management practices, management should serve as role models and provide employees with adequate safety guidance and safety knowledge. In furtherance, should try as much as possible to meet the safety needs of employees, design a conducive work environment, and make available resources to support the safety behavior of employees. Occupational health and safety assume an enormous part in any workplace environment, hereafter, it is essential and crucial to stipulate that setting up OHS policy and administration alone cannot solve the problem of security and wellbeing in public universities in Ghana. For example, a significant relationship between OHS training and induction and the safety behavior of employees that inspires occupational health and safety through genuine training and inspections will revitalize and empower the employees. Moreover, the management of institutions should highlight the establishment and execution of an approach that improves and takes into contemplation the procedure of adequate employee welfare management and a conducive work environment to improve work fulfillment.

The findings of the study suggest that occupational health and safety management practices (thus, OHS policies and regulations, workplace safety inspection, OHS induction, and training) have a significant effect on employee safety behavior which have both practical and theoretical implications. Notwithstanding, this present study has a myriad of limitations that needs to be responded to in further studies. Further studies can examine why the relationship between occupational health and safety management occurs by adopting a longitudinal research design since this study adopted a descriptive survey research design. Also, the finding reported in this present study was undertaken at Accra Technical University, Ghana. As such it is encouraged that further authors can conduct similar studies in other technical universities in Ghana. Finally, drawing on the expectancy theory, the findings of this study confirmed the effect of OHS policies and regulations, workplace safety inspection, and OHS induction and training on employee safety behavior. As such further studies can confirm and enlarge this conceptual framework drawing on these theories in connection to OHS management.

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