



# Analysis of Factors Influencing Health and Safety Programmes in Selected Electricity Distribution Companies

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## Abstract

The study determined the factors influencing health and safety programme in the selected electricity distribution companies in Southwest, Nigeria. The study used descriptive survey research design. The study used primary sources of data, and the data were gathered through administration of questionnaire. The population for the study comprised of 11,621 workers of electricity companies in Southwest, Nigeria. A sample size of 400 was determined through the use of Taro Yamane formula and 385 were valid for usage. The sample was selected using two-stage sampling technique. At the first stage, purposive sampling technique was used in selecting employees who have used at least five years in the company; at the second stage, stratified random sampling technique was used in selecting employees using a senior, middle and junior categorisation of workers for stratification. The results also revealed that the human factors ( $t = 5.836$ ,  $p < 0.05$ ), management factors ( $t = 3.898$ ,  $p < 0.05$ ), organisational factors ( $t = 2.120$ ,  $p < 0.05$ ) and environmental factors ( $t = 2.102$ ,  $p < 0.05$ ) were the factors influencing occupational health and safety practices in the study area. The study concluded that occupational health and safety practices have the potency of reducing the rate at which accidents and injuries occur among the workers and thereby improving the employees' performance in Southwest, Nigeria. The

study recommended that the factors that could reduce the potency of the health and safety programme should be controlled and be prevented.

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## 1. Introduction

The hum of electricity is the lifeblood of progress, powering homes, businesses, and the very dreams of a nation. Yet, the energy that illuminates our lives can also be a hidden danger (Afolabi, 2020). This study shines a light on the factors influencing health and safety (H&S) programmes within selected electricity distribution companies (DISCOs) in Nigeria. Nigeria's electricity sector is undergoing a rapid transformation. The web of distribution lines is expanding, reaching more corners of the nation and fueling its development. However, this growth comes with a weighty responsibility – ensuring the safety of the workforce that keeps the current flowing (Ali, Shafiq & Jabbar 2018; Adewumi & Oluremi, 2021). While government regulations, established by agencies like NAPSER, provide a framework, there's a need to delve deeper and assess how effectively these regulations are being implemented within individual DISCOs.

Learning from the best practices employed around the world is crucial. But simply transplanting these practices would not suffice. The Nigerian context presents unique challenges that require tailored solutions (Karapetrou & Kontogiannidis, 2020). This study aims to identify areas for improvement within the H&S programmes of Nigerian DISCOs, with a specific

focus on preventing occupational health hazards and accidents commonly encountered in the electricity sector. The benefits of a robust H&S program are multifaceted. A healthy workforce, protected from work-related injuries and illnesses, translates to increased productivity and reduced absenteeism for DISCOs (Adewumi & Oluremi, 2021; (Kaynak, et al., 2016; Dunmade, et al., 2019; Amedome, 2017)). But the positive impact extends beyond the company walls. Effective H&S programmes safeguard public safety by ensuring the safe operation and maintenance of electricity distribution networks, minimizing the risk of electrical fires and accidents that could devastate communities.

A commitment to H&S goes beyond mere compliance; it's the cornerstone of a DISCO's reputation (Hassan & Abd Halim 2020). By prioritizing safety, DISCOs foster public trust and contribute to the long-term sustainability of the electricity sector. This, in turn, ensures a safe and healthy work environment for employees, a crucial element for a bright and illuminated future for Nigeria's electricity sector. This study seeks to illuminate the path towards improved H&S practices within Nigerian DISCOs. By identifying key factors influencing these programmes, we can create a framework for better safety measures, protecting employees and the public (Lingard & Rowlinson, 2018). Ultimately, this will empower the electricity sector to illuminate Nigeria's future, not just with light, but with a commitment to occupational health and safety that burns brightly.

### 1.1. Objectives of the Study

- i. Identify the factors influencing health and safety programme in the selected electricity distribution companies in Southwest, Nigeria;
- ii. Investigate the effect of influencing factors on health and safety programme in the selected electricity distribution companies in Southwest, Nigeria.

## 2. Health and Safety Programme

A company's health and safety programme entails activities taken to reduce or eliminate hazardous working conditions and unsafe behaviours. Reducing dangerous conditions is always an employer's starting point for defense in accident prevention (Ladewski & Al-Bayati, 2019). Also, businesses must give extra attention to workers who are at risk due to linguistic problems, lack of awareness, incorrectly fitted PPE, or physical or mental limitations in order to establish safe and healthy workplaces (Budhathoki, et al., 2014). Every employee of a company, including those employed on a contract basis, is responsible for ensuring a safe and healthy workplace and minimizing any risks to health and safety that may exist (Mazzetti, et al., 2020). Programme for OHS are created to abate the effects of disease and disaster that can occur at workplace (Lee, 2018; Fruhen, et. al., 2019).

However, Kim and Scott (2019) contend that creating a safe and healthy workplace is necessary for improved performance to exist. The organisations with the best safety records have comprehensive, well-thought-out health and safety policies. Safety concerns should start at the top of the organisation, with the manager, followed by the supervisor. Fewer employees will suffer short or long-term negative consequences from working for a firm that implements strong

safety and health policies (Jonathan & Mbogo, 2016). Organisations rely on employees as collaborators and community members, according to Borowski, et al., (2020); Feng, et al., (2011) and Hu, et al., (2020). The creation of a safe and healthy work environment and the removal of all risks from an organisation, as well as individuals employed there temporarily.

Organisations become significantly more effective by lowering the incidence and severity of occupational illnesses, accidents, workplace violence, and stress-related illnesses, as well as by raising the standard of living for their workers (Ajmal, et al., 2020). Fines for non-compliance, health insurance premiums, and payments for unproductive labor are just a few of the expenditures that organisations worry about minimizing while investing in health and safety initiatives (Classen, et al., 2020; Occupational Safety and Health Act (OSHA, 2004). They gain from having healthy workers as some companies have been willing to invest in creating wellness programs and facilities for this aim (Ajmal, et al., 2021). Workplace safety and health can be improved through a variety of approaches. Programs created to lessen illnesses, accidents, and injuries, stress management skills, and general wellness of employees are among the most popular (Mazzetti, et al., 2020), while some of the therapies aim at altering employees' lifestyles and extracurricular behaviors. All of these measures can lower the high expenses linked to employee accidents, illnesses, and deaths (Fruhen, et al., 2019).

## 2.1. Overview of factors influencing the occupational health and safety practices

### 2.1.1. Organisational factors

Organisational factors include anything within the employment context, it may have direct or indirect effect on the activities of the firm at a particular point in time. These organisational factors may either affect the employee negatively or positively depending on the influence it has on the activities (Brough, 2004). The literature points out some common organisational factors found among employee are safety orientation for the new employee, provision of safety and health policies, safety communication, education training on personal protective equipment, collaboration among management and employee representative which may lead to higher job satisfaction (Eskandari, 2017; Purba & Demou, 2019; Harrison, 2019). Dynamism of an organisational factor determine way and manner in which they react to internal and external forces. Organisation are easier to comprehend if they are analysed as a dynamic object, managers will have enough strategies in responding to controversial requirements. The dynamic nature of organisations provides an explanation for the fact that pursuing safety is a one-off duty. It is not sufficient that crucial work processes are carried out correctly once or twice, but they have to be performed with the same quality day in day out, year by year irrespective of the fact that people exit and new recruits are being on board to the organisation (Baumont, 2000).

### 2.1.2. Management factors

Negligence that results to workplace accident and injuries could not only be traced to the employee carelessness but also to the top management that shun a crucial role in preventing workplace accidents (Al-Refaie, 2013). There is need for the management to give priority to the implementation and enforcement of occupational health and safety practices which

could be achieved by numbers of ways which include but not limited to taking defensive measures, and releasing information that are helpful to employees by training, and directing them to carry out their jobs in safety. Employees should be safety conscious, and care enough to perform their obligations regarding work safety while working (Neal, et al., 2000). Therefore, to achieve higher safety in an organisation, both management and workers must implement and enforce the safety practices available for them.

### 2.1.3. Environmental factors

Numerous environmental factors can affect the health and well-being of employees. These include air quality, noise, lighting among others (Tulchinsky & Varavikova, 2014). When organizing a workspace, the work to be performed there must be taken into account. Ensure that all traffic routes are easy and marked as needed and that staff has adequate and safe operating space. It is assumed that the size of the work room, which used for most of the working day, should be spacious to be able to have enough airspace when working (Leesman & Berrone, 2014; Seppanen & Fazio, 2012).

### 2.1.4. Human factors

Human factors in safety are concerned with all those factors that persuade people and their action towards safety-critical situations. If any employer thinks that safety is expensive, he should understand that the cost of having an accident is not palatable (Vogt, et al., (2010). Managing and preventing human failures cannot be overemphasized and it is not without cost implication which if the management does not proactively handle it, it could halt the business going concern. Excellent technology combined with the best work strategy can help businesses achieve high productivity and service quality while enforcing occupational health and safety practices to achieve the set goals. The best work arrangement is based on having a best brain with needed skill, jobs descriptions that are suitable with individuals' abilities. Notably, the influence of both psychological and organisational factors could affect the human health and safety, it should be noted that at the long run they have effect on their efficacy and productivity. Since individuals have a wide range of abilities and constraints, human factors approach should focus on how to make the best use of these capabilities by organising responsibilities and PPE which are fit for people (Unal, et al., 2018). This does not only improve the health and safety of the employees but ensures a better, an effective and reputable organisation.

## 2.2. Theoretical Review

### 2.2.1. Human Factors Theory

The purpose of Ferrell's study of the human factors theory is to improve performance, increase safety, and increase user happiness by focusing on how people interact with tools, systems, and processes within organisations. So, the theory of human factors is advantageous to employees. Human factors theory is founded on the idea that mistakes made by humans lead to accidents. Overload, unsuitable activity, and inappropriate responses have all been highlighted as the three human elements that can cause human errors. When a person is required to complete an excessive number of duties, it is said that overload has happened. Whether or not this person is qualified, the overburden condition presents

the potential for a mishap. When there are obvious physical constraints, the overload may be physical or psychological, causing stress (for instance, a weakling asked to lift a heavy load). When a person is not properly trained to carry out his tasks, it is said that an inappropriate behavior has taken place. This can be the result of inadequately supervised training and incorrect assessments of job dangers. This is one of the reasons for making sure that every learner completes a real task while receiving on-the-job training, always under close observation. Finally, qualified people intentionally breaking a procedure for high productivity or failing to address the issue after it is identified both constitute unacceptable responses. This could also entail disobeying workplace safety regulations and responding inappropriately to hazards that have been discovered (such as failure to wear personal protective clothing).

The Human Factors Theory's central tenet, that most accidents are caused by human mistake, is supported by empirical data. Approximately 72% to 91% of all industrial accidents are thought to be caused by human error (Health & Safety Executive, 2008; Kirschenbaum, et al., 2000). According to Hamalainen, (2009) there were about 16,500 fatal accidents and nearly 2 million disabling occupational accidents in American industry. Additionally, it has been widely asserted that only about 5% of motor vehicle accidents are the consequences of mechanical breakdowns, with 95% being related to the inadequacies of the man operating the machine. As a result, it is acknowledged that employees, supervisors, and senior management have all made risky decisions that have contributed to the unsafe environments that can lead to accidents. For instance, unsafe conditions arise when people are unaware that they exist and don't act to fix them when they are aware.

### 2.2.2. Goal-Freedom Alertness (GFA) Theory

Goal-Freedom Alertness (GFA) Theory was introduced by Kerr (1950), and he firmly asserted that workplace safety improves performance, organisations, and outcomes (Oppong, 2011). According to the GFA theory, unsafe workplace behavior by employees leads to accidents. By fostering a supportive company culture and psychological climate, this behaviour can be corrected by increasing worker awareness. Mishaps can be decreased, for instance, by making sure that employees are punished to maintain decent housekeeping. The GFA theory implies that psychological judgments of workplace circumstances, such as culture, climate, and justice, are important in explaining why accidents happen. An effective strategy to convey to employees that a company values safety and will stop at nothing to keep it is by establishing and maintaining a positive safety climate and culture in the workplace. In a similar vein, organisational justice or perceived fairness on the side of employees regarding how management manages or enforces its safety regulatory regime is also evidence that no one is exempted from punishment for violations.

Employee work-related behaviour and performance have been demonstrated to be influenced by these psychological factors. For instance, there is a consistent relationship between psychological climate and many metrics of organisational effectiveness and employee outcomes (Grawitch, et al., 2007; Petersen, 1996; Paul & Anantharaman, 2003; Pfeiffer, 1998; Von Glinow, et al., 2002). In the area of occupational safety and health, study showed in a meta-analytic study that the safety climate has an impact on safety performance, safety compliance, and actual accidents. However, it was found that the safety climate had a greater impact on safety performance than on safety compliance. The same study also showed that safety performance had a greater influence on accident occurrence than safety compliance. These



overwhelming empirical results have made the GFA hypothesis a key participant in the field of accident causation theories.

For the purpose of this study, goal-freedom-alertness is used as an anchor theory. The justification for usage of this theory is that it incorporates the main variables considered in the study (occupational health, safety practices and employees' performance).

### 2.3. Empirical Review

Othman et al., (2020) carried out a research on the critical success factors influencing construction safety program in Malaysia as one of the developing countries. Semi-structured interview was conducted to have in-depth insight and understanding of those factors that has potential of influencing the OHS in the construction project. Sixteen respondents were interviewed by the experts and professionals in Iraqi construction companies. The result showed the importance of factors like management commitment, safety training, and the enforcement of safety rules and regulations and stakeholders' collaboration. The level of technology is the new factors that were revealed by respondents. The study recommended that the management should be more committed, engage the employees in relevant training and collaboration of the stakeholders should be ensure to have enforceable safety rules and regulations.

Nordlof et al., (2017) conduct a cross-sectional study of factors influencing occupational health and safety management practices in Swedish. The primary data were collected through well structured questionnaire. Manufacturing companies with at least 10 employees were selected for the study and statistically used ordinal regression analysis to generate generalized estimating equation. This study considered various elements that may influence occupational health and safety management (OHSM) practices in manufacturing companies may include company size which was found to be relatively connected with the conclusion; the large sized company tends to appreciate OHSM practices. The converse was also found to be true, that the company that is smaller in size will tend to neglect OHSM practices. More so, the result has important dependence on safety culture in the selected companies, the more the positive safety cultures the more the OHSM practices. In other perspective, if there is negligence attitude to the safety culture in the company, there is tendency that the OHSM practices will be worse.

Oladejo (2020) investigated the factors responsible for the non-implementation of H&S management practices by contractors in the Nigeria construction industry. The objectives are to appraise the condition of H&S, examine H&S management models in order to identify the key elements and procedures of H&S management, analyse H&S management implementation in construction company, develop a conceptual framework for establishing elements distressing implementation of H&S management, improve the conceptual framework and to develop an instrument to collect and analyse data, discuss and compare the extant literature with the empirical research findings of the present study and to draw conclusion from the findings of the study and propose implications for H&S management in Nigeria. Descriptive survey research instrument was developed and copies of questionnaire were used to gather data needed. The total population included Director or top management construction industries. The 350 copies of questionnaire were administered by the researcher to the top management and relevant professionals in construction industries. The findings

revealed that H&S management practices is an important issues in Nigeria construction industry, however, the rate of accidents is very high. In addition, key elements that influence the occupational health and safety management practices among construction firms in Nigeria include sizes and age of construction companies. The study recommended that a public policy towards occupational health and safety management practices should be provided by the policy makers to restrain the rate at which workers of construction industry in Nigeria experience accidents and injuries.

### 3. Methodology

The study used descriptive survey research design. The study used primary sources of data, and the data were gathered through administration of questionnaire. The population for the study comprised of 11,621 workers of electricity companies in Southwest, Nigeria. A sample size of 400 was determined through the use of Taro Yamane formula. The sample was selected using two-stage sampling technique. At the first stage, purposive sampling technique was used in selecting employees who have used at least five years in the company; at the second stage, stratified random sampling technique was used in selecting employees using a senior, middle and junior categorisation of workers for stratification. Two experienced research assistants were used in gathering data for the variable studied. Out of the 400 copies administered, 385 were useful for the analysis done with the descriptive test and the inferential statistics.

## 4. Factors that influence health and safety programme in the selected electricity distribution companies in Nigeria

### 4.1. Organisational factors

Table 4.1 indicated that the selected companies' new workers received safety orientation and safety, and safety and health policies are disclosed by the company. It was strongly agreed that employees received training on how to use Protective Equipment (PPE), and they were likewise trained to recognise hazard at work. It was also indicated that training given has changed the behavior of concerned employees and they have received encouragement to report workplace accidents. The table also indicated that there was existence of official safety and health reporting system. Moreover, the table revealed that hazard assessment was done by the management and employees representatives. There is indication of penalty for any non-compliant official (Field survey, 2022). This study was similar to prior studies on factors influencing health and safety programme that showed the efforts of organisation to perform their roles in putting safety measures in place in order to reduce accident and injuries (Eskandari, 2017; Purba & Demou, 2019; Harrison, 2019))

**Table 4.1.** Organisational factors influencing health and safety programme



Statement	Strongly Agree 5 Freq/%	Agree 4 Freq/%	Undecided 3 Freq/%	Disagree 2 Freq/%	Strongly Disagree 1 Freq/%	Total	Mean	Standard Deviation
Every new worker receives safety orientation and safety.	164 (42.6)	87 (22.6)	116 (30.1)	14 (3.6)	4 (1.0)	385 (100)	4.02	0.984
All safety and health policies are disclosed by the company.	285 (74.0)	86 (22.3)	9 (2.3)	5 (1.3)	-	385 (100)	4.69	0.582
Employees received training on how to use personal protective equipment	200 (51.9)	105 (27.3)	62 (16.1)	14 (3.6)	4 (1.0)	385 (100)	4.25	0.926
Employees are trained to recognize hazard at work	180 (46.8)	160 (41.6)	36 (9.4)	9 (2.3)	-	385 (100)	4.33	0.741
Employees received first aid training	170 (44.2)	108 (28.1)	68 (17.7)	34 (8.8)	5 (1.3)	385 (100)	4.05	1.043
Training received changes my behaviour about safety and health issues	261 (67.8)	115 (29.9)	4 (1.0)	5 (1.3)	-	385 (100)	4.64	0.574
Employees are encouraged by their employer to report workplace accident.	267 (69.4)	109 (28.3)	-	-	9 (2.3)	385 (100)	4.62	0.719
We have an official safety and health reporting system.	254 (66.0)	116 (30.1)	10 (2.6)	5 (1.3)	-	385 (100)	4.61	0.608
The management and employee representative work together to undertake the hazard assessment.	183 (47.5)	138 (35.8)	52 (13.5)	8 (2.1)	4 (1.0)	385 (100)	4.27	0.847
Regular health and safety standards assessment are conducted by the company	194 (50.4)	133 (34.5)	53 (13.8)	5 (1.3)	-	385 (100)	4.34	0.761
Inspector imposes penalty when the employer is not complying	132 (34.3)	177 (46.0)	62 (16.1)	14 (3.6)	-	385 (100)	4.11	0.799
<b>Grand Mean</b>							44.19	

Source: Field survey, (2022)

## 4.2. Environmental factors influencing health and safety programme

Table 4.2 indicated that the employees of the selected companies' are satisfied with the health and safety practices implemented, and also pointed out that management gave prompt response to safety issues. The table also revealed that employees are satisfied with the level of hygiene, and that chemical and hazard material are clearly identified and housed in a safe room. There was an indication from the table that comfortable working environment improve performance of the workers, and they often received refresher training on health and safety programme (Field survey, 2022). This study was similar to prior study on factors influencing health and safety programme that showed that numerous environmental factors can affect the health and well-being of employees. These include air quality, noise, lighting among others (Tulchinsky & Varavikova, 2014).

**Table 4.2.** Environmental factors influencing health and safety programme

Statement	Strongly Agree 5 Freq/%	Agree 4 Freq/%	Undecided 3 Freq/%	Disagree 2 Freq/%	Strongly Disagree 1 Freq/%	Total Freq/%	Mean	Standard Deviation	
I am satisfied with the health and safety practices implemented in my workplace	133 (34.5)	213 (55.3)	13 (3.4)	18 (4.7)	8 (2.1)	385 (100)	4.16	0.855	
Management gives a prompt response to safety issues	133 (34.5)	213 (55.3)	29 (7.5)	10 (2.6)	-	385 (100)	4.22	0.692	
I am satisfied with the level of hygiene at my workplace	121 (31.4)	222 (57.7)	21 (5.5)	10 (2.6)	11 (2.9)	385 (100)	4.12	0.847	
That chemical and hazard material are clearly identified and housed in a safe room	208 (54.0)	146 (37.9)	18 (4.7)	9 (2.3)	4 (1.0)	385 (100)	4.42	0.776	
Comfortable working environment improve performance	145 (37.7)	179 (46.5)	52 (13.5)	5 (1.3)	4 (1.0)	385 (100)	4.18	0.790	
We often receive refresher training on health and safety programme	143 (37.1)	160 (41.6)	25 (6.5)	57 (14.8)	-	385 (100)	4.01	1.015	
<b>Grand Mean</b>								21.77	

Source: Field survey, (2022)

### 4.3. Management factors influencing health and safety programme

Table 4.3 indicated that management viewed health and safety programme as important, and management made sufficient provision for resources to approve health and safety programme. There was an agreement that enforcement of health and safety programme was management priority, and that the implementation of strategy on health and safety programme was developed by top management. The table revealed that usage of health and safety posters are common, and that management appointed health and safety professionals. It was also agreed that top management provides first aid box to attend to accidents and injuries (Field survey, 2022). This study was similar to prior study on factors influencing health and safety programme that showed that negligence that results to workplace accident and injuries could not only be traced to the employee carelessness but also to the top management that shunned a crucial role in preventing workplace accidents (Al-Refaie, 2013).

**Table 4.3.** Management factors influencing health and safety programme

Statement	Strongly Agree 5 Freq/%	Agree 4 Freq/%	Undecided 3 Freq/%	Disagree 2 Freq/%	Strongly Disagree 1 Freq/%	Total	Mean	Standard Deviation
Mgt sees health and safety programme as important	161 (41.8)	82 (21.3)	138 (35.8)	-	4 (1.0)	385 (100)	4.03	0.934
Mgt makes sufficient provision for resources to adopt health and safety programme	155 (40.3)	143 (37.1)	20 (5.2)	67 (17.4)	-	385 (100)	4.00	1.074
Enforcement of health and safety programme is mgt priority	147 (38.2)	150 (39.0)	74 (19.2)	10 (2.6)	4 (1.0)	385 (100)	4.11	0.873
Implementation strategy on health and safety programme was developed by top mgt	134 (34.8)	108 (28.1)	124 (32.2)	15 (3.9)	4 (1.0)	385 (100)	3.92	0.957
Usage of health and safety posters are common	174 (45.2)	143 (37.1)	50 (13.0)	10 (2.6)	8 (2.1)	385 (100)	4.21	0.912
Mgt appoints health and safety professionals	204 (53.0)	154 (40.0)	13 (3.4)	10 (2.6)	4 (1.0)	385 (100)	4.41	0.769
Top mgt provides first aid box	259 (67.3)	91 (23.6)	17 (4.4)	10 (2.6)	8 (2.1)	385 (100)	4.51	0.863
<b>Grand Mean</b>							25.32	

Source: Field survey, (2022)

#### 4.4. Human Factors Influencing health and safety programme

Table 4.4 indicated that workers' non compliance influence the health and safety programme, and that there is low commitment from top management. It also revealed that there is negligence on the part of the employees toward health and safety programme, and that human failures influenced employees' attitude towards health and safety programme (Field survey, 2022). This study corroborated the previous study on factors influencing health and safety programme that showed that human factors approach should focus on how to make the best use of these capabilities by organising responsibilities and personal protective equipment which are fit for task (Unal, et al., 2018).

**Table 4.4.** Human factors influencing health and safety programme

Statement	Strongly Agree 5 Freq/%	Agree 4 Freq/%	Undecided 3 Freq/%	Disagree 2 Freq/%	Strongly Disagree 1 Freq/%	Total	Mean	Standard Deviation
Workers' non compliance influence the health and safety programme	9 (2.3)	66 (17.1)	21 (5.5)	122 (31.7)	167 (43.4)	385 (100)	2.03	1.178
There is low commitment from top mgt	9 (2.3)	31 (8.1)	29 (7.5)	176 (45.7)	140 (36.4)	385 (100)	1.94	0.985
There is negligence on the part of the employees toward health and safety programme	9 (2.3)	43 (11.2)	33 (8.6)	80 (20.8)	220 (57.1)	385 (100)	1.81	1.132
Human failures influence employees attitude towards health and safety programme	4 (1.0)	40 (10.4)	49 (12.7)	107 (27.8)	185 (48.1)	385 (100)	1.89	1.052
<b>Grand Mean</b>							6.25	

Source: Field survey, (2022)

**Table 4.5.** Model Summary of Regression estimates for extracted factors and health and safety programme (HSP)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.832 <sup>a</sup>	0.692	0.688	0.332

**Table 4.6.** Combined Effect of the extracted factors on Health and Safety Programme (ANOVA<sup>a</sup>)

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	94.082	5	18.816	170.510	0.000 <sup>b</sup>
	Residual	41.824	379	0.110		
	Total	135.906	384			

<sup>a</sup> Dependent Variable: HASP

<sup>b</sup> Predictors: (Constant), HF, MMSPR, MCEER, FECP, MCPN

**Table 4.7.** Effect of the extracted factors on Health and Safety Programme (Coefficients<sup>a</sup>)

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.463	0.183		2.521	0.012
	MCPN	0.226	0.035	0.221	6.418	0.000
	MCEER	0.031	0.028	0.037	1.098	0.273
	FECP	0.291	0.024	0.359	11.885	0.000
	MMSPR	0.357	0.016	0.644	21.841	0.000
	HF	0.050	0.017	0.089	2.907	0.004

<sup>a</sup> Dependent Variable: HSP

## Keys

- MCPN = My company provides notice on all occupational safety and health procedures
- MCEER = My company encourages employees to report accident that occur at work
- FECP = Favourable environmental conditions provided at work will increase my productivity
- MMSPR = Mgt makes sufficient provision for resources to adopt OHS practices
- HF = Human failure
- HASP = Health and Safety Programme

## 5. Discussion of findings

Based on the findings from Table 4.5 to Table 4.8 in this study however, it is scientifically justifiable to reject the null hypothesis one which state that “there are no significant factors influencing health and safety programme” of the selected electricity distribution companies in Nigeria”. Hence, the study accepts the alternative hypothesis and conclude that “there are significant factors influencing health and safety programme” of the selected electricity distribution companies in Nigeria. The findings corroborated the study of (Yu, et al., 2019), they opined that the level of management control influences the extent of employee attitude and disposition to safety measures put in place, the study of Mwangi and Waiganjo (2017) supported their findings. Nordlof, *et. al.*, (2017) which found out that negligence attitude of the workers influence occupational health and safety practices, they are of the opinion that negligence attitude to the safety culture in the company, will worsen OHS practices. Othman et al., (2019) corroborated the study in their opinion that the management should be more committed, engage the employees in relevant training and collaboration of the stakeholders should be ensured to have enforceable safety rules and regulations.

## 6. Conclusion

This study proved that the factors influencing health and safety programme identified and analysed had significant effect on the selected electricity distribution companies in the Southwest, Nigeria. Thus, the identified factors such as organisational factors, management factors, environmental factors and human factors were strong predictors of selected electricity distribution companies health and safety programme. The findings of this study implied that organisational factors, management factors, environmental factors and human factors are valid construct for predicting health and safety programme of electricity distribution companies in the Southwest, Nigeria.

## 7. Recommendations

The following recommendations are suggested on the basis of the findings of the study and the conclusion agreed upon, which invariably could help in the deployment of health and safety programme among employees of electricity distribution companies in the Southwest, Nigeria. Management of electricity distribution companies in the Southwest should allocate substantial amount of resources to ensure that health and safety programme increase so that employee performance could be improved and sustained. Upon the identification and acceptance of health and safety programme, management must take steps as a matter of urgency to handle, put under control and prevent the negative effects of factors that influence the OHSP like organisational factors, management factors, environmental factors and the human factors which was indicated as the highest factor that influenced the health and safety programme

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