



EFFECT OF SAFETY TRAINING ON KNOWLEDGE OF WORKERS IN SELECTED INDIGENOUS OIL AND GAS COMPANIES IN PORT HARCOURT METROPOLIS

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Abstract

This study investigated the effect of safety training on knowledge of workers in selected indigenous oil and gas companies in Port-Harcourt metropolitan. Quasi-experimental research design was adopted. The study population comprised of field workers in five selected indigenous oil and gas firms in Port-Harcourt. The sample size comprised of 137 workers from which 123 respondents completed the pre-test, training and post-test stages. The data collection was done using safety training manual and test-questions. The test question designed on “True or False: format was used to examine the knowledge of workers before and after the safety training. The reliability of the instrument was ascertained using Cronbach Alpha test. Data analysis was carried out with descriptive statistics and Analysis of Variance (ANOVA) using SPSS version 26. The revealed that; overall knowledge of the workers on fire safety training, emergency first aid response training and electrical safety training increased from 48.55% to 99.12% before and after the safety training. Z-test revealed that there was positive and significant difference between the overall levels of knowledge before and after the safety training (mean difference = 44.57%, p-value = 0.000<0.05). ANOVA results also revealed that there was significant difference in effect of safety training on knowledge among the sampled companies (p-value = 0.047 < 0.05). It was concluded that the safety training improved the knowledge of workers in the sampled indigenous oil and gas companies.

Keywords:

Safety Training, Safety Knowledge, Petroleum Workers, Port Harcourt.

1.0 Introduction

It is common knowledge that the health and safety of workers in oil and gas companies are a concern to the management of oil and gas firms (WHO, 2021). It is also known that there are 160 million cases of accidents worldwide in both oil and gas firms, and that there are approximately 1.1 million deaths associated with work-related illness and injuries, which is almost equal to the total number of people who die from malaria each year across the globe (WHO, 2021). Accidents and incidents that occur on the job have developed into a major concern in countries all over the world (Jiang et al, 2020). For instance, the year 2021 alone saw a total of six hundred and twenty-seven thousand workplace accidents due to poor knowledge and poor attitude of workers on safety, which resulted in the tragic deaths of over

hundred thousand individuals. This indicates that there is an average of three hundred and twenty deaths among employees each day. In addition, it is known that around 1.5 million workers in private firms suffered accidents and illnesses on the job that were not fatal in the year 2020 (WHO, 2021)

The oil and gas business in Nigeria are significant contributor to the economy of Nigeria; as a result, there is a pressing need to reduce the number of deaths caused by accidents and enhance the level of safety performance in the country. Around ninety percent of the annual revenue that the federal government receives comes from the oil and gas industry. Accidents can occur in the oil and gas industry because of the interplay of several elements, including environmental, technical, organizational, and management considerations, as well as humans. In the oil and gas business, the most common causes of mishaps, other than the infamous Macando catastrophe that occurred in 2010, have been determined to be substandard safety procedures and other forms of human error (Khan et al, 2019)

The refinery accident that occurred in 2010 was yet another significant event in the oil and gas business. According to the findings of the investigative lab run by the Chemical Safety Board, the explosion at the refinery, it was seen that the management of the refinery failed to appropriately examine and manage the safety implications of having a contractor trailer located so near to the isomerization unit (Khan et al, 2019). If the organization had a strong culture of safety practices and provided ongoing training for employees, then this disaster may have been averted. It is arguable that the problem of cultivating a culture of safety in the workplace has since become one of the most important considerations in the oil and gas industry, and every firm is working hard to adopt this culture or imbibe best practices. Standard operating procedures, training, and education are all available in oil and gas corporations, but none of them are properly implemented. It is not uncommon to discover that certain employees in oil and gas businesses are devoted to safety improvement initiatives, while other employees in same organizations only give lip service to the idea that they are doing so.

Safety training is fundamental safety management practices that help to improve worker's safety knowledge and safety behavior and ultimately enhance safety performance by reducing injuries due to accident and incident occurrence (Sharma & Vineet, 2021). It has also been identified as a veritable and most important safety management practices to reduce frequency of accidents and improve safety culture in an organization. Therefore, Achalu (2019) emphasized the importance of safety training program as a process of providing learning experience for the purpose of influencing knowledge, attitudes and conduct relating to safety for individual or group of individuals in any organization. According to this research study on evaluating the effect of safety training interventions on knowledge and attitude of worker on safety practices, many accounts or incidents that occur in oil and gas companies may have been because of poor or inadequate training, while others may have been due to non-adherence of workers to work procedures as well as non-implementation of safety measures that were gained from various training. The research study was conducted to evaluate the impact of training on knowledge and knowledge of workers which supposed that an employee at the place of employment need to be made aware that they play a significant part in guaranteeing the improvement of the workplace's safety performance.

Many studies have also demonstrated that the presence of safety training methods improved the knowledge of workers on safety which inversely connected to the number of accidents and

injuries that occur on different sectors such as construction sites (Dong et al, 2019, Johnson, 2017), manufacturing firms (Kinn et al, 2019) and food processing firms (Zierold and Anderson, 2018). Thus, the effectiveness of safety training methods in oil and gas firms might be one of the finest approaches to improving the overall safety performance of the workers by improving the overall safety knowledge of workers. Most recently, Afex et al., (2022) argued that employing safety training methods that are interesting to employees and that promote conversation, feedback, and action can result in enhanced knowledge of workers to safety practices and also improve their attitude toward safety practices and ultimately enhance safety performance of the workers. However, there is limited studies on the effect of safety training on knowledge of workers in oil and gas companies in Nigeria. Thus, this current study is aimed at investigating the effect safety training intervention on the knowledge of oil and gas workers towards safety management practices in selected indigenous oil and gas companies in Port Harcourt Metropolis. and the specific objectives are to; determine the effect of safety training on knowledge of workers in selected indigenous oil and gas companies and examine the difference in the effect of safety training on knowledge of the workers among the selected indigenous oil and gas companies

2.0 Methodology

2.1 Research Design

The pre-test and post-test quasi-experimental research design were adopted in this study to ascertain the effect of safety training program on knowledge of safety among workers in indigenous oil and gas firms operating in Port Harcourt, Rivers state, Nigeria. Quasi-experimental design is often described as non-randomized control group pre-test post-test intervention studies with the attribute of both experimental and non-experimental study.

The One-Group Pre-test Post-test Design, which is a commonly used study design was adopted. It is a single pre-test measurement taken as (O1), an intervention is applied, and a post-test measurement is taken as (O2). Most times the period O1 serves as the “control” period. The Quasi-experimental design has been used in similar studies by Okafor et al (2014), Rundmo & Iversen (2017) and Scialfa et al., (2011). This design is considered important for the study on the use of safety training intervention as mean for enhancing the attitude and knowledge of workers on safety practices in indigenous oil and gas firms. Prior to the training section on safety practices because it involves assessing the knowledge and attitude of the sampled workers before and after administration of the safety training on safety practices.

2.2 Population of the Study

The population of this study comprised of field workers in the indigenous oil and gas firms operating within Port Harcourt Metropolitan in Rivers State. Based on report of Rivers State inland revenue commission. (RSIRC) in 2023, there are twenty-three indigenous oil and gas companies operating in Rivers State and majority of them are located in Port Harcourt. thus, the field workers in these firms make up the population of this study.

2.3 Sampling Technique and Sample size determination

Multistage sampling technique was adopted which comprised of two stages. The first stage involved using purposive sampling technique to select five out of the twenty-three indigenous oil and gas firms operating in River’s state. The choice of the companies was purely based on availability, proximity and acceptability in that they are the companies that

available by accepting the consent letter of the researchers and are willing to make their workers available for the research on safety training. To maintain anonymous state of these companies, they were labelled company A to company E. Respectively. The second state involve random selection of field workers from the five companies sampled in stage one above

The participant in the safety training program comprised of 137 workers in the five companies. The sample size was distributed among the field workers in the company based on their availability and willingness to participate in the safety training sampled see Table 1

Table 1 The oil and gas companies and workers sampled in Port Harcourt, Rivers State

S/N	Company label	Sample size allocated
1	Company A	30
2	Company B	27
3	Company C	32
4	Company D	25
5	Company E	23
Total		137

2.4 The Research instrument

Safety training manual and test questions were used as the instrument for this study. The safety training manual comprised of three safety modules on fire safety training, emergency first aid response training and electrical safety training. It was adopted from Shell safety training program for workers in oil and gas sector and designed using Power Point slide. The safety training manual was used to conduct the safety training programs for the sampled workers in the selected oil and gas firms.

The test questions comprised of two main sections: A and B, Section A. was used to obtain responses of the respondents on socio-demographic characteristics of the respondents (Age, sex, marital status, educational level and work experience) Section B. contain “True or False” questions designed to determine the level of knowledge of the workers on the three aspect of safety training covered in the safety manual which include fire safety training (B1), emergency first aid response training (B2), and electrical safety training (B3). The score is based on percentage correct or wrong answer to the questions in each module which is evaluated as ratio of correct or wrong answer to the total number of questions multiplied by 100.

2.5 Methods of Data Collection

In this study, the data used were collected by using pre-test and post-test test questions that was administered to the sampled respondents before and after the safety training programs. This study is focused on investigating the effect of safety training program on knowledge among the selected oil and gas firms. Therefore, safety training program was centered on some safety modules which include, fire safety training, emergency fire response training and electrical safety training. Therefore, the safety training manual was designed to cover the selected three aspects of safety practices (Fire safety training, emergency fire aid response training and electrical safety training). Thus, a questionnaire and safety training manual titles Training manual for oil and gas safety practices (TMOGSP)

Test questions were administered and retrieved before the safety training was conducted (Pre-test), the same test questions were administered two months after the safety training program (Post-test). Thus, data were collected in two phases: pre-test data collection and post-test data collection. The test questions were administered to the sampled oil and gas field workers after the consent forms has been completed, and the intent of the study has been explained to the respondents, and the questionnaire is retrieved immediately with the assistance of research assistant/support.

The first part of the test questions, which is section A, contains sociodemographic characteristics of the workers. The second part or section B was centered on assessment of knowledge and comprised of 25 items that are presented in “True or False” format. The true or false questions were graded on 100% based for the 25 items questions such that each question answered correctly attracts 4% while the ones answered wrongly attracts 0%, the respondents were graded that less than 50% is poor knowledge, 50-55% is fair knowledge, 56-69% is good knowledge, 70-80% is very good while above 80% is excellent knowledge.

2.6. Validity of the Instrument

The face and content validities were determined by researcher supervisor as authority in Occupational health and safety. Researchers’ supervisors vetted items in this instrument, to consider clarity of words, sentences and whether the variables of this study were properly captured by the items.

2.7 Reliability of Instrument

The self-administered questionnaire was tested for reliability among workers of 20 workers from oil and gas firms that was not involve in the study. The reliability was tested using Cronbach alpha reliability test. A Cronbach alpha coefficient of a scale above 0.70 is considered to be “suitable” for the research.

2.8 Methods of Data Analysis

The study employed descriptive and inferential statistics to analyses data that were collected using the Questionnaires; these include descriptive statistics like means, percentages and weight average. The descriptive statistic as used to answer research questions while T-test and ANOVA were used to test the test hypotheses. The instrument used for data analysis is SPSS version 24

3.0 Results and Discussions

3.1 Sociodemographic Characteristics of the sampled respondents

Table 2 showed the summary of the sociodemographic characteristic of the study respondents. On the gender distribution of the respondent, the results revealed that 113 respondents representing 91.90% of the sampled respondents were males while only 10 persons representing only 8.10% were female. This shows that the field operations of the indigenous oil and gas companies are dominated by male workers which is an expectation due to the physically demanding nature of the operations. On the distribution of the respondents based on age, the results revealed that majority of the workers which amount to 44 respondents covering 35.80% were between age 36-45, followed by workers who are

between age 25 to 35 who are 35 and covered 28.50% while the minority are workers below 25 who are just 19 covering only 15.45%. the oldest set of workers who are above 40 are just 25 and covered only 20.33%. This shows that majority of the workers in the indigenous oil and gas companies are young adults.

On years of experience, the results revealed that majority of the workers which is 53 covering 43.10% of the entire sampled respondents have 7 to 10 years of experience in the oil and gas sector, followed by 28 workers covering 22.80% who have 4-6 years of experience while the least are 16 workers covering 13.00% who have more than 10 years of experience. This shows that majority of the sampled respondents have substantial years of experience in the field work of the oil and gas operations. On educational level, the results revealed that majority of the workers which is 59 covering 48.00 of the entire sampled respondents have BSc and equivalent certificates, followed by 40 workers covering 32.52% who have HND certificates while the least are 5 workers covering 4.10% who have Master's degree. This shows that majority of the sampled respondents have substantial education. Finally, on the type of work, it was observed that majority of the workers were full time workers of the companies (68, 55.28%), followed by the contract workers (31.00, 25.20%) while the least are sub-contract workers (24.00, 19.51%)

Table 3 Summary of the sociodemographic characteristic of the study respondents

Socio Demographics		Frequency (n=123)	Percentage (%)
Gender	Male	113.00	91.90
	Female	10.00	8.10
Age	Below 25	19.00	15.45
	25 – 35	35.00	28.50
	36- 40	44.00	35.80
	above 40	25.00	20.33
Years of Experience	0-3 years	26.00	21.14
	4-6 years	28.00	22.80
	7-10 years	53.00	43.09
	Above 10 years	16.00	13.00
Education	OND	19.00	15.45
	HND	40.00	32.52
	BSC	59.00	48.00
	MSC	5.00	4.07

Type of Work	Full time	68.00	55.28
	Contract	31.00	25.20
	Sub-contract	24.00	19.51

3.2 The effect of safety training on the knowledge of workers towards safety in selected indigenous oil and gas companies

To examine the effect of safety training on the knowledge of workers in selected indigenous oil and gas companies, the difference between the level of knowledge of workers before and after the safety training program was evaluated using percentage correct and wrong answer to the test question answered by the respondents such that positive percentage gain mean that safety training had positive effect, negative value implies negative effect while zero mean no effect as shown below

Table 4 to 6 shows the summary of the pre-test score carried out on sampled indigenous oil and gas field workers which was intended to ascertain the level of their knowledge of safety procedures with focus on electrical safety, emergency first aid response and fire safety. The results revealed that, before the safety training, the sampled field workers have poor knowledge of electrical safety (35.77%) and emergency first aid procedures (38.70%), very good and knowledge of fire safety procedures (76.270%). Based on these results it could be deduced that overall level of knowledge of safety among the workers before safety training based on the three safety procedures considered is fair (48.53). These results implied that, prior to the safety training program carried out in the sampled companies, the knowledge of safety procedures among the workers is fair.

Same Table 4 to Table 6 shows the summary of the post-test score carried out on sampled indigenous oil and gas field works which was intended to ascertain the level of their knowledge of safety procedures with focus on electrical safety, emergency first aid response, fire safety, manual handling and personal protective equipment after the administration of the safety training program. The results revealed that, after the safety training, the sampled field workers had excellent knowledge of electrical safety (97.40%), emergency first aid procedures (98.21%), fire safety procedures (100%). The results also revealed that the overall level of knowledge of safety among the workers based on the five safety procedures considered was improved to excellent level (99.12%). These results implied that, after the safety training program was carried out in the sampled companies, the knowledge of safety procedures among the workers improved from good to excellent.

Lastly, Table 4 to Table 8 also present the result of evaluation carried out to determine the effect of the safety training on the knowledge of the workers towards safety procedures. Results revealed that the percentage gain in mean different between the level of knowledge of the workers towards safety procedures after and before (Pre and Post) the training for all the three safety procedures considered is positive and they includes electrical safety (61.25%), emergency first aid procedures (59.91.00%), and fire safety procedures (23.74%). The results also revealed that the overall knowledge of the workers on safety procedures was improved by 42.40% due to the safety training program conducted. These results imply that the safety

training programs organized in this study have positive effect on the knowledge of the workers towards safety procedures in areas of electrical safety, emergency first aid procedures, manual handling procedures, fire safety procedures and personal protection equipment.

The results aligned with the outcome of study by Uchendu et al., (2020) who carried out study on the effect of training on knowledge and attitude to standard precaution among workers exposed to body fluids in a tertiary institution in south-west Nigeria. They carried out an interventional study among workers exposed to body fluids of humans and animals. A self-administered questionnaire was used to obtain information on socio-demographic information, knowledge and perception of staff on standard precaution. The maximum obtainable knowledge and attitude scores were 27 and 6 points respectively. The mean knowledge and attitude score were determined at pre-test and post-test. Frequency, proportion, mean and standard deviation were used for summary statistics, and an independent t-test was performed to test for association. Statistical significance was set at 5%. The result revealed that mean knowledge score among the workers increased from 22.59 ± 3.4 (67.00%) at pre-test to 22.83 ± 3.2 (67.30%) at post-test.

The results aligned with work of Notoatmodjo (2003) who explained that knowledge is the result of knowing, and this occurs after the individual has sensed a particular object. As Notoatmodjo (2003) stated, knowledge is a domain that can influence a person's actions; therefore, errors in knowledge and perception will make wrong decisions and cause uncomfortable behaviour. Knowledge measurement can do through written questions or questionnaires (Notoatmodjo, 2003). OSH knowledge is information that can make every individual aware that there can be various hazards ranging from mild to severe in every workplace, as well as the risk of work accidents and PAK caused by unsafe human actions. Generally, these dangerous acts by a lack of OSH knowledge and skills and reckless behaviour (Cooper & Philips, 2020).

The finding of the study is contrary to the work of Suryanto and Akhyarul (2018) who carried out study to examine the effect of safety training on knowledge and attitude of the group merchant's small and medium businesses around Unsoed Purwokerto. They adopted quasi-experimental design with one group pretest and post-test design. The evaluation was done two times that before training (pretest) and after training (post-test I) and two weeks after training (post-test II). Data analysis was performed using paired t-test or Wilcoxon test. Population of 120 merchants and samples were taken by purposive sampling with a sample size of 40 people. The results revealed there is no difference working knowledge of significant accidents between before (pretest) and after training (post-test I). Respondents mentioned having experienced workplace accident is exposed to hot oil, stove fire, electric shock currents and exposed blade.

Table 4 Summary of test scores on effect of safety training on the knowledge of electrical safety procedures in selected indigenous oil and gas companies

Knowledge of electrical safety procedures		Pre-Test Response Percentage		Post-Test Response Percentage		Percentage Gain
		Correct	Wrong	Correct	Wrong	
1	Electrical safety procedures are design to teach works on how to reduce or control electrical hazards.	31.00 (25.20%)	92.00 (74.80%)	118 (95.93%)	5.00 (4.07%)	70.73%
2.	Faulty electric sockets and poorly insulated wire are among the common electrical hazards	28.00 (22.76%)	95.00 (77.24%)	115.00 (93.50)	8.00 (6.50)	70.74%
3.	The main condition for electric shock or electrocution is a direct physical contact with life electrical wire or appliance	55 (44.72%)	68.00 (55.28%)	123 (100%)	0 (0.00%)	53.28%
4.	Cessation of heart/breath and burn are not among the consequences of electric shock	38 (30.89%)	85.00 (69.11%)	120 (97.56%)	3.00 (2.44)	66.67%
5	Some signs of electrical hazard are odour of burning insulator, mild shock from contact with appliance, heat and smoke from appliance sizzles and buzzles sounds from the appliance	68.00 (55.28%)	55 (44.72%)	123 (100%)	0 (0.00%)	44.72%
Mean		35.77		97.40		61.63%

Table 5 Summary of test score on effect of safety training on the knowledge of Emergency first aid response procedures in selected indigenous oil and gas companies

Knowledge of Emergency first aid response procedures		Pre-Test Response Percentage		Post-Test Response Percentage		Percentage Gain
		Correct	Wrong	Correct	Wrong	
1	Emergency response are response or reaction to sudden, abnormal and unplanned situation that requires immediate attention to save life, secure property and also secure the environment	72.00 (58.54%)	51.00 (41.46%)	123 (100%)	0.0(0.00%)	41.46%
2.	The first rule of emergency response is to panic and scream to call attention	45.00 (36.59%)	78.00 (63.41%)	123 (100%)	0.0(0.00%)	63.41%
3.	The major emergency responses to fire accident in workplace are cut-off electricity supply and turn off switches/equipment	55 (44.72%)	68.00 (55.28%)	123 (100%)	0 (0.00%)	53.28%
4.	A good first emergency responder must be observant, resourceful, brave, confident and empathetic.	38 (30.89%)	85.00 (69.11%)	120 (97.56%)	3.0092.44)	66.67%
5	Prompt handle or control the emergency situation are among the responsibilities of first emergency responder.	28.00 (22.76%)	95.00 (77.24%)	115.00 (93.50)	8.00 (6.50)	70.74%
Mean		38.70		98.21		59.51%

Source; Field Survey 2025

Table 6 Summary of test scores on effect of safety training on the knowledge of fire safety procedures in selected indigenous oil and gas companies

Knowledge of Fire safety procedures		Pre-Test Response Percentage		Post-Test Response Percentage		Percentage Gain
		Correct	Wrong	Correct	Wrong	
1	Fire requires three ingredients to manifest, namely oxygen/air, water and source of heat or ignition.	75.00 (60.98%)	48.00 (39.02.80%)	123 (100%)	0.00 (0.0%)	39.02%
2.	Elimination of fuel source and ignition source is the baseline for design of fire extinguisher	100 (81.30%)	23.00 (18.70%)	123 (100%)	0.00 (0.0%)	18.70%
3.	Air is the major source of oxygen for the manifestation of fire globally	113 (91.88%)	10.00 (8.12%)	123 (100%)	0 (0.00%)	8.12%

4. Naked flame, smoker's leftover, electrical heating, and hot work processes are common source of ignitions for manifestation of fire.	113 (91.88%)	10.00 (8.12%)	123 (100%)	0 (0.00%)	8.12%
5 The PASS acronyms in operation of fire extinguisher means Pull the pin. Aim at the Based, Squeeze the trigger and Sweep around the fire.	68.00 (55.28%)	55 (44.72%)	123 (100%)	0 (0.00%)	44.72%
Mean	76.26		100.00		23.74%

Source; Field Survey 2025

3.3 Difference in the effect of safety training on knowledge of the workers among the selected indigenous oil and gas companies

To determine whether there are differences in the effect of safety training on knowledge of the workers among the selected indigenous oil and gas companies. The overall percentage gain due to safety training on knowledge for the five safety procedures considered during the training namely electrical safety, emergency first aid procedures, and fire safety procedures for the five companies sampled in the study are plotted on a bar chart. If the bar charts have the same height, then there is no difference in the effect of safety training on knowledge of the workers among the selected indigenous oil and gas companies but if the bar chart have different heights, then there is difference in the effect of safety training on knowledge of the workers among the selected indigenous oil and gas companies

Table 7 present the various percentage gains which reflect the effect of safety training on knowledge of safety in five different safety aspects considered during the safety training in the four oil and gas companies. The values of the various percentage gains are different for each of the five companies which showed that there is difference in the effect of safety training on knowledge of the workers with respect to all the five safety procedures considered during the safety training among the selected indigenous oil and gas companies.

Table 7 shows the summary of ANOVA analysis carried out on the fourth hypothesis presented in null form which states that "There is no statistically significant difference in the effect of safety training on knowledge of the workers among the selected indigenous oil and gas companies". The results revealed that the p-value for all the five safety procedures considered in the study were all less than 0.05 such that electrical safety (p-value = 0.047), emergency first aid procedures (p-value = 0.031) and fire safety procedures (p-value = 0.001) which means that there is statistically significant difference in the effect of safety training on knowledge of the workers among the selected indigenous oil and gas companies.. Therefore, the null hypothesis which stated that "There is no statistically significant difference in the effect of safety training on knowledge of the workers among the selected indigenous oil and gas companies" is rejected while the alternate hypothesis which state that "There is statistically significant difference in the effect of safety training on knowledge of the workers among the selected indigenous oil and gas companies" is accepted. These results entail that the safety training program conducted in the study area have different level of positive impact in improving the knowledge of the workers in the different companies considered in the study.

Table 9; Summary of ANOVA for significant difference in the effect of safety training on knowledge of the workers among the selected indigenous oil and gas companies

Knowledge of Safety	Percentage Gain Company A	Percentage Gain Company B	Percentage Gain Company C	Percentage Gain Company D	Percentage Gain Company D	P-value	Remark
Knowledge of electrical safety procedures.	59.00	61.20	60.40	64.30	64.30	0.047	Significant
Knowledge of Emergency first aid response procedures	64.10	55.90	66.35	53.30	58.30	0.031	Significant
Knowledge of Fire safety procedures	24.50	27.50	23.00	21.50	21.50	0.003	Significant

4.0 Conclusions

The effect of safety training on the knowledge of workers in selected indigenous oil and gas companies operating in Rivers State has been examined. Based on the findings of the study, it was concluded that; first, there is good level of knowledge of safety procedures among the workers in selected indigenous oil and gas companies before the safety training, and execution of the safety training among the workers improved their knowledge from good to excellent level, This means that the safety training program organized among the workers had positive and significant effect on the level of knowledge of safety procedures among the workers in the sampled oil and gas companies. Lastly, there was significant different in the level of knowledge of safety procedures among the workers before and after the safety training in selected indigenous oil and gas companies and also among the selected companies

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