The study examined the effect of gender diversity on the performance of Shell Petroleum Development Company of Nigeria. The study adopted survey research design by using primary data with the aid of questionnaire administered to the population. The population of the employees of Shell Company of Nigeria is 4,500 while the sample size is 367 which was derived using Taro Yamane formula. The study tested for reliability and released that all the variables were reliable. The study used regression to test the hypothesis with the aid of statistical package for social sciences (SPSS) version 20.00. The result of the analysis indicates that there exists a negative and significant effect of gender diversity on the performance of Shell Petroleum Development Company of Nigeria. The study recommended that Shell Petroleum Development Company of Nigeria should de-emphasize the method and manners of employment based on gender. They should move from a recruitment process that reflects affirmative action to one that values diversity based on performance, this implies that gender should not be a primary or critical criterion for qualification for recruitment as doing so will negatively affect performance.

Keywords: Gender Diversity, Men, women, Performance and Effectiveness

Corresponding Author: Onah, B. Chikwendu
**Background to the Study**

In today's world of business, the workforce of various organizations is becoming more heterogeneous with a mix of people in terms of gender, age, race, and education background (Robbins, 2009). This may not be unrelated to the fact that the world is a now a global village and every little community constitute a microcosm of people of diverse background; management of a diverse workforce therefore becomes imperative. A diverse workforce for instance, includes people of different gender, age, ethnicity, and educational background working together toward attaining specific goals. According to Dahm (2003), diversity within the workplace can evoke an array of emotions as, some view diversity as something to be dealt with rather than a tool to be used to improve the organization. On the other hand some organizations adopt age diversity at their workplace or organization in order to become more creative and open to change.

Shell Petroleum Development Company of Nigeria Limited (SPDC) like most organizations operating in the different parts of the country have been observed not to be making deliberate and conscious efforts to avoid unnecessary discriminations on the bases of the aforementioned diversities. This often times lead to employees discriminated based on age or favoured while implementing financial and non-financial rewards systems on the bases of the aforementioned diversities and such act is a recipe for underperformance of the organization in the different performance areas.

From the extant studies such as Neda and Jegak(2011); Qaiser (2012); Muhammad, Carol and Isabel (2014); Daniel, Adewale, Anthonia, Olumuyiwa(2014); Bhargava and Anbazhagan (2014); Naima (2016); Lone, Huidan, Joana, Petia andRima (2016); Ajayi (2017); Kwang and Sheryl (2017) and Regina and Dishon (2017) studied the variables using different organizations in India, Kenya, Nigeria as well as Malaysia but none of these studies used Shell Petroleum Development Company of Nigeria. None of these studies reviewed used organizational effectiveness which is measured by mission, vision, goals and objectives. Also, none of the previous studies reviewed considered introducing a control variable in terms of accessing how regulatory factors and /or insecurity affect performance. The objective of this study is to examine the effect of gender diversity on the performance of Shell Petroleum Development Company of Nigeria while the specific objective is to determine the effect of gender diversity on the effectiveness of Shell Petroleum Development Company of Nigeria.

The study is also restricted to employees of SPDC in Abuja, Lagos, Port Harcourt and Warri. Gender diversity in this study is restricted to male and female while performance is restricted to strategic effectiveness in terms of mission, vision, goals and objectives. The period of study covered twenty-two (20) years from 2001 to 2021. The period is chosen because it spans through the years that Nigeria has had uninterrupted democratic governance in recent history and also because the period is long enough to examine workplace diversity and performance within an organization especially as it relates to the control variables introduced in the work which are; regulatory framework and state of insecurity.
Brass (2009) argues that men wish to maintain their dominance by intentionally excluding women from informal interactions. In social interaction, communication also plays an important role and men managers feel uncomfortable communicating with women (Kanter, 2001). Cohen and Vigoda (2007) also report that political behavior differs for males and females. They hypothesized stronger relationship between political behavior and work outcomes for males. In the pre-industrial era men and women had specific work and there were even some works that only one gender was allowed to do. For instance, women were the only ones allowed to milk cows in Sweden until sometime in the 20th century. Men did not want to do women's work as they would lose status and prestige, something that women could rarely get as it was only related to men's jobs. Segregation between genders is no longer as common but it exists in some industries where there are still ideas about what is regarded as women's work and men's work (Alvesson & Billing, 1997, pp. 54-56).

The hypothesis is stated as:

\[ H_0: \text{Gender diversity has no significant effect on effectiveness of Shell Petroleum Development Company of Nigeria.} \]

**Concept of Gender Diversity**

Gender diversity in the workplace is the equal treatment and acceptance of both males and females in an organization (Kumudha and Raji, 2018). Diversity adds value to a company's bottom line due to the different viewpoints and backgrounds of diverse individuals. Gender diversity is when a company is represented by more or less equal proportion of men and women. More companies are realizing the value of having a diverse workforce (Kumudha and Raji, 2018).

Powell (2011) defined gender as the physiological inference of someone being either male or female; like expectations and beliefs regarding what kind of attitudes, behaviours, values, knowledge, skills, and interests areas are more suitable for or typical of one sex than the other. The world health organization (2015) defined gender as “socially constructed roles, behaviors, activities, and attributes that a given society considers appropriate for men and women”. The study of gender diversity focuses on how individuals believe that males and females differ. These gender variations influence the manner in which individuals react to the behaviours of others in the work settings or any other group coalition. Gender diversities are visible in prejudice, stereotypes, and discrimination.

The study conceptualized gender as a social construct of roles and responsibilities attached to male and female employees that affect employees and organizational performance.

**Male**

Brass (2009) argues that men wish to maintain their dominance by intentionally excluding women from informal interactions. In social interaction, communication also plays an important role and men managers feel uncomfortable communicating with women (Kanter, 2001). Cohen and Vigoda (2007) also report that political behavior differs for males and females. They hypothesized stronger relationship between political behavior and work outcomes for males. In the pre-industrial era men and women had specific work and there were even some works that only one gender was allowed to do. For instance, women were the only ones allowed to milk cows in Sweden until sometime in the 20th century. Men did not want to do women's work as they would lose status and prestige, something that women could rarely get as it was only related to men's jobs. Segregation between genders is no longer as common but it exists in some industries where there are still ideas about what is regarded as women's work and men's work (Alvesson & Billing, 1997, pp. 54-56).

**Female**

Women are more in jobs today and it is challenging for them to create a good balance between work and family demands. They find it difficult to continue their job due to family pressures. Besides earning the most challenging task for female employees is to take care of their children and elderly parents. Females not only take care of their kids but they are bound to care of their in-laws and elderly parents thereby fulfilling the psychological and emotional needs of the society (Sandra et al., 2000).
Females have a lower participation rate in decision making in organizations and have low employment ratio because working ladies are considered to have a bad character still in many societies. Female employees feel trouble in getting comfortable in a male dominated society because male show them less professional respect whatever the place is. Females are not given respect by men at their jobs, in their offices, on the roads, in busses, in neighborhoods and by the male customers also. The situation regarding giving rights to female employees is worse in third world countries, may be because of poverty, ignorance and certain stereotypes that has been passed on from one generation to another (Linda, 2001).

If females are encouraged to participate in decision making, there is a better chance of achieving desirable results. All the organizations which provide a gender equitable environment are the ones where rewards are given on merit and information is shared and employees are given equal chances of participation in decision making. There is a positive relationship between the employee satisfaction improved performance in terms of lower costs of turnover, absenteeism and organizational productivity. Management practices and workplace cultures that are good for women are also good for men and for the employer's financial results (Jennifer, 1998). Furthermore, Ojo (2002) affirms that women are fewer than men in certain socio-economic activities. According to him, the percentages of female workers in some selected professions were as follow: architects, 2.4%, quantity surveyors, 3.5%, lawyers/jurists, 25.4%, lecturers, 11.8%, obstetricians and gynecologists, 8.4%, pediatricians, 33.3%, media practitioners, 18.3%.

**Concept of Performance**
Performance is the behavior on how a target is achieved (Armstrong & Taylor, 2014). Performance is in two forms which are financial performance and non-financial (Akyuz and Opusunju 2019). Performance is a general structure that refers to the operations of the enterprise (Opusunju, Akyuz and Abdullahi, 2019). It has been noted that performance reflects the productivity of members of an enterprise measured in terms of revenue, profit, growth, development, and expansion of the organization (Opusunju, Akyuz and Jiya, 2019). Performance is defined as how an enterprise is doing in terms of an increase in profit, market share, product quality, and expansion about other enterprises in the same industry (Akyuz and Opusunju 2019). Performance is measured using diverse parameters by different organizations some firms measure it through expansion, survival, number of employees, and capital employed (Akyuz and Opusunju, 2020).

Also, however, Russell and Russell (2011) argued that most organisational performance can be grouped into one of the following six general categories. However, certain organizations normally develop their own categories as appropriate depending on the organization’s mission: a) Effectiveness: A process characteristic indicating the degree to which the process output (work product) conforms to requirements of the organisation; b) Efficiency: A process characteristic indicating the degree to which the process produces the required output at minimum resource cost; c) Quality: The degree to which a product or service meets customer requirements and expectations; d) Timeliness: Measures whether a unit of work was done correctly and on time. However, the criteria must be established to define what constitutes
timeliness for a given unit of work. The criterion is usually based on customer requirements; e) productivity: the value added by the process divided by the value of the labour and capital consumed; and f) safety: Measures the overall health of the organization and the working environment of its employee.

**Organizational Effectiveness**

Organizational effectiveness is achieving the outcomes the organization intends to achieve (Mitchell, 2013). An organization is said to be effective when the right systems, structures and strategy is deployed on resources to meet desired outcomes. According to Richard et al. (2000) organizational effectiveness captures organizational performance plus the myriad of internal performance outcomes normally associated with more efficient or effective operations and other external measures that relate to considerations that are broader than those simply associated with economic valuation (either by shareholders, managers, or customers).

Composition of people which formulate independent business identity for some specific purpose is commonly known as organization and getting desired outcome within defined resource is treated as effectiveness. Organisational effectiveness is the notion of how effectual an organization is in accomplishing the results the organization aims to generate (Muhammad, 2011). It plays an important role in accelerating organizational development (Bulent, 2009). It is the net satisfaction of all constituents in the process of gathering and transforming inputs into output in an efficient manner (Matthew, 2005). Organisational effectiveness is defined as the extent to which an organization, by the use of certain resources, fulfills its objectives without depleting its resources and without placing undue strain on its members and/or society (May, 2006). In this work we conceptualize organizational effectiveness as meeting objectives and goals that align with an organisation's mission and vision.

**Control Variables**

**Regulatory Factor**

This consist of laws, regulations and procedures of a country which business enterprises are anticipated to comply with in the course of their operations, O'Cass and Julia, (2002). These laws may facilitate successful business conduct as well as constitute major problems to successful performance. Furthermore, in carrying out their business operations, business enterprises are required by law to pay taxes; value added tax, capital gains tax, education tax, import duties, excise duties, etc. Tax Policy in Nigeria has been largely used to generate maximum revenue for the government and as a result its use for optimal allocation of resources or redistribution of income is being neglected. Anyanwu (2008) noted that tax authority in Nigeria has concentrated on the manipulation of the rates and tax bases in order to generate enough revenue for the government. This has led to imposing of different types of taxes and levies by tax authorities.

**State of Insecurity**

Security is the ability of a state to maintain law and order among its citizen Nwama, (2015). On the other hand, the Concept of insecurity connotes different meanings such as: absence of safety; danger; hazard; uncertainty; lack of protection, and lack of safety. The term insecurity
is a state of fear or anxiety due to absence or lack of protection (Beland, 2005). Even though insecurity of lives and properties had become noticeable following the civil war and the subsequent military regimes which directly intensified urban violence, the recent upsurge of violence and insurgency in the country heightens the need to comprehensively address the persistent causes of social tension as a risk factor to Nigeria as an investment destination (Ezeoba, 2011). The oil and gas industry have had its own fair share of insecurity for example, the refineries were designed to receive crude oil feedstock by pipeline. Unlike fashion, they were designed to have products evacuated mainly also by pipeline. Lifting of products from depots immediately contiguous to the refineries was intended mainly to supply the towns and cities nearby. Vandalization of crude and product pipelines commenced in the late 1990s, some scholarly works have sought to elucidate the reasons for this development. Two major reasons have been attributed: The agitation for resource control and the attendant rise of militancy in the Niger Delta region, the second is outright theft of crude oil and petroleum products. It could be argued that both are linked. Several publications have given comprehensive treatment of these matters. In summary, the Niger Delta area of Nigeria where oil is principally produced has been a hotbed of agitation for resource control. This has arisen from the perceived injustice felt by the people on the assertion that the region has not significantly benefited from the oil wealth, while it has borne the brunt of resultant environmental degradation and pollution (Ogbuigwe, 2018).

**Empirical Studies**

Qaiser (2012) examined relationship between board gender diversity and its effect on firm performance, based on evidence from the Pakistan. They use empirical data on KSE 100 Index firms observed in 2008 to 2010. Twenty Five percent (25%) of the sample firms have at least one woman in the boardroom and only 3.33% of the CEOs are female. In order to investigate the rapport of gender diversity in board on firm performance, two-stage least-squares estimation was utilized, using Economic Valued Added (EVA) as performance measurement technique. Their results indicate that there is no significant relationship between board gender diversity on firm performance in Pakistan.

The above study was conducted in Pakistan and similar study can be conducted in Nigeria using Shell Petroleum Development Company of Nigeria. The study failed to indicate the population of the study and the sample size of the study. It also failed to use correlation as a pretest to indicate the degree and strength of the relationship between the dependent and independent variable. The study used regression to establish the cause and effect of dependent variable on the independent variable.

Naima (2016) sought to know if gender has direct effect on organizational effectiveness and what barriers women face during their professional career growth. The paper is exploratory research to highlight different type of factors that affect organizational effectiveness and on the true reasons that push back women from proceeding to middle and top management positions in organizations. Structured in depth interviews of top-level managers and focus group of middle-level managers were conducted to a convenient sample with the aim of knowing their attitudes and behavior towards role of gender in organizational effectiveness and to recognize its implications that are the reason of biasness, mental block and stereotyping against female at workplace.
The above study failed to indicate the place it was conducted and the organization that the study was conducted. The study used exploratory research design but failed to indicate the population of the study as well as the sample size of the study. The study failed to provide good measures of the variable of organizational effectiveness.

Muhammad, Carol and Isabel (2014) proposed a moderating effect of industry type (services vs. manufacturing). The predictions were tested using archival quantitative data with a longitudinal design. The results show partial support for the positive linear and inverted U-shaped curvilinear predictions as well as for the proposed moderating effect of industry type. The results help reconcile the inconsistent findings of past research. The findings also show that industry context can strengthen or weaken gender diversity effects.

The above study failed to use research ingredients such as research design, population of the study, sample size of the study, sample size determination, source of data, method of data collection, method of data analysis and model specification.

Bhargava and Anbazhagan (2014) investigated the different performance levels of the workers in the Chittoor Sugar factory located at the Chittoor town of South India. It also studied how the factors age and gender influence the performance levels of the workers in the firm. Upon study it found that the two variables under investigation have direct effect on the performance of the workers to varying degrees. Workers in the medium range on age, perform better compared to those on the extremes. The gender too is found to have its influence on the performance and the female workers are relatively more productive.

The above study was conducted using Chittoor Sugar factory located at the Chittoor town of South India and similar study can be conducted using Shell Petroleum Development Company of Nigeria. The study failed to indicate the population of the study, sample size of the study and sample size determination. The study failed to indicate the statistical tool such as regression and correlation. Regression analysis could have been used to establish the cause-and-effect relationship between the dependent and independent variable while correlation could have been used to indicate the strength and degree of the relationship between the dependent and independent variable.

Ajayi (2017) examined the influence of demographic variables of gender and age on the commitment of employees in the Nigerian civil service. Data for the study were obtained through 567 valid questionnaire containing information on gender and age-, and work-related issues from civil servants purposively selected from six states in the South-West, Nigeria. The Analysis of Variance (ANOVA) was used for the data. Findings indicate that the age groups of the civil servants are critical to their commitment in the organisation. The findings indicated that commitments in the civil service organisation are higher for the younger and older civil servants than those within the middle age groups.

The above study was conducted using Nigeria civil service and similar study can be conducted using Shell Petroleum Development Company of Nigeria. The study failed to indicate the population of the study but only indicated the sample size of the study without stating how the
sample size was derived. The study used the six states of Western Nigeria but failed to indicate the lists of Nigerian civil service. The study used Analysis of Variance (ANOVA) but the Analysis of Variance (ANOVA) is the component of regression. The study could have used regression to establish the cause-and-effect relationship between the dependent variable and independent variable.

Daniel, Adewale, Anthonia, Olumuyiwa(2014) gender discrimination against men and women based on their ethnic, religious and geographical identity is common. This survey, however, focuses on discrimination against women on the basis of gender and performance in government universities in Lagos State, Nigeria. The model used for this study was developed and tested in which one hundred and eighty-seven copies of the questionnaire that were administered to respondents as completed by the academic staff of government universities in Lagos State were retrieved. Pearson correlation and regression were utilized for the analysis of the study, and the result showed that managerial roles based on gender discrimination against women in government universities in Lagos State have affected employee job performance negatively.

The above study was conducted using Universities in Lagos State, Nigeria and similar study can be conducted using Shell Petroleum Development Company of Nigeria. The study failed to lists the number of universities in Lagos state used in the study. The study used one hundred and eighty-seven copies of the questionnaire but failed to indicate the population of the study. The study used regression and correlation. The used of regression was to establish the cause-and-effect relationship between the dependent variable and independent variable. The used of correlation was to establish the degree and strength of the relationship between the dependent variable and independent variable.

Neda and Jegak (2011) investigated the moderating effect of two socio-demographic variables which are employee gender and organizational tenure incompetency-performance relationship. Data was gathered from 210 Malaysian employees at the Department of Agriculture. To test the moderating effects, two hypotheses were raised and tested. Theoretical model and hypothesis in this study were tested using moderated multiple regression (MMR) analysis. Results revealed that there are no moderating effects for gender. In other word, gender did not moderate the relationship between competency and performance. However organizational tenure significantly affected the relationships between competency and performance; whereby the relationship was stronger for longer tenured employees.

The study was conducted in Malaysia using Malaysian employees at the department of agriculture and similar study can be conducted in Nigeria using Shell Petroleum Development Company of Nigeria. The study indicated the population of the study but failed to indicate the sample size of the study. The study used regression to establish the effect and cause of independent variable on the dependent variable.

Kwang and Sheryl (2017) analyzed the effects of gender diversity management on organizational performance using Korea Workplace Panel Survey data for 2005, 2007, and 2009. Few studies have examined this relationship for firms outside the United States,
Regina and Dishon (2017) established the extent to which gender diversity affects organizational performance of Elgeyo Marakwet County, Kenya. The study used descriptive research design. The study location was in Elgeyo Marakwet County, Kenya which is located in former Rift Valley Province in Northern part of it and the population consisted of 2,155 employees of Elgeyo Marakwet County, Kenya. The sample size was 400 employees. The sample was chosen through simple random sampling. The response rate of the study was 84.3% of the realized target. Reliability of the results was determined by the test-retest approach. Validity of the research instruments was established by using Elgeyo Marakwet County. Data was analyzed using descriptive statistics and inferential statistics. The hypothesis was tested using simple linear regression at 95% confidence level. The study revealed that age diversity has a positive effect on organizational performance of Elgeyo Marakwet County, Kenya.

Lone, Huidan, Joana, Petia and Rima (2016) examined the link between gender diversity in senior corporate positions and financial performance of 2 million companies in Europe. They documented a positive association between corporate return on assets and the share of women in senior positions and established two potential channels through which gender diversity may affect firm performance. The positive correlation is more pronounced in, first, sectors where women form a larger share of the labor force (such as the services sector) and, second, where complementarities in skills and critical thinking are in high demand (such as high-tech and knowledge-intensive sectors).

The above study was conducted using 2 million companies in Europe and similar study can be conducted using Shell Petroleum Development Company of Nigeria. The study failed to indicate the population and the sample size of the study. The study failed to indicate a good statistical tool such as regression which could have been used to establish the cause-and-effect relationship between the dependent variable and independent variable.

Regina and Dishon (2017) established the extent to which gender diversity affects organizational performance of Elgeyo Marakwet County, Kenya. The study used descriptive research design. The study location was in Elgeyo Marakwet County, Kenya which is located in former Rift Valley Province in Northern part of it and the population consisted of 2,155 employees of Elgeyo Marakwet County, Kenya. The sample size was 400 employees. The sample was chosen through simple random sampling. The response rate of the study was 84.3% of the realized target. Reliability of the results was determined by the test-retest approach. Validity of the research instruments was established by using Elgeyo Marakwet County. Data was analyzed using descriptive statistics and inferential statistics. The hypothesis was tested using simple linear regression at 95% confidence level. The study revealed that age diversity has a positive effect on organizational performance of Elgeyo Marakwet County, Kenya.
The study adopted survey research design this is because data needed for this study requires the use of structured questionnaire that will be administered to the respondents who are staff of Shell Petroleum Development Company of Nigeria. Sampling technique is a process used in statistical analysis in which a predetermined number of observations will be taken from a larger population. The population of the study consists of all members of staff of Shell Petroleum Development Company of Nigeria. According to Shell Nigeria Plc Report (2021) the company employs more than 4,500 people directly of whom 95 per cent are Nigerians and some 66 per cent of the Nigerian staff members are from the Niger Delta. The table below shows the population of the study.

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct staff</td>
<td>4,500</td>
</tr>
<tr>
<td>Population</td>
<td>4,500</td>
</tr>
</tbody>
</table>


Thus, the population of this study shall be 4,500 staff of SPDC Nigeria Ltd. The sample size was derived using the Taro Yamane formula; which is stated below.

\[ n = \frac{N}{1+N(e)^2} \]

**Social Identity Theory**

This theory was put forth by scholars by the names Henri Tajfel and John Turner at the beginning of the 1970s and the 1980s. According to the theory, social identities are reflections of the social categories, groups, as well as the networks that an individual may belong. The core function of the assemblage to its members is its utility in increasing self-esteem and ego, internalized stereotypes as well as the norms are advanced in a manner that they advantage the in-group. The theory also posits that the process of singling out the group by stereotype apportionment and the allocation of the cognitive frameworks is christened the “categorization” process. Social identity similarly termed as the self-categorization theory hypothesizes that the embracing of a collective identity by a cluster member will outplay his/her personal, individual identity, as he/she becomes an appendage of the collective whole. The theory posits that categorization of individuals in whichever way creates an instant favoritism for the “in group”. The theory fails to explain non-discriminatory conduct due to categorization. The social identity theory proposes a negative correlation between diversity and improved performance (Tajfel, 1978).

**Methodology**

The study adopted survey research design this is because data needed for this study requires the use of structured questionnaire that will be administered to the respondents who are staff of Shell Petroleum Development Company of Nigeria. Sampling technique is a process used in statistical analysis in which a predetermined number of observations will be taken from a larger population. The population of the study consists of all members of staff of Shell Petroleum Development Company of Nigeria. According to Shell Nigeria Plc Report (2021) the company employs more than 4,500 people directly of whom 95 per cent are Nigerians and some 66 per cent of the Nigerian staff members are from the Niger Delta. The table below shows the population of the study.
Where \( N \) is the population size \\
\( E \) is the margin of error (assume 5\%)

\( l = \) constant \\
\( e = 0.05 \) \\
\( n = \frac{4500}{1+4500(0.05)^2} \) \\
\( n = \frac{4500}{1+4500(0.0025)} \) \\
\( n = \frac{4500}{1+11.25} \) \\
\( n = \frac{4500}{12.25} \) \\
\( n = 367 \)

The sample size of this study is three hundred and sixty-seven (367) members of staff of Shell Petroleum Development Company of Nigeria. However, 10 percent was added to the administered questionnaire to ensure a successful return on 367. However, the total copies of questionnaire administered are 403.

The study employed the use primary data by using questionnaire to elicit responses from the respondents. The primary data serves as the basic source for the collection of data for this study because the nature of the study requires that we gauge the perception of the existing staff about their views on workforce diversity as been practiced in SPDC and how this affects their overall performance. Data is collected from staff of SPDC and the sample size of 367 respondents are randomly distributed through the use of the questionnaire. A well-structured questionnaire was used in the cause of this research work to obtain all the vital data on gender diversity and performance of SPDC. The questionnaire was designed in a five (5) point Likert type scale format to collect data from the respondents regarding workplace diversity and performance of Shell Nigeria Plc.

The statistical tools of multiple regression, mean and simple parentages. The study used models to express the relationship of the various variables used in this study as follows:

\[ Y = \alpha + \beta x \]

Where \( y \) = dependent variable, \( \alpha \) = intercept, \( \beta \) is coefficient and \( x \) is the independent variable. However, the above model expatiated in a multiple form, thus, is expressed as:

\[ PF = \alpha + \beta_1 GD + \beta_2 RF + \beta_3 INS + \mu \] \hspace{1cm} \text{equation 1} \\
Where: \\
PF = Performance (organizational effectiveness) \\
GD = Gender diversity \\
RF = regulatory framework \\
INS = insecurity \\
\( \beta \) = Coefficient \\
\( \alpha \) = Intercept \\
\( \mu \) = Error terms
The questionnaire is tested to ascertain the reliability of questionnaires. The reliability and viability of the questionnaire is not be more than the Alpha values of 0.6.

**Table 2: Reliability test**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number of items</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational effectiveness</td>
<td>5</td>
<td>0.97</td>
</tr>
<tr>
<td>Gender diversity</td>
<td>5</td>
<td>0.98</td>
</tr>
<tr>
<td>Regulatory factors</td>
<td>4</td>
<td>0.77</td>
</tr>
<tr>
<td>Insecurity</td>
<td>3</td>
<td>0.78</td>
</tr>
</tbody>
</table>

**Source:** Researcher’s computation (2021)

**Data Analysis**

**Table 3: Percentage Analysis for Gender Diversity**

<table>
<thead>
<tr>
<th>Items</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opposite gender can perform well, and I enjoy working with them</td>
<td>89(24.25)</td>
<td>78(21.25)</td>
<td>29(7.90)</td>
<td>77(20.98)</td>
<td>94(25.61)</td>
</tr>
<tr>
<td>Women are involved in organization decision making as much as men</td>
<td>99(26.97)</td>
<td>111(30.24)</td>
<td>40(10.89)</td>
<td>56(15.25)</td>
<td>61(16.62)</td>
</tr>
<tr>
<td>There is equal opportunity for career growth and advancement for women in the organization</td>
<td>109(29.70)</td>
<td>123(33.51)</td>
<td>28(7.62)</td>
<td>49(13.35)</td>
<td>58(15.80)</td>
</tr>
<tr>
<td>The organization's training and development program is developed to meet the requirement of male and female employee</td>
<td>121(32.97)</td>
<td>110(29.97)</td>
<td>50(13.62)</td>
<td>59(16.07)</td>
<td>27(7.35)</td>
</tr>
<tr>
<td>Employees have not been discriminated by employer during promotional opportunities based on gender</td>
<td>113(30.79)</td>
<td>114(31.06)</td>
<td>51(13.89)</td>
<td>65(17.71)</td>
<td>24(6.53)</td>
</tr>
</tbody>
</table>

**Source:** Survey, 2021

Table 3 indicates that 24.25% of the respondents strongly agreed that opposite gender can perform well, and they enjoy working with them. 21.25% of the respondents agreed that opposite gender can perform well, and they enjoy working with them and 7.90% of the respondents were undecided. 20.98% of the respondents strongly disagreed that opposite gender can perform well, and they enjoy working with them and 25.61% of the respondents disagreed that opposite gender can perform well, and they enjoy working with them.

Table 3 indicates that 26.97% of the respondents strongly agreed that women are involved in organization decision making as much as men. 30.24% of the respondents agreed that women are involved in organization decision making as much as men and 10.89% of the respondents were undecided. 15.25% of the respondents strongly disagreed that women are involved in organization decision making as much as men and 16.62% of the respondents disagreed that women are involved in organization decision making as much as men.

Table 3 indicates that 29.70% of the respondents strongly agreed that there is equal opportunity for career growth and advancement for women in the organization. 33.51% of
the respondents agreed that there is equal opportunity for career growth and advancement for women in the organization and 7.62% of the respondents were undecided. 13.35% of the respondents strongly disagreed that there is equal opportunity for career growth and advancement for women in the organization and 15.80% of the respondents disagreed that there is equal opportunity for career growth and advancement for women in the organization.

Table 3 indicates that 32.97% of the respondents strongly agreed that the organization's training and development program is developed to meet the requirement of male and female employee. 29.97% of the respondents agreed that the organization's training and development program is developed to meet the requirement of male and female employee and 13.62% of the respondents were undecided. 16.07% of the respondents strongly disagreed that the organization's training and development program is developed to meet the requirement of male and female employee and 7.35% of the respondents disagreed that the organization's training and development program is developed to meet the requirement of male and female employee.

Table 3 indicates that 30.79% of the respondents strongly agreed that employees have not been discriminated by employer during promotional opportunities based on gender. 31.06% of the respondents agreed that employees have not been discriminated by employer during promotional opportunities based on gender and 13.89% of the respondents were undecided. 17.71% of the respondents strongly disagreed that employees have not been discriminated by employer during promotional opportunities based on gender and 6.53% of the respondents disagreed that employees have not been discriminated by employer during promotional opportunities based on gender.

**Table 4:** Percentage Analysis for Effectiveness

<table>
<thead>
<tr>
<th>Items</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shell Nigeria Limited frequently work toward achieving their mission</td>
<td>50(13.62)</td>
<td>47(12.80)</td>
<td>70(19.07)</td>
<td>80(21.79)</td>
<td>120(32.69)</td>
</tr>
<tr>
<td>The objectives of Shell Nigeria Limited are frequently achieved</td>
<td>60(16.34)</td>
<td>25(6.81)</td>
<td>47(12.80)</td>
<td>110(29.97)</td>
<td>125(34.05)</td>
</tr>
<tr>
<td>Shell Nigeria Limited frequently breaks down tasks into achievable units</td>
<td>110(29.97)</td>
<td>80(21.79)</td>
<td>120(32.69)</td>
<td>27(7.35)</td>
<td>30(8.17)</td>
</tr>
<tr>
<td>Shell Nigeria Limited frequently use their set objectives to achieve their goals</td>
<td>109(29.70)</td>
<td>123(33.51)</td>
<td>28(7.62)</td>
<td>49(13.35)</td>
<td>58(15.80)</td>
</tr>
<tr>
<td>The vision of Shell Nigeria Limited flows through its mission, objectives and goals</td>
<td>89(24.25)</td>
<td>78(21.25)</td>
<td>29(7.90)</td>
<td>77(20.98)</td>
<td>94(25.61)</td>
</tr>
</tbody>
</table>

**Source:** Survey, 2021

Table 4 indicates that 13.62% of the respondents strongly agreed that Shell Nigeria Limited frequently work toward achieving their mission. 12.80% of the respondents agreed that Shell Nigeria Limited frequently work toward achieving their mission and 19.07% of the respondents were undecided. 21.79% of the respondents strongly disagreed that Shell Nigeria Limited frequently work toward achieving their mission and 32.69% of the respondents disagreed that Shell Nigeria Limited frequently work toward achieving their mission.
Table 4 shows that 16.34% of the respondents strongly agreed that the objectives of Shell Nigeria Limited are frequently achieved. 6.81% of the respondents agreed that the objectives of Shell Nigeria Limited are frequently achieved and 12.80% of the respondents were undecided. 29.97% of the respondents strongly disagreed that the objectives of Shell Nigeria Limited are frequently achieved and 34.05% of the respondents disagreed that the objectives of Shell Nigeria Limited are frequently achieved.

Table 4 indicates that 29.97% of the respondents strongly agreed that Shell Nigeria Limited frequently breaks down tasks into achievable units. 21.79% of the respondents agreed that Shell Nigeria Limited frequently breaks down tasks into achievable units and 32.69% of the respondents were undecided. 7.35% of the respondents strongly disagreed that Shell Nigeria Limited frequently breaks down tasks into achievable units and 8.17% of the respondents disagreed that Shell Nigeria Limited frequently breaks down tasks into achievable units.

Table 4 indicates that 29.70% of the respondents strongly agreed that Shell Nigeria Limited frequently use their set objectives to achieve their goals. 33.51% of the respondents agreed that Shell Nigeria Limited frequently use their set objectives to achieve their goals and 7.62% of the respondents were undecided. 13.35% of the respondents strongly disagreed that Shell Nigeria Limited frequently use their set objectives to achieve their goals and 15.80% of the respondents disagreed that Shell Nigeria Limited frequently use their set objectives to achieve their goals.

Table 4 indicates that 24.25% of the respondents strongly agreed that the vision of Shell Nigeria Limited flows through its mission, objectives and goals, 21.25% of the respondents agreed that the vision of Shell Nigeria Limited flows through its mission, objectives and goals, and 7.90% of the respondents were undecided. 20.98% of the respondents strongly disagreed that the vision of Shell Nigeria Limited flows through its mission, objectives and goals, and 25.61% of the respondents disagreed that the vision of Shell Nigeria Limited flows through its mission, objectives and goals.

Table 5: Percentage Analysis for Regulatory framework

<table>
<thead>
<tr>
<th>Items</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>There are multiple tax charges from the government of Nigeria to the</td>
<td>129(35.14)</td>
<td>132(35.96)</td>
<td>22(5.99)</td>
<td>60(16.34)</td>
<td>24(6.53)</td>
</tr>
<tr>
<td>organization</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>There is frequent policy inconsistency from the government of Nigeria in the oil and gas industry</td>
<td>134(36.51)</td>
<td>110(29.97)</td>
<td>34(9.26)</td>
<td>52(14.16)</td>
<td>37(10.08)</td>
</tr>
<tr>
<td>The frequent change of policy by the government of Nigeria directly impact organizational performance</td>
<td>144(39.23)</td>
<td>123(33.51)</td>
<td>33(8.99)</td>
<td>33(8.99)</td>
<td>34(9.26)</td>
</tr>
<tr>
<td>There is failed government policy regarding the operation of business in Nigeria</td>
<td>119(32.42)</td>
<td>151(41.14)</td>
<td>31(8.44)</td>
<td>44(11.98)</td>
<td>22(5.99)</td>
</tr>
</tbody>
</table>

Source: Survey, 2021
Table 5 indicates that 36.51% of the respondents strongly agreed that there is frequent policy inconsistency from the government of Nigeria in the oil and gas industry. 29.97% of the respondents agreed that there is frequent policy inconsistency from the government of Nigeria in the oil and gas industry and 9.26% of the respondents were undecided. 14.16% of the respondents strongly disagreed that there is frequent policy inconsistency from the government of Nigeria to the organization and 10.08% of the respondents disagreed that there are multiple tax charges from government of Nigeria to the organization.

Table 5 indicates that 39.23% of the respondents strongly agreed that the frequent change of policy by the government of Nigeria directly impact organizational performance. 33.51% of the respondents agreed that the frequent change of policy by the government of Nigeria in the oil and gas industry and 9.26% of the respondents were undecided. 8.99% of the respondents strongly disagreed that the frequent change of policy by the government of Nigeria in the oil and gas industry and 9.26% of the respondents disagreed that there is frequent policy inconsistency from the government of Nigeria in the oil and gas industry.

Table 5 indicates that 32.42% of the respondents strongly agreed that there is failed government policy regarding the operation of business in Nigeria. 41.14% of the respondents agreed that there is failed government policy regarding the operation of business in Nigeria and 8.44% of the respondents were undecided. 11.98% of the respondents strongly disagreed that there is failed government policy regarding the operation of business in Nigeria and 5.99% of the respondents disagreed that there is failed government policy regarding the operation of business in Nigeria.
Table 6: Percentage Analysis for Insecurity

<table>
<thead>
<tr>
<th>Items</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shell Petroleum Development Company of Nigeria often experience absence of security when carrying out their activities</td>
<td>95(25.88)</td>
<td>91(24.79)</td>
<td>34(9.26)</td>
<td>61(16.62)</td>
<td>86(23.43)</td>
</tr>
<tr>
<td>Shell Petroleum Development Company of Nigeria employees and facilities are exposed to dangers due to the volatile state of security in the business environment.</td>
<td>84(22.88)</td>
<td>88(23.97)</td>
<td>31(8.44)</td>
<td>70(19.07)</td>
<td>94(25.61)</td>
</tr>
<tr>
<td>There are so many unpredictable security risks and hazards that increase cost of operation of Shell Petroleum Development Company of Nigeria limited</td>
<td>94(25.61)</td>
<td>76(4.35)</td>
<td>59(16.07)</td>
<td>50(13.62)</td>
<td>88(23.97)</td>
</tr>
</tbody>
</table>

Source: Survey, 2021

Table 6 indicates that 25.88% of the respondents strongly agreed that Shell Petroleum Development Company of Nigeria often experience absence of security when carrying out their activities. 24.79% of the respondents agreed that Shell Petroleum Development Company of Nigeria often experience absence of security when carrying out their activities and 9.26% of the respondents were undecided. 16.62% of the respondents strongly disagreed that Shell Petroleum Development Company of Nigeria often experience absence of security when carrying out their activities and 23.43% of the respondents disagreed that Shell Petroleum Development Company of Nigeria often experience absence of security when carrying out their activities.

Table 6 indicates that 22.88% of the respondents strongly agreed that Shell Petroleum Development Company of Nigeria employees and facilities are exposed to dangers due to the volatile state of security in the business environment. 23.97% of the respondents agreed that Shell Petroleum Development Company of Nigeria employees and facilities are exposed to dangers due to the volatile state of security in the business environment and 8.44% of the respondents were undecided. 19.07% of the respondents strongly disagreed that Shell Petroleum Development Company of Nigeria employees and facilities are exposed to dangers due to the volatile state of security in the business environment and 25.61% of the respondents disagreed that Shell Petroleum Development Company of Nigeria employees and facilities are exposed to dangers due to the volatile state of security in the business environment.

Table 6 indicates that 25.61% of the respondents strongly agreed that there are so many unpredictable security risks and hazards that increase cost of operation of Shell Petroleum Development Company of Nigeria limited. 4.35% of the respondents agreed that there are so many unpredictable security risks and hazards that increase cost of operation of Shell Petroleum Development Company of Nigeria limited and 16.07% of the respondents were undecided. 13.62% of the respondents strongly disagreed that there are so many unpredictable security risks and hazards that increase cost of operation of Shell Petroleum Development Company of Nigeria limited.
Development Company of Nigeria limited and 23.97% of the respondents disagreed that there are so many unpredictable security risks and hazards that increase cost of operation of Shell Petroleum Development Company of Nigeria limited.

**Table 7: Descriptive Statistics on the Variables**

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>PF</td>
<td>367</td>
<td>1.00</td>
<td>5.00</td>
<td>4.0086</td>
<td>1.35944</td>
</tr>
<tr>
<td>GD</td>
<td>367</td>
<td>1.00</td>
<td>5.00</td>
<td>3.5143</td>
<td>1.52104</td>
</tr>
<tr>
<td>RF</td>
<td>367</td>
<td>1.00</td>
<td>5.00</td>
<td>3.9143</td>
<td>1.31492</td>
</tr>
<tr>
<td>INS</td>
<td>367</td>
<td>1.00</td>
<td>5.00</td>
<td>3.6543</td>
<td>1.40931</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>367</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Source:** SPSS version 20.00

The table 7 shows the result of the descriptive statistics which indicates the mean and standard deviation as well as minimum and maximum value of the variables. The mean value of performance in terms of effectiveness (PF) is 4.00, the mean value of gender diversity (GD) is 3.51. The mean value of regulatory framework (RF) is 3.91 and the mean value of insecurity (INS) is 3.65. The table also recorded standard deviation of the variables as PF is 1.35, GD is 1.52, RF is 1.31 and INS is 1.40.

**Table 8: Regression Result**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.993*</td>
<td>.985</td>
<td>.985</td>
<td>.16538</td>
</tr>
</tbody>
</table>

*a. Predictors: (Constant), INS, GD, RF*

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>635.593</td>
<td>6</td>
<td>105.932</td>
<td>3873.112</td>
<td>.000*</td>
</tr>
<tr>
<td>1</td>
<td>Residual</td>
<td>9.381</td>
<td>361</td>
<td>.027</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>644.974</td>
<td>367</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*b. Predictors: (Constant), INS, GD, RF*

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>(Constant)</td>
<td>-.020</td>
<td>.031</td>
<td>-.630</td>
<td>.529</td>
</tr>
<tr>
<td>1</td>
<td>GD</td>
<td>-.304</td>
<td>.011</td>
<td>-3.41</td>
</tr>
<tr>
<td></td>
<td>RF</td>
<td>-.916</td>
<td>.047</td>
<td>.886</td>
</tr>
<tr>
<td></td>
<td>INS</td>
<td>-.103</td>
<td>.020</td>
<td>.107</td>
</tr>
</tbody>
</table>

*a. Dependent Variable: PF*
The $R^2 = 0.98$ indicates that only 98% of variation on gender diversity can be used to explain performance in terms of effectiveness in Shell Nigeria Limited but 2% can be explained by other factors not noted in the regression model which is referred to as error term. The regression result shows that the model is fit for the study since the $f$-statistics is significant at 5% level of significance. This implies that all the variables used in the study are fit for the model and can be used to explain their effect on each other.

From the regression result, gender diversity coefficient (GD) is negative and significant in achieving performance (PF) in terms of effectiveness in Shell Nigeria Limited. The $PF = -0.02 - 0.30GD$ which indicates that performance in terms of effectiveness in Shell Nigeria Limited will decrease by 30% for every 1% increase in gender diversity in the organization. The p-value of 0.00 is more than the t-statistic value of -28.47 and the standard error value of 0.011 is more than the t-statistic value. This implies that there exists a negative and significant effect of gender diversity on the performance of Shell Nigeria Limited.

Regulatory framework coefficient (RF) is negative and significant in achieving performance (PF) in terms of effectiveness in Shell Nigeria Limited. The $PF = -0.02 - 0.91RF$ which indicates that performance in terms of effectiveness in Shell Nigeria Limited will decrease by 91% for every 1% change in regulatory framework in the oil and gas industry. The p-value of 0.00 is more than the t-statistic value of -19.349 and the standard error value of 0.047 is more than the t-statistic value. This implies that there is negative and significant effect of regulatory framework on the performance in terms of effectiveness in Shell Nigeria Limited.

Insecurity coefficient (INS) is negative and significant in achieving performance (PF) in terms of effectiveness in Shell Nigeria Limited. The $PF = -0.02 - 0.10INS$ which indicates that performance in terms of effectiveness in Shell Nigeria Limited will decrease by 10% for every 1% increase in insecurity in the organization. The p-value of 0.00 is more than the t-statistic value of -5.05 and the standard error value of 0.02 is more than the t-statistic value. This implies that there is negative and significant effect of insecurity on the performance in Shell Nigeria Limited.

**Discussion of Findings**

The study found that there exists a negative and significant effect of gender diversity on the performance of Shell Petroleum Development Company of Nigeria. This implies that gender diversity does not directly contribute positively to performance of SPDC but rather has a negative and significant influence on it and therefore should be de-emphasized. This finding is in line with that of Quaiser (2012) which examined the relationship between board gender diversity and its effects on firm performance and concluded that there is no significant relationship between board gender diversity on firm's performance in Pakistan. The study is in line with Social Identity Theory which states that social identities are reflections of the social categories, groups, as well as the networks that an individual may belong. The core function of the assemblage to its members is its utility in increasing self-esteem and ego, internalized stereotypes as well as the norms are advanced in a manner that they advantage the in-group. The theory also posits that the process of singling out the group by stereotype apportionment and the allocation of the cognitive frameworks is christened the “categorization” process.
Social identity similarly termed as the self-categorization theory hypothesizes that the embracing of a collective identity by a cluster member will outplay his/her personal, individual identity, as he/she becomes an appendage of the collective whole. The theory posits that categorization of individuals in whichever way creates an instant favoritism for the “in group”.

Conclusion and Recommendations
The study concluded that gender diversity has a negative and significant effect on the performance of Shell Petroleum Development Company in terms of effectiveness as relates to achieving organizational mission, vision, goals and objectives. This implies that gender diversity has negative effect on the performance in terms of effectiveness of Shell Petroleum Development Company of Nigeria and this effect is significant enough decrease performance of Shell Petroleum Development Company of Nigeria.

The study recommended that Shell Petroleum Development Company of Nigeria should de-emphasize the method and manners of employment based on gender. They should move from a recruitment process that reflects affirmative action to one that values diversity based on performance, this implies that gender should not be a primary or critical criteria for qualification for recruitment as doing so will negatively affect performance.

References


Kumudha, A. & Raji, J. (2018). A study about how workforce diversity (cultural, age, gender, ethnicity), training and development influences on employee's performance in their workplace in information technology companies, Bangalore. International Journal of Management, IT & Engineering, 8(3)