

Comparing the Effect of Occupational Stress on Oil and Gas Industry Workers in Nigeria With Respect to Age and Gender

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ABSTRACT

The petroleum industry in Nigeria has positively impacted the Nigerian economy. Sadly, the industry has also recorded high incident rates and has maintained the upward trend as reported by the Department of Petroleum Resource (DPR) in their 2015 publication of the petroleum industry health and safety performance score card. The report indicates that fatality in the oil and gas industry had risen by 244% between 2010 to 2015 and that the death toll reached 217 within the same period. The deaths were recorded from 298 incidents reported industry-wide within the five-year period and the reasons are not farfetched. The workers in the oil and gas industry have continually faced unfavorable work environments and conditions, lengthy working hours, achieving ambitious targets and deadlines, workplace competition and other workplace stress factors which led to fatigue, substance abuse to keep up with work, poor judgments and accidents as the eventual outcome. Previous studies have confirmed the risky nature of petroleum exploration and prevalence of stress elements faced by the industry workers while some other studies have established the relationship between occupational stressors and workplace incident in the oil and gas industry. This study therefore will focus on the comparison of oil and gas industry workers response to the effect of stress with respect to their age and gender. The study utilized a web-based questionnaire distributed across 850 respondents selected from Nigeria's petroleum industry with different job roles. A total of 550 feedbacks representing 64.71% of the total sample population for the study were received. SPSS software was first used to analyze descriptive statistics of demographic information such as age, gender, work-experience, employment type, and job category. The prevalence of stress and the level experienced by the respondents were analyzed using cross-tabulation and correlation on the questionnaires. The percentage of responses for each item used to measure the occupational stress factors in the oil and gas industry was examined in order to understand the extent to which the respondents agree or disagree with the questions. The findings showed that over 95% of the workers in petroleum industry experience stress from their jobs from a moderate level to an extreme level. 111 respondents of the 550 workers surveyed indicated that their

jobs were very stressful, which accounted for 20.2% of the total respondents. 45.8% of the respondents said their jobs were moderately stressful, 31.8% were mildly stressful while 2.2% of respondents said their job were not stressful at all. it can be observed that 39.1% of workers between the ages of 20-29 years complained that their job was very stressful, 31.1% of the workers between the ages of 30-39 years complained that their jobs were very stressful, 11.5% of worker between the ages of 40-49 years complained that their jobs were very stressful and none of the worker above the age of 50 years complained that their jobs were very stressful. The survey also showed that 22.1% of male workers indicated that their jobs were very stressful while 9.6% of female workers indicated that their jobs were very stressful. This study has shown that workers of all ages in the oil and gas industry experience different levels of stress and greater number of male workers are more distressed at work than their female counterparts. Further study is needed with equal number of male and female participants in similar jobs roles with the same age groups. This will provide more details that could be used to develop specific stress management models with respect to the age and gender of oil and gas industry workers in Nigeria.

Keywords: Oil and gas, Petroleum, occupational stressors, accidents, gender, Age, Psychological, Physical, Incident, Safety outcome.

INTRODUCTION

Nigerian oil and gas industry workers face various health challenges as a result of exposure to occupational risks. Stress is a major health problem in the workplace. Most oil and gas industry workers suffer from various stressful conditions that affect their health (Cookey-Gam and Douglas, 2018). Work-related stress is one of the biggest health risks faced by workers in the industry. It is the cause of most physical illnesses, drug abuse and family problems that people face.

Stress is defined according to the physical and physiological impact on a person, and it can be mental, physical or emotional stress (Mahmood et al., 2013). Workplace stress is called occupational stress (Jiang et al., 2018). It occurs when the requirements of the environment/workplace do not match the individual's ability to meet these requirements (Mahmood et al.). With the transition from the traditional biomedical model to the bio-psychosocial model, occupational stress has become a new harmful workplace factor affecting physical and mental health, and is similar to traditional physical, chemical and biological harmful factors. And may directly or indirectly endanger the health and performance of workers (Zhou and Xiao, 2013). Recently, this has become an ongoing global concern and has therefore attracted greater interest from researchers (Choy, Wong, 2017; Zare et al., 2017).

The demographic characteristics of oil and gas workers include gender, age group, education level, marital status, monthly household income, working hours, job type, job title, shifts, and smoking and drinking status (Jiang et al. 2018). Due to the similarity of the research, the small sample size, the choice of research methods, and the limitations related to separation, hinder the research of different demographics due to occupational stress. Other possible influencing factors and the conclusions drawn by the researchers are contradictory (Ma et al., 2015; Xiong, Li, 2014; Jiang et al., 2018). According to Mahmood et al. (2013), age can be explained by the fact that mature personality tendencies are related to the completion of specific developmental

tasks for each development and its impact on the individual's perception of whether they are in a state of stress. Studies have shown that younger employees report greater work stress than older employees and employees between the ages of 31 and 40 experience the most work stress (Sharpley et al., 1996). Because this finding is that older workers usually reach a stage where career development is not their main focus, so many job characteristics may be stressful on younger workers who have careers, rather than on older workers (Du, 1994). According to Hsu (2019), older workers may encounter many obstacles and pressures at work, such as: B. Physical limitations and health problems, gaps in the use of new technologies, and commitment to work. Workers' physical and mental health (Gallo et al., 2000; Wahrendorf et al., 2017; Hessel et al., 2018) Guglielmelli et al. (2016) investigated the gain cycle from job requirements to job satisfaction, and younger workers responded better than older workers. As you grow older, you are less likely to receive rewards, work imbalances and poor physical conditions. This shows that work ability and work conditions determine the opportunities for the elderly to participate in work. For those older (aged 65 or more) workers whose work was in low control, less effort-reward imbalanced work and having poorer health were less likely to work in the old age (Damman et al., 2013).

Gender refers to socially constructed roles, behaviors, expressions and identities of girls, women, boys, men, and how people see themselves and each other, how they act and interact, and how power and resources are allocated in society (CIHR, 2014). Many studies have been conducted on gender differences and work stress, and various explanations have been proposed for these gender differences. Research shows that work stress affects both men and women. Men and women face different working environments and different types of demand and tension, even if they work in the same industry and the same type of job roles.

Men tend to hold higher positions while women (42% of the active population in the EU) are more likely to work part-time than men (32% of women report part-time work compared to 7% for men), and many women work in precarious jobs and are paid lesser than their male counterparts, which affects their work ability, hence the risks they face (Rivera-Torres et al., 2013). Nevertheless, women may be disproportionately exposed to stressors. Women have greater exposure to monotonous tasks than men, are less likely to do jobs involving problem solving or learning, are less likely to be able to choose when to take a break in their work, and are more likely to be interrupted with unexpected tasks (Paoli and Merllie, 2001; Fagan and Burchell, 2002; Gunkel *et al.*, 2007).

Understanding the impact of age and gender differences in occupational stressors of oil and gas workers is essential for improving and implementing safety measures. In addition, it is impossible to prevent workplace stress without knowing exactly how age and gender affect the specific tasks assigned to them. Therefore, this study is a contribution to the research literature on the impact of age and gender on the job satisfaction and stress effect of oil and gas industry workers by using a set of prospective design in a randomly sampled group of oil and gas workers in the Niger-Delta region of Nigeria. The first objective of this study is to provide strong evidence that different age groups of the workers experience stress in their jobs. The second objective of this study is to compare the effect of stress between gender and age groups of the workers. Based on the theoretical and empirical data presented above, we suggest and test the following hypotheses:

H1: There is a relationship between the age group of the workforce and if the workers experience stress in their jobs.

H2: There is a relationship between the gender of the workforce and if the workers experience stress in their jobs.

H3: There is a relationship between the age group of the workforce and if the workers are satisfied with their jobs.

METHODS

Study Design

The data used in this study is based on a sample of oil and gas workers from selected companies operating in the Niger Delta region of Nigeria. The study utilized a web-based questionnaire. 850 questionnaires were distributed to selected oil and oil industry workers in the selected companies in the Niger Delta region. Of the 850 questionnaires distributed, 550 were deemed suitable for survey, which corresponds to the response rate of 64.71%. All the questionnaires were transferred to SPSS spreadsheet. The analysis began with understanding the demography of the respondents that took part in the survey. Univariate (frequency count) analyses were done on the questionnaires to summarize as well as describe the responses of the respondents, after which bivariate (cross-tabulation and correlation) analyses were also carried out on the questionnaires to understand the relationship between categorical variables.

Participants

Participants in the research population include oil and gas workers engaged in various tasks, such as Information Technology support staff, engineering assistants, human resources, accountants, laboratory researchers/scientists, rig crew, mud Engineers, marine supervisors, safety officers, operations supervisors, site inspectors and other personnel who had been on the job for at least twelve months prior to administering the web-based questionnaire. The number of male respondents was 467, accounting for 84.9% of the total number of respondents, of which 83 respondents were female employees. Most workers were between 30 and 39 years old. Approximately 270 employees were between 30 and 39 years old, accounting for 49.1% of the total number of respondents. There were 23 workers between the ages of 20 and 29 which accounted for 4.2% of the total respondents.

Pilot study

Pilot studies are an important part of the research project because they can help researchers identify potential problem areas and gaps in research tools and instruments before the commencement of the full study (Thabane et al., 2010). Conducting a pilot study does not guarantee the success of the main study, but it will increase the likelihood of success (Thabane et al). The pilot study was done by electronically distributing the web-based questionnaires to frontline employees of oil and gas companies (international and local) in the Niger Delta region of Nigeria through the Google Forms survey platform to get their responses.

Statistical Analysis

Univariate (frequency count) analyses were done on the questionnaires to summarize as well as describe the responses of the respondents, after which bivariate (cross-tabulation and correlation) analyses were also carried out on the questionnaires to understand the relationship between categorical variables. These analyses were done using the SPSS package (version 23).

RESULTS

The Stress Experienced by Oil and Gas Workers

In order to first get a general feel of how stressful oil and gas workers jobs are on a daily basis in Niger Delta, questions were asked about if the jobs they engaged in were stressful on a daily basis and if they were satisfied with their jobs. These questions were asked because it will aid in knowing if further analysis will be carried out in knowing the relationship of various occupational stressors and the associated outcome from the occupational stressors experienced by oil and gas workers. Note, if workers in the oil and gas industry in the Niger Delta indicate that their jobs are not stressful, then there would be no justification proceeding with the research. Cross Tabulation was used in analyzing respondent's responses to these set of questions in order to understand the level of stress experienced by workers on a daily basis and also to check the relationship between stress experienced by worker and the demographic criteria (age and gender).

Age Group

The cross-tabulation for age group and if oil workers in Niger Delta region feel stress in their jobs on a daily basis is shown in Table 1. From Table 1, it can be observed that 39.1% of workers between the ages of 20-29 years complained that their job were very stressful, 31.1% of the workers between the ages of 30-39 years complained that their jobs were very stressful, 11.5% of worker between the ages of 40-49 years complained that their jobs were very stressful and none of the worker above the age of 50 years complained that their jobs were very stressful.

Chi-square test which was used to establish if a relationship exist between the age group and if workers experience stress in their job is shown in Table 2. The chi-square result showed that there was statistical difference at a level of significance 0.05 ($\chi^2 = 184.081$, $df = 9$, $p\text{-value} = 0.000$), which provide strong evidence that there is a relationship between age group of the worker and if the workers experience stress in their jobs.

Table 1: Cross Tabulation of How stressful is your Job and Age

How old are you? * In general, how stressful is your job?

Cross tabulation

			In general, how stressful is your job?				Total
			Not Stressful	Mildly Stressful	Moderately Stressful	Very Stressful	
How old are you?	20-29	Count	0	2	12	9	23
		% within How old are you?	0.0%	8.7%	52.2%	39.1%	100.0%
		% of Total	0.0%	0.4%	2.2%	1.6%	4.2%
	30-39	Count	0	119	67	84	270
		% within How old are you?	0.0%	44.1%	24.8%	31.1%	100.0%
		% of Total	0.0%	21.6%	12.2%	15.3%	49.1%
	40-49	Count	0	25	114	18	157
		% within How old are you?	0.0%	15.9%	72.6%	11.5%	100.0%
		% of Total	0.0%	4.5%	20.7%	3.3%	28.5%
	50 and above	Count	12	29	59	0	100
		% within How old are you?	12.0%	29.0%	59.0%	0.0%	100.0%
		% of Total	2.2%	5.3%	10.7%	0.0%	18.2%
Total	Count		12	175	252	111	550
	% within How old are you?		2.2%	31.8%	45.8%	20.2%	100.0%
	% of Total		2.2%	31.8%	45.8%	20.2%	100.0%

Table 2: Chi-Square of How stressful is your Job and Age

Chi-Square Tests

	Value	df	Asymptotic (2-sided)	Significance
Pearson Chi-Square	184.081 ^a	9	.000	
Likelihood Ratio	193.312	9	.000	
N of Valid Cases	550			

4 cells (25.0%) have expected count less than 5. The minimum expected count is .50.

Gender

The cross-tabulation for gender and if oil workers in the oil and gas industry in the Niger Delta region feel stress in their jobs is presented in Table 3. From Table 3, it can be observed that more male oil workers were very stressed in their workplace than female worker. The survey showed that 22.1% of male workers indicated that their job were very stressful while 9.6% of female workers indicated that their job was very stressful.

Chi-square test which was used to establish if a relationship exists between gender and if workers experience stress in their job is shown in Table 4. The chi-square result showed that

there was statistical difference at a level of significance 0.05 ($\chi^2 = 14.08$, $df = 3$, $p\text{-value} = 0.003$), which provide strong evidence that there is a relationship between gender of the worker and if the workers experience stress in their jobs.

Table 3: Cross Tabulation of How stressful is your Job and Gender

What is your gender * In general, how stressful is your job?

Cross tabulation

			In general, how stressful is your job?				Total
			Not Stressful	Mildly Stressful	Moderately Stressful	Very Stressful	
What is your gender	Male	Count	12	152	200	103	467
		% within What is your gender	2.6%	32.5%	42.8%	22.1%	100.0%
		% of Total	2.2%	27.6%	36.4%	18.7%	84.9%
	Female	Count	0	23	52	8	83
		% within What is your gender	0.0%	27.7%	62.7%	9.6%	100.0%
		% of Total	0.0%	4.2%	9.5%	1.5%	15.1%
Total	Count		12	175	252	111	550
	% within What is your gender		2.2%	31.8%	45.8%	20.2%	100.0%
	% of Total		2.2%	31.8%	45.8%	20.2%	100.0%

Table 4: Chi-Square of How stressful is your Job and Gender

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	14.080 ^a	3	.003
Likelihood Ratio	16.462	3	.001
Linear-by-Linear Association	.072	1	.788
N of Valid Cases	550		

a. 1 cells (12.5%) have expected count less than 5. The minimum expected count is 1.81.

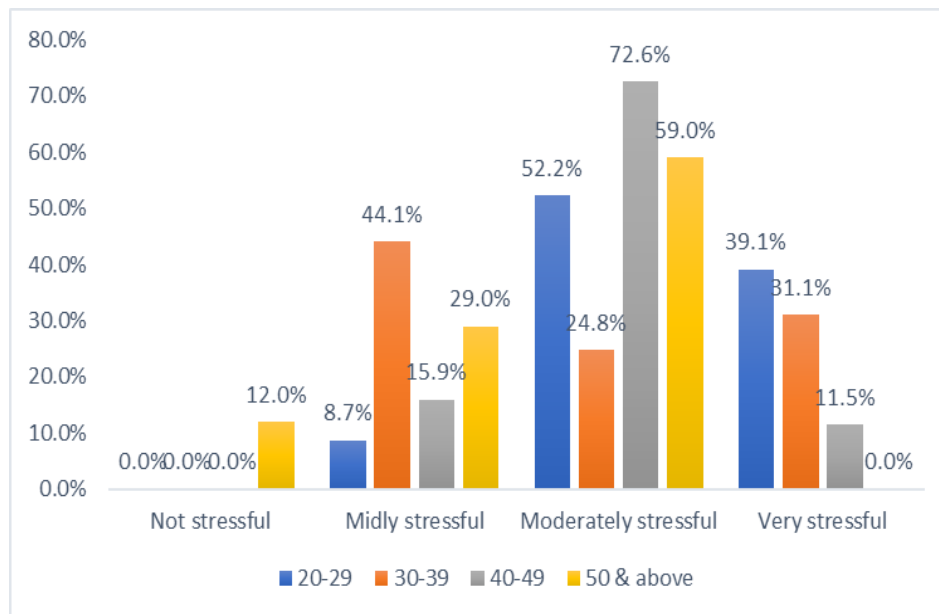


Figure 1: Prevalence of job stress by age group

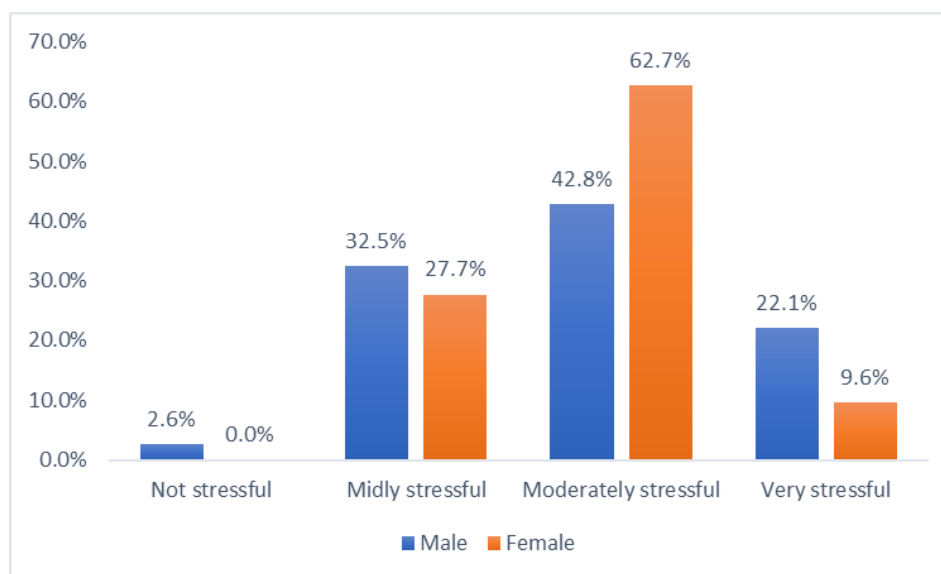


Figure 2: Prevalence of job stress by gender

Job Satisfaction Experienced by Workers

Workers' job satisfaction graph shows the results of the cross-tabulation, in which oil and gas workers were asked whether they are satisfied with their jobs. The results showed that most workers expressed dissatisfaction with their work. Work, accounting for 62.9% of the total number of employees surveyed, while 14.5% of employees said they were very satisfied with their work.

Age Group

The cross-tabulation of age groups and employee satisfaction with work shows that there is a negative correlation between the two variables (Table 5). Younger oil and gas workers were unsatisfied with their job than older workers. The result showed that 39.1% of workers

between the ages of 20-29 years indicated that they were unsatisfied with their job, 37.0% of workers between the ages of 30-39 years indicated that they were unsatisfied with their jobs, 1.9% of workers between the ages of 40-49 years indicated that they were unsatisfied with their jobs while 12.0% of worker above the age of 49 years indicated that they were unsatisfied with their job.

Chi-square test which was used to establish if a relationship exist between age group and if workers satisfied with their job is shown in Table 6. The chi-square result showed that there was statistical difference at a level of significance 0.05 ($\chi^2 = 147.32$, $df = 6$, $p\text{-value} = 0.000$), which provide strong evidence that there is a relationship between age group of the worker and if the workers are satisfied with their jobs.

Table 5: Cross Tabulation of How satisfied are you with your job and age group

How old are you? * How satisfied are you with your job?

Cross tabulation

			How satisfied are you with your job?			Total
			Unsatisfied	Satisfied	Very Satisfied	
How old are you?	20-29	Count	9	12	2	23
		% within How old are you?	39.1%	52.2%	8.7%	100.0%
		% of Total	1.6%	2.2%	0.4%	4.2%
	30-39	Count	100	142	28	270
		% within How old are you?	37.0%	52.6%	10.4%	100.0%
		% of Total	18.2%	25.8%	5.1%	49.1%
	40-49	Count	3	144	10	157
		% within How old are you?	1.9%	91.7%	6.4%	100.0%
		% of Total	0.5%	26.2%	1.8%	28.5%
	50 and above	Count	12	48	40	100
		% within How old are you?	12.0%	48.0%	40.0%	100.0%
		% of Total	2.2%	8.7%	7.3%	18.2%
Total	Count		124	346	80	550
	% within How old are you?		22.5%	62.9%	14.5%	100.0%
	% of Total		22.5%	62.9%	14.5%	100.0%

Table 6: Chi-Square of How satisfied are you with your job and age group
Chi-Square Tests

	Value	df	Asymptotic (2-sided)	Significance
Pearson Chi-Square	147.315 ^a	6	.000	
Likelihood Ratio	149.930	6	.000	
N of Valid Cases	550			

a. 1 cells (8.3%) have expected count less than 5. The minimum expected count is 3.35.

Gender

A cross-tabulation based on employee gender and job satisfaction shows that compared with women, more male employees are less satisfied with their jobs (Table 7). The results showed that 25.9% of male employees expressed dissatisfaction with their jobs. 3.6% of female workers expressed dissatisfaction with their work, while more female workers expressed satisfaction with their work. The cross table found that 28.9% of female workers were very satisfied with their work, while 12.0% of men were satisfied with their work. The chi-square to determine whether there is a relationship between gender and employee job satisfaction, is shown in Table 8. The chi-square test results show that there was a statistical difference when the significance level is 0.05 ($\chi^2 = 29.74$, $df = 2$, $p\text{-value} = 0.000$). This is strong evidence that there is a relationship between the gender of the worker and the satisfaction of the workers.

Table 7: Cross Tabulation of How satisfied are you with your job and Gender

What is your gender * How satisfied are you with your job?

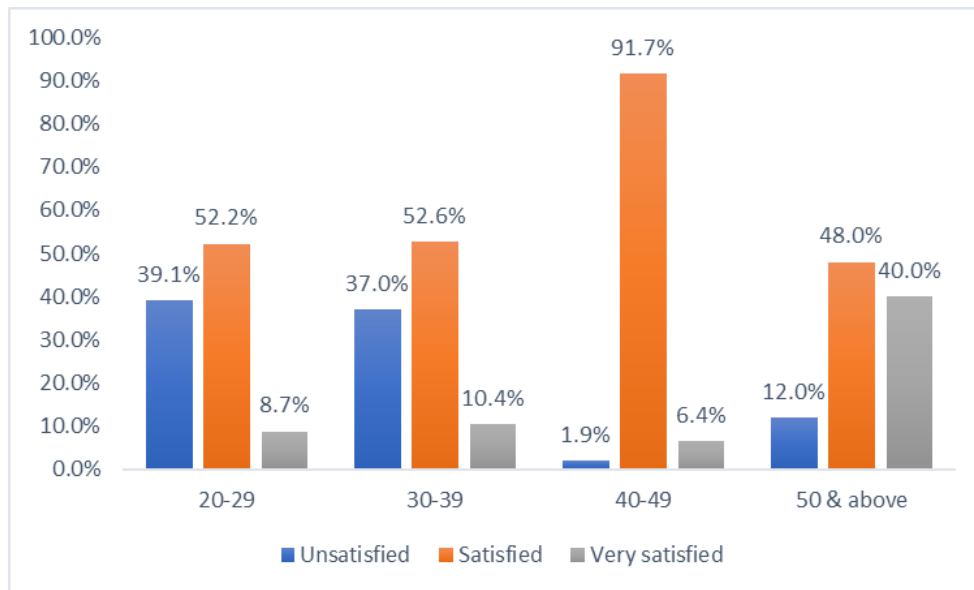
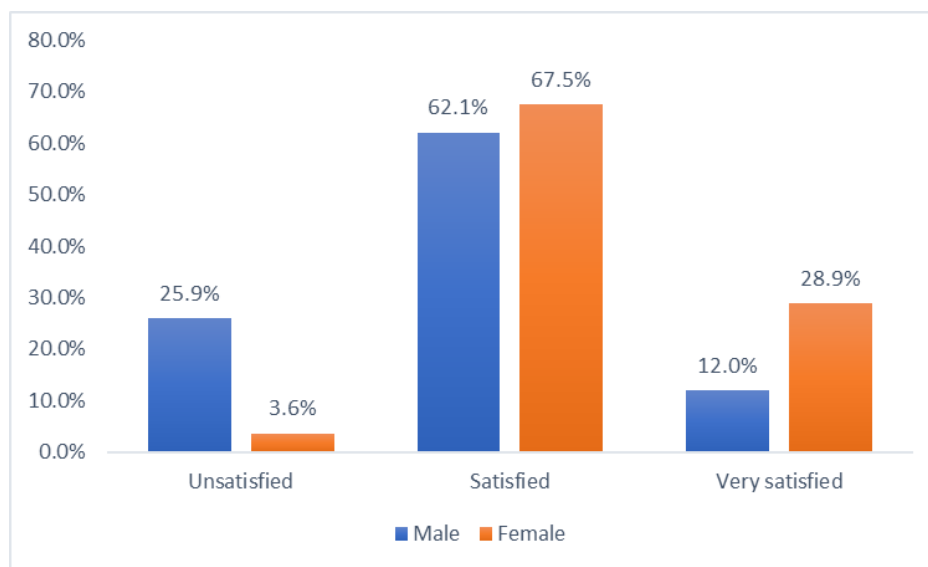
Cross tabulation

			How satisfied are you with your job?			Total
			Unsatisfied	Satisfied	Very Satisfied	
What is your gender	Male	Count	121	290	56	467
		% within What is your gender	25.9%	62.1%	12.0%	100.0%
		% of Total	22.0%	52.7%	10.2%	84.9%
	Female	Count	3	56	24	83
		% within What is your gender	3.6%	67.5%	28.9%	100.0%
		% of Total	0.5%	10.2%	4.4%	15.1%
Total	Count		124	346	80	550
	% within What is your gender		22.5%	62.9%	14.5%	100.0%
	% of Total		22.5%	62.9%	14.5%	100.0%

Table 8: Chi-Square of How satisfied are you with your job and gender**Chi-Square Tests**

	Value	df	Asymptotic (2-sided)	Significance
Pearson Chi-Square	29.740 ^a	2	.000	
Likelihood Ratio	34.351	2	.000	
Linear-by-Linear Association	29.686	1	.000	
N of Valid Cases	550			

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 12.07.

**Figure 3: Level of job satisfaction by age group****Figure 4: Level of job satisfaction by gender**

DISCUSSION

From the survey, the number of male respondents was 467, accounting for 84.9% of the total number of respondents, and 83 respondents were female workers. Nielsen et al. (2013) also reported in their study that 85% of respondents participated in their survey. This result shows that the majority of the workers in the petroleum industry are predominantly male workers. For the age of worker, it was observed from the survey data that most of the worker were between the ages of 30-39. About 270 workers were between the ages of 30-39, which accounted for 49.1% of the total respondents. The age of workers in the oil and gas industry was similar to the construction industry as reported in several studies. Pavicic *et al.* (2019) reported in their study that 45% of the oil and gas workers that took part in their study were between the ages of 26-35years. Goldenhar *et al.* (2003) in their study of job stressors in the construction industry found out from their questionnaire survey that the mean age of workers was 38 years. Abbe *et al.* (2011) in their study also on job stressor in the construction industry reported that the mean age of works was 41years from the questionnaire survey they carried out. Finding from these studies and other studies suggest that most industries are made up of workers in the late-thirties, as this age group can be regarded as the majority of work force in most industries.

Respondents between the age group of 20-29years were the lowest working age in the oil and gas companies. There were only 23 workers between the ages of 20-29years which accounted for 4.2% of the total respondents. The low number of respondents between these ages can be attributed to the fact that most graduates in Nigeria tend to finish their university program at their mid-twenties and just a few number of fresh graduate are absorbed into most oil and gas companies in Nigeria.

From the bivariate analysis (cross-tabulation), it was clear that majority of oil and gas workers in the Niger Delta region experience stress from their job from a moderate level to an extreme level. 111 respondents of the 550 workers surveyed indicated that their jobs were very stressful, which accounted for 20.2% of the total respondents. 45.8% of the respondents said their jobs were moderately stressful while 2.2% of respondents said their job was not stressful at all. The high number of respondents indicating that their jobs was stressful give the indication that most job roles in the oil and gas industries comes with a good amount of stress attached to it . Several studies have confirmed the high level of stress faced by oil and gas workers from different occupational stressors. Bresic *et al.* (2007) stated that most oil and gas workers are exposed to extreme conditions and are therefore exposed to a variety of occupational stressors such as adverse weather conditions, long working hours, shift work, night duty, noise, vibration and poor ventilation. Parkes (1998) reported that most oil and gas workers are exposed to psychosocial stressor which include workload pressure, lack of family support, social isolation, fatigue, high responsibility and lack of sleep.

From the cross-tabulation for age group and if oil workers in Niger Delta region feel stress in their jobs on a daily basis, it can be observed that 39.1% of workers between the ages of 20-29 years complained that their job were very stressful, 31.1% of the workers between the ages of 30-39 years complained that their jobs were very stressful, 11.5% of worker between the ages of 40-49 years complained that their jobs were very stressful and none of the worker above the age of 50 years complained that their jobs were very stressful. From the result it can be observed that there is a negative relationship between the age of oil and gas workers and how

stressed they are from conducting their respective jobs. Pavicic *et al.* (2019) in their study also found similar observation relating occupational stressors and age of oil and gas workers but attributed it to the fact that older workers must have adjusted to specific working condition than younger workers. Another possibly reason of the high complain rate of stress among workers below the age of 40 years might be due to the fact that most of the workers might possibly be junior staffs and more tasks are assigned to them to execute with shorter delivery date and several studies have shown that high job demand result to increase in stress in workers.

The contrast of low stress noticed for older oil and gas workers can be attributed to the fact that as worker grow in the company they tend to get promoted to senior position/managerial positions and have more job control (ability to make decision on how jobs are to be executed). Karasek (1979) reported that occupational stresses experienced in most jobs are also related to the decision latitude (job control) the worker has over his job. Workers with high job demand but low decision latitude (cannot make any decision regarding the jobs) experience the highest level of stress. High job demand but low decision latitude usually apply to junior staff workers. For this study, it seem like the high stress associated with workers below the age of 40 years might have resulted from the high job demand with little decision latitude on how the jobs are been executed. He also reported that worker with low job demand but high decision latitude have the lowest level of stress which usually apply to managers/senior staff of companies.

The findings of this study showed that majority of the workers indicated that they were satisfied with their jobs. 346 workers out of the 550 workers surveyed indicated that they were satisfied with their job, which accounted for 62.9% of the total workers surveyed while 14.5% of the total workers indicated that they were very satisfied with the jobs. The high rate of satisfaction with their jobs despite the fact that 66% of the total respondents indicated that their jobs were moderately to very stressful can be attributed to the fact that there might not be better job alternative to their present job. The oil and gas industry provide adequate financial compensation for workers and most workers in this industry prefer to bear the stress associated with the job than looking for alternative job that will be less stressful. The desire of oil and gas workers to keep on working despite not being happy with their job can result to a lot of behavioral safety outcome such as psychological and physical symptoms. Several studies have shown that workers in the oil and gas industry have more anxiety and depressive disorder than the general population. World Health Organization have reported that anxiety and depression symptoms to be the fourth leading cause of work incapacity. It is a well-known fact that the Petroleum industry play an important role in driving the world economy, so it is important to identify factors that influence the health and safety of workers within the industry in other to ensure adequate production of crude oil (Lian *et al.*, 2018; Nielsen *et al.* 2013).

CONCLUSION

In conclusion, the results of this study revealed that both old and younger are associated with different occupational stress levels and job satisfaction in the Nigerian oil and gas industry particularly in the Niger- Delta region. The study showed a negative relationship between the age of oil and gas workers and how stressed they are from conducting their respective jobs. This was attributed to the fact that older workers must have adjusted to specific working condition than younger workers. The contrast of low stress noticed for older oil and gas workers can be attributed to the fact that as worker grow in the company, they tend to get

promoted to senior position/managerial positions and have more job control (ability to make decision on how jobs are to be executed). Occupational stress and job satisfaction levels are also different among male and female workers in the oil and gas industry. The study showed that more male workers were more unsatisfied with their job than female workers and also, more male oil workers were very stressed in their workplace than female workers. The findings from this study should help direct future stress research. I recommend further study with equal number of male and female participants in similar jobs roles with the same age groups to help develop specific stress management models that would consider age and gender in stress management in the oil and gas industry in Nigeria

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