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## ANALYSIS OF SAFETY CLIMATE FACTORS AND COMPLIANCE IN THE NIGERIAN CONSTRUCTION SYSTEM

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#### ABSTRACT

The construction industry plays an important role in the social and economic development in Nigeria. Statistics shows that there are persistently high accident rates in the industry which has resulted in various forms of injuries and fatalities. This study analyzed the safety climate factors and compliance among construction industry workers to determine the extent of safety climate factors and compliance in the industry; the relationship between safety climate factors and the prevalence of accidents and as well as the relationship between safety climate factors and compliance among workers in construction companies. The study adopted descriptive survey research design. A sample size of 82 respondents were sampled using stratified sampling technique. The data gathered were tabulated and analysis using descriptive statistics of simple percentages, mean and standard deviation, while the inferential statistics of ANOVA and regression analysis were used to test the hypotheses. The results of the analysis indicated 38.25% prevalence of accident in the construction industry. At 2.5 mean score criteria, the study indicated negative safety climate perceptions of 2.32, 2.43, 2.41 and 2.39 respectively for management commitment to safety; safety training; workers' involvement in safety and safety communication. Also, in the case safety compliance, the mean score was 2.38 indicating poor workers' compliance to safety in the industry. However, hypotheses tested at P < 0.05 level of significance revealed a significant relationship between safety climate factors and prevalence of accidents of P = 0.004; significant relationship between safety climate factors and compliance of P = 0.000. The results also revealed (P=0.000) that worker's safety compliance is influenced by their levels of educational background and worker's safety compliance is not influenced by their years of work experience with P = 0.874. Based on the findings, the study recommended that construction industry management should implement visible top management commitment to safety and health to drive employee's motivation to comply to rules and procedures and consistently address complacency related behavior by the workers.

#### **1. INTRODUCTION**

The foundation of this research uncovered that there has been developing worries among scientists and industry specialists to recognize the best organisational variables that would enhance safety execution and lessen the disturbing rates of accidents in the construction industry particularly in underdeveloped and developing nations.

Shockingly, as of late, it was noticed that there has been scarcity of research by researchers in this core safety area

and furthermore an extremely limited data/information is accessible for the construction industry in mangers /supervisors to decide the fate of safety climate factors that are necessary to enhance safety execution, diminish accident level and increase efficiency. Consequently, this study explored safety climate factors among construction industry workers to evaluate the degrees to which its acceptability could best enhance safety compliance in the construction industry in River state.

### 2. AIM AND OBJECTIVES OF THE STUDY

The aim of the study is to investigate safety climate components and compliance among workers in the construction industry in Nigeria. Specifically, the target objectives are to determine:

- 1. Accident prevalence in the construction industry in Nigeria.
- 2. The level of safety climate factors in the construction industry in Nigeria.
- 3. The level of safety compliance in the construction industry.
- 4. The association between safety climate factors and the accident prevalence in construction industry in Nigeria.
- 5. The association between safety climate factors and compliance among workers in the construction industry in Nigeria.
- 6. The impact of employee's educational foundation on safety compliance.
- 7. The impact of employee's experience safety compliance.

## 3. TEST OF HYPOTHESES

This research will test the following Null hypothesis at 0.05 level of significance

- 1. There is no significant relationship between safety climate factors and the prevalence of accidents in the construction industry in Nigeria
- 2. There is no significant relationship between safety climate factors and compliance among workers in the construction industry in Nigeria
- 3. There is no significant difference on safety compliance based on educational background of the workers.
- 4. There is no significant difference on safety compliance based on worker's experience in the job

### 4. RESULT OF ANALYSIS

#### 4.1 Presentation and Analysis of Data

This chapter presented the result of the analysis and interpretation based on the research questions and hypotheses. The data and results of each research question and its corresponding hypotheses are presented on different tables.

**Table 4.1**: Demographic distribution of respondents based on age and gender

Age group	<b>Male</b> Frequency (%)	<b>Female</b> Frequency (%)	%Age
Less than 18 yrs.	6 (7.32%)	0	7.32
19-25 yrs.	14 (17.07%)	2 (2.44%)	19.51
26 - 35 yrs.	32 (39.02%)	2 (2.44%)	41.46
36 & Above yrs.	26 (31.71%)	0	31.71
TOTAL	78 (95.12%)	4 (4.88%)	100%

The data in table 4.1 indicated that ages of the majority (41.46%) of the total sampled population were within 26-35 years old. Workers whose age group are above 35 were next comprising of 31.71%, followed by 19.51% representing young workers between 19 years to 25 years old. The lowest were workers who are minor (Below 18-year-old). Out of the 82 respondents investigated, 95.12% were male while 4.88% were female

4.1.1 Research Question 1: What is the prevalence of accident in the construction industry in River State?

Table 4.2: Distribution of the prevalence of accident

PREVALENCE OF ACCIDENT	0 times	1-3 times	3-5 times	6 & above times
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)
How many times have you been involved in a				
workplace accident in the last 12 Months?	57.32%	28.05%	10.20%	Nil

A standout amongst the most critical discoveries of this examination was the pervasiveness (prevalence) of accidents in the construction industry in Nigeria, Nigeria. In Table 4.2, out of the aggregate tested populace, 57.32% of specialists have not been engaged with any work put accidents whatsoever. It was observed that an aggregate of 28.05% of the aggregate inspected populace have been engaged with workplace accidents up to 1 to 3 times.

10.20% of the populace consented to have been engaged with work environment mishaps between 3 to 5 times.

### 4.1.2 Research Question 2: What is the extent of safety climate factors in the construction industry in Nigeria?

#### Table 4.3a - Distribution of response based on management commitment to safety

S/N	Items	Mean (x)	SD (σ)	Remark
1	My company have safety policies, rules and procedures	2.52	1.11	Positive
2	My management implements recommendations to correct unsafe acts/conditions	2.32	1.00	Negative
3	My managers/supervisors show interest in the safety of workers.	2.38	1.06	Negative
4	My management considers safety as important as production.	2.12	0.91	Negative
5	My company provided sufficient personal protective equipment for me	2.26	1.09	Negative
	Grand mean	2.32	1.03	Negative

The Table 4.3 above presented the distribution of respondents based on safety climate factors. Table 4.3a which analyzed management commitment to safety as a form of safety climate factors indicated  $3.56 \pm 1.08$ , that the construction companies have safety policies, rules and procedures;  $2.32 \pm 1.00$ , that management does not implement recommendations to correct unsafe acts/conditions;  $2.38 \pm 1.06$ , that managers/supervisors does not show interest in the safety of workers;  $2.12 \pm 0.91$ , that management does not consider safety as important as production;  $2.26 \pm 1.09$ , that company does not provide sufficient personal protective equipment to the workers.

#### Table 4.3b - Distribution of response based on safety training

S/N	Items	Mean (x)	SD (σ)	Remarks
6	My company gives periodic safety and health training.	2.12	1.06	Negative
7	I was given company orientation when I first arrived the company.	2.72	1.18	Positive
8	I am adequately trained to respond to emergency situations in my workplace.	2.38	1.12	Negative
9	Management gives incentives to encourage safety training attendance	2.26	1.17	Negative
10	Safety orientation given to me enables me to assess hazards at workplace	2.69	1.03	Positive
	Grand mean	2.43	1.11	Negative

Moreover, table 4.3b - analyzed the safety training as part of safety climate factors revealed  $(2.12 \pm 1.06)$  that company does not give periodic safety training, however  $(2.72 \pm 1.18)$  there were usually initial orientations given to worker upon first arrived to the company. The table further indicated  $2.38 \pm 1.12$ , that workers do not receive adequate training to enable them respond to emergency situations in the workplaces;  $2.26 \pm 1.17$ , that management does not give incentives to encourage safety training

attendance and  $2.69 \pm 1.03$ , that Safety orientation given to workers was the only reason that they are able to assess hazards at workplace.

### Table 4.3c - Distribution of response based on workers' involvement in safety

S/N	Items	Mean (x̄)	SD (σ)	Remark
11	My company has safety committee comprising of management and worker's representatives	2.36	1.06	Negative
12	My company consults with us regularly about health and safety issues.	2.17	1.19	Negative
13	Management listens to our opinion on safety related matters	2.36	1.06	Negative
14	My company gives incentives to promote employee's involvement in safety related matters.	2.35	1.15	Negative
15	Employees do not participate in identifying safety problems.	2.56	1.24	Positive
	Grand mean	2.41	1.14	Negative

Also table 4.3c analyzed the workers' involvement in safety which indicated  $2.36 \pm 1.06$ , that construction company do not have safety committee comprising of management and worker's representatives;  $2.17 \pm 1.19$ , that company does not consult with workers regularly about health and safety issues;  $2.36 \pm 1.06$ , that Management does not listen to worker's opinion on safety related matters;  $2.35 \pm 1.15$ , that company does not give incentives to promote employee's involvement in safety related matters and  $2.56 \pm 1.24$ , that employees do not participate in identifying safety problems.

#### Table 4.3d - Distribution of response based on safety communication

S/N	Items	Mean $(\overline{x})$	$SD(\sigma)$	Remark
16	My company's policies, rules & procedures are clear to me	2.34	1.17	Negative
17	My company has a hazard reporting system to enable us report hazards	2.63	1.21	Positive
18	Safety emergency contacts are displayed on the company notice boards	2.31	1.12	Negative
19	The safety objectives of my company are clear to me Grand mean	2.29 2.39	1.09 1.15	Negative Negative

Data of safety communication were presented and analyzed in table 4.3d. The table indicated  $2.34 \pm 1.17$ , that company's policies, rules & procedures are clear to made clear to workers;  $2.63 \pm 1.21$ , that company has in place hazard reporting system to enable workers report hazards;  $2.31 \pm 1.12$ , that safety emergency contacts are not displayed on the company's notice boards and finally,  $2.29 \pm 1.09$ , that the safety objectives of companies are not made clear to workers.

### 4.1.3 Research Question 3: What is the extent of safety compliance in the construction industry in Nigeria?

Table 4.4 Distribution of based on respondent's safety compliance

S/N	Items	Mean (x)	SD (σ)	Remark
20	I use appropriate PPEs to do my job.	2.25	1.05	Negative
21	I always report to the management any unsafe acts/conditions	2.34	1.03	Negative
22	I follow safety rules & procedures while carrying out my job.	2.28	0.96	Negative
23	I participate in safety meetings.	2.53	1.25	Positive
24	Unsafe conditions at the workplace made me always work unsafe			
		2.54	1.12	Positive
	Grand mean	2.38	1.08	Negative

The distribution of respondents-based safety compliance is presented in table 4.4. The table indicated 2.25  $\pm$ 1.05 that workers do not use appropriate PPEs to do their work; 2.34  $\pm$  1.03, that worker do not always report unsafe acts/conditions to management; 2.28  $\pm$  0.96, that workers do not follow safety rules & procedures while carrying out their task. Meanwhile, the table further showed that 2.71  $\pm$  1.29, for workers participate in safety meetings and 2.54  $\pm$  1.12, that unsafe conditions at the workplace made them always work unsafe.

# 4.1.4 Research Question 4: What is the relationship between safety climate factors and the prevalence of accidents in the construction industry in Nigeria?

The Figure 4.1 showed the connection between safety climate factors and predominance of accidents in the construction industry workplace. At the point when the mean estimation of safety climate factors is at the most elevated estimation of 2.55, the relating predominance of mishaps esteem lessened to 0. Likewise, when the estimation of safety climate factors lessened to 2.15, there were noticeable increment in the accident rates in the industry.



Figure 4.1: Safety climate factors and the prevalence of accidents in the construction industry

The chart additionally exhibited that an opposite relationship exists between safety climate components and prevalence of mishaps. In other words, an enhancement in safety climate factors prompt diminishment in mischance level in the industry.

# 4.1.5 Research Question 5: What is the relationship between safety climate factors and compliance among workers in the construction industry in Nigeria?

The Figure 4.2 above exhibited the connection between safety climate factors and compliance in the construction industry. The diagram showed a positive connection between the two factors. At 2.3 mean of safety climate factor, the comparing safety compliance is at 2.3. As the safety climate factors improves to 2.4, the safety compliance additionally increases up to 2.4 et cetera in the same direction.



Figure 4.2: Safety climate factors and compliance in the construction companies in Nigeria

### 4.1.6 Research Question 6: What is the influence of worker's educational background on safety compliance?

Educational	Frequency (%)	
No Basic Education	16 (19.51%)	
Primary/Secondary School	47 (57.32%)	
Technical/Diploma	14 (17.07%)	
Bachelors, Masters & above	5 (6.10%)	

Table 4.5: Distribution of respondents based Educational Background

Figure 4.3 presented the graph of the difference between worker's educational background and safety compliance. It indicated that safety compliance increased as worker's levels of education increases. Safety compliance dropped down to 2.3 for workers without education and 2.6 for workers with BSc. And Masters degrees. The graph demonstrated positive trend of worker's safety compliance based on their difference levels of educational background. However, table 4.5 presented the distribution of respondents based educational background. Out of the total respondents, 19.51% have no basic education; 57.32% have primary/secondary school education; 17.07% have technical/diploma education and 6.10% for workers with bachelors, masters & above education.



Figure 4.3: Graph of the influence of worker's educational background on safety compliance

## 4.1.7 Research Question 7: What is the influence of worker's experience on safety compliance?

Work Experience	Frequency (%)	7
0-3	48 (58.54)	
4-7	11 (13.41)	
8-10	14 (17.07)	
11 and above	9 (10.98)	

 Table 4.6: Distribution of respondents based on work experience

The Figure 4.4 presented the difference between safety compliance and worker's job experience, it indicated an irregular trend between the two variables. Workers that fall within 0 - 3 years of work experience indicated 2.44 safety compliance and 4 - 7 years have 2.25 compliance. The trend moved up at 9-10 years and them down at 11 and above years. Similarly, Table 4.6 presented the distribution of respondents based on work experience. Out of the total respondents, 58.54% had 0-3 years of work experience, followed by 17.07% for 8-10, 13.41% for 4-7, and only 10.98% for 11 and above years of work experience.



Figure 4.4: Graph of the influence of worker's experience on safety compliance

4.1.8 Test of hypothesis 1: There is no significant relationship between safety climate factors and prevalence of accidents in the construction industry in Nigeria

Table 4.7: Regression analysis of safety climate factors and prevalence of accidents

	Prevalence of accident	Safety climate factors
r- valve	1	- 0.312
p-value		0.004
Ν	82	82
r- valve	-0.312	1
p-value	0.004	
Ν	82	82
		·
	r- valve p-value N r- valve p-value N	Prevalence of accidentr- valve1p-valueN82r- valve-0.312p-value0.004N82

Table 4.7 indicated a correlation coefficient (r)of the relationship between safety climate factors and prevalence of accidents as - 0.312 which is closer to -1. However, the P-value of 0.004 in table 4.7 is less than 0.05 significance level. The researcher therefore rejected the Null hypothesis and conclude that there is significant relationship between safety climate factors and prevalence of accidents in the construction industry in Nigeria.

## 4.1.9 Test of hypothesis 2: There is no significant relationship between safety climate factors and compliance among workers in the construction industry in Nigeria

Table 4.8 below analyzed the relationship between the safety climate factors and compliance in the construction companies in Nigeria. The values of the correlation coefficient of (r) 0.726; 0.699, 0.555 and 0.622 respectively for management commitments to safety, safety training, worker's involvement in safety, Safety communication respectively and worker's safety compliance are close to 1, implying a correlationship between the variables.

		Management	Safety	Workers	Safety	Safety
		Commitment to	Training	involvement in	comm.	compliance
		Safety		safety		
Management	r	1	0.871	0.667	0.698	0.726
Commitment to	р	-	0.000	0.000	0.000	0.000
Safety	N	82	82	82	82	82
	r	0.871	1	0.684	0.662	0.699
Safety Training	р	0.000	-	0.000	0.000	0.000
	N	82	82	82	82	82
Workers	r	0.667	0.684	1	0.585	0.555
involvement in	р	0.000	0.000	-	0.000	0.000
safety	N	82	82	82	82	82
Cafata	r	0.698	0.662	0.585	1	0.622
Salety	р	0.000	0.000	0.000	-	0.000
communication	N	82	82	82	82	82
	r	0.726	0.699	0.555	0.622	1
Safety compliance	р	0.000	0.000	0.000	0.000	-
	N	82	82	82	82	82
P < 0.05 significance 1	evel					

Table 4.8: Regression analysis of safety climate factors and compliance in the construction companies in Nigeria

The P-Values from table 4.8 shows 0.000 results which is less than 0.05 level of significance. The researcher therefore rejected the null hypothesis and concluded there is a significant relationship between safety climate factors and compliance in the construction industry in Nigeria.

# 4.1.10 Test of hypothesis 3: There is no significant difference in worker's educational background on safety compliance

Table 4.9: Descriptive analysis of safety compliance and educational background

	N	Mean	Std.	Std. Error	95% Confidence Interval for		Minimum	Maximum
			Deviation		Mean			
					Lower Bound	Upper Bound		
NO EDU	16	2.2875	.26300	.06575	2.1474	2.4276	1.80	2.60
PRIM/SEC	46	2.3728	.35241	.05196	2.2682	2.4775	1.60	3.00
TECH/DIP	15	3.0400	.15492	.04000	2.9542	3.1258	2.80	3.40
BS/MS+	5	3.2400	.08944	.04000	3.1289	3.3511	3.20	3.40
Total	82	2.5311	.43735	.04830	2.4350	2.6272	1.60	3.40

	Sum of Squares	df	Mean Square	F	P-value
Between Groups	8.499	3	2.833	31.595	0.000
Within Groups	6.994	78	0.090		
Total	15.493	81			

The ANOVA table 4.10 shows the P- Value of 0.000. This value is less than 0.05 level of significance and therefore the researcher rejected the hypothesis and concluded that there is significant difference between worker's educational background and safety compliance.

### 4.1.11 Test of hypothesis 4: There is no significant difference in worker's work experience on safety compliance.

DESCRIPTIVE ANALYSIS								
	N	Mean	Std.	Std. Error	95% Confidence Interval for		Minimum	Maximum
			Deviation		Mean			
					Lower Bound	Upper Bound		
0 - 3yrs	49	2.5367	.44192	.06313	2.4098	2.6637	1.60	3.40
4 - 7 yrs	11	2.4364	.51239	.15449	2.0921	2.7806	1.60	3.20
8 - 10 yrs	14	2.5821	.44532	.11902	2.3250	2.8393	1.80	3.40
4 - 7 yrs	8	2.5375	.33354	.11792	2.2587	2.8163	2.20	3.20
Total	82	2.5311	.43735	.04830	2.4350	2.6272	1.60	3.40

Table 4.11: Descriptive analysis of safety compliance and work experience

Table 4.12: ANOVA	of worker's	work experience	and safety	compliance.
		1		1

	Sum of Squares	df	Mean Square	F	P-value
Between Groups	0.137	3	0.046	0.232	0.874
Within Groups	15.356	78	0.197		
Total	15.493	81			

The P-Value in table 4.12 indicated 0.874 which is more than 0.05 level of significance. The researcher therefore accepted the Null hypothesis and conclude that no significant relationship exists between worker's work experience and worker's safety compliance.

### 5. DISCUSSION OF FINDINGS

## 5.1 The prevalence of accident in the construction industry

One noteworthy disclosure of this research was the prevalence of accidents in the construction industry in Nigeria. The investigation uncovered that 38.25% of the aggregate tested populace were associated with accident in their work environment. This figure concurs with the worldwide worries on the persevering high rate of mishaps in the construction industry. It was before noted by Takala (2009) that the aggregate worldwide yearly mishap rate

will to be 260,000 by 2020. Then again, as per Nghitanwa (2017) in 2010 and 2011 casualty and damage rates remained at 19.2 and 14,626 for each 100,000 laborers, respectively. The pattern without uncertainty would keep on increasing if suggestions to address negative climate perception by construction chiefs are not tended to.

## 5.2 The extent of safety climate factors in the construction industry in Nigeria

The distribution of respondents in light of safety climate factors were introduced in Table 4.3 A-D. This study found that construction administration and management were not dedicated to safety in the workplace. In spite of the fact that the organizations had written safety policies and arrangements on ground, standards and methodology yet these policies were not being actualized, the management does not execute proposals to adjust hazardous administrators/bosses acts/conditions: don't indicate enthusiasm for the safety and security of employees; administration considers creation more imperative than the safety of the workers; administration does not give adequate individual defensive gear or personal protective equipment (PPE) to the workers. Considering safety preparing, it was additionally found that after introductory orientations given to laborers upon first arrival, organization does not further give occasional safety training/preparing to workers and this has brought about worker's powerlessness to react to crisis and/or emergency circumstances in the working environments. Incentives were not given to workers to encourage training participation. There were no safety committee comprising of management and worker's representatives and workers were not consulted regularly about health and safety issue as well as to participate in identifying safety problems. In terms of safety communication, it was discovered that company's policies, rules & procedures existed only on paper, these were not made clear to workers understanding; Emergency contacts were not displayed on the company's notice boards and finally, the safety objectives of companies were also not clear to workers.

# 5.3 The extent of safety compliance in the construction industry in Nigeria

The result revealed that workers in the construction companies: Do not use appropriate PPEs to do their work; Do not always report unsafe acts/conditions to management; Do not follow safety rules & procedures while carrying out their task. It was also discovered that they participate in safety meetings but the unsafe conditions at the workplace always made them to work unsafe. The finding above violates some basic obligations placed on employers in Article 16 of Convention 155 as expanded in Article 10 of Recommendation 164 that among others, employer shall provide the following to their workers: Provide and maintain workplaces, machinery and equipment, and use work methods, which are as safe and without risk to health as is reasonably practicable; Give necessary instructions and training, taking account of the functions and capacities of different categories of workers; Provide adequate supervision of work, of work practices and of application and use of occupational safety and health measures; Provide, without any cost to the worker, adequate personal protective clothing and equipment which are reasonably necessary when hazards cannot be otherwise prevented or controlled and take all reasonably practicable measures with a view to eliminating excessive physical and mental fatigue (ILO, 1981).

## 5.4 The relationship between safety climate factors and the prevalence of accidents in the construction industry in Nigeria

This study researched on the connection between safety climate elements and predominance of mishaps in the construction industry in Nigeria. The correlation analysis of the data gathered demonstrates a huge converse connection between the factors, showing that as safety climate factors makes increase, mishaps level declines in the construction industry. In concurrence with the above discovering, Bowander (1987) studied related factors and furthermore found that the absence of, as well as the nonappearance of essential safety climate factors prompts a distinction between organizational hierarchical structures human, innovative and system frameworks structures which transformed into injuries and fatalities and attendant costs recorded in organizations. Subsequently, it is vital for associations to distinguish and analyze the most basic factors that are fit for enhancing safety execution markers/indicators in the form of compliance and accident reduction. Subsequently, analysts and industry specialists have proposed safety climate factors as instruments through which safety execution as safety compliance can be enhanced (Dark colored, and Carter 2017).

## 5.5 The relationship between safety climate factors and compliance among workers in the construction industry in Nigeria

This investigation additionally looked at the connection between the safety climate factors, for example, administration duties regarding safety, safety preparing, workers' contribution to safety and security, safety correspondence/communication and compliance in construction organizations in Nigeria. The study uncovered a critical connection between the factors. Neal and Griffin (2006) concurs with the discoveries above and additionally disclosed instrument used to foresee the connection between safety climate and safety called social exchange theory. He noticed that, when an association looks after the prosperity of its employees (i.e., the association has a positive safety climate), the workers are probably going to create verifiable commitments to perform their obligations, exhibiting conducts that are helpful to the organization. As far as safety performance is concerned, workers will act securely when they see that such conduct will bring esteemed characteristic or extraneous outcomes. At the point when an association really values wellbeing, there is an unusually high level of safety and security atmosphere the association. Based on behaviour-outcome in expectancies, employees are likely to behave safely because they expect that their safety behaviour would be rewarded and such behaviour would bring a valuable outcome to them

# 5.6 The influence of worker's educational background on safety compliance

This study further investigated how worker's educational background influences their safety compliance. Table 4.6 indicated that the majority (57.32%) of respondents hold primary/secondary school certificate. This is followed by workers with no basic education at all comprises of 19.51% of the total sample population. 17.07% of workers sampled have technical/diploma education and are placed as foremen on site. The supervisors occupy 6.10% of the sample population. Then again, in regards to safety compliance, it was established in this study that the majority of the workers in the industry did not have higher education and this is the purpose behind their high hazard resilience behavious against the prerequisites of Article 19 of C155 which distinguished commitments put on all laborers and their agents to include: Taking reasonable care for their own safety and that of other persons who may be affected by their acts or omissions at work; Complying with instructions given for their own safety and health and those of others and with safety and health procedures; Use safety devices and protective equipment correctly and do not render them inoperative; Reporting forthwith to their immediate supervisor any situation which they have reason to believe could present a hazard and which they cannot themselves correct and also report any accident or injury to health which arises in the course of or in connection with work.

## 5.7 The influence of worker's experience on safety compliance

This study also investigated the influence of worker's experience on safety compliance. Table 4.7 revealed that 58.54% of the workers investigated have lower work experience, followed by 17.07% comprising of workers with 8-11 years of work experience. The least on the table are 13.41% and 10.98% for personnel with 4-6 and 11 above work experience. The ANOVA between the two variable indicated 2.54 safety compliance for 0-3 years of experience. Same is applicable to workers who have 11 and above years of work experience and with 2.55 safety compliance which is lower than 2.58 for 8-10 years of work experience. The indications implied that safety compliance is not influence by the differences in the levels of work experience.

## 6. CONCLUSION AND RECOMMENDATIONS

## 6.1 Conclusion

The discoveries of this investigation uncovered that there is high pervasiveness of mishaps in the construction industry in Nigeria. This is on the grounds that workers in the industry saw that administration are not taking so much responsibilities regarding safety in the workplace. Also, laborers were not adequately prepared to guarantee that dangerous situations are recognized and relieved; laborers are not engaged with safety related issues. This has prompted poor safety compliance among the construction workers in Nigeria. The study additionally uncovered a huge connection between safety climate factors and the pervasiveness of mishaps and between safety climate variables and compliance among workers. It was further observed that safety compliance isn't impacted by work encounters rather safety compliance is based upon sound instructive foundation. Unfortunately, a whopping 76.83% of respondents either attended primary/secondary or have not been to school at all. Only 23.17% out of the sampled population have been to either technical / diploma school or hold BSc/ Master's qualifications. To enhance worker's safety culture and to improve safety climate that may lead to better perception and behave more safely, the research emphasized that safety climate has a positive impact on safety compliance. The research provided basic

information required to render solutions to unavailability of information to construction industry managers to assist determine safety related climate factors necessary to improve safety performance, increase productivity and profitability.

### 6.2 Recommendations

Based on the findings of this research, the following recommendations will be most useful to the construction industry's managers:

- 1. Adequate and enforceable health and safety regulations are urgently needed from the state government to regulate the activities of the construction industries in Nigeria
- 2. There are needs for the establishment of Construction Industry Training Board. This board should be charged with the task of training, retraining and providing advisory services to the Nigerian construction workforce;
- 3. Employers should identify and implement training needs of workers with poor educational background to enable them measure up their educational background lapses.
- 4. Complacency by the experience workers should be discourages as it contributes greater percentage of the high accident rates in the construction industry
- 5. Regular safety audits and performance review will aid in prompt identification of potential hazards in the work places.
- 6. Enforce visible top management commitment to organizational safety to motivate employees' commitment in the execution of their daily work activities.

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