

Impact of Leadership Styles on Employee Engagement in Nigeria's Oil and Gas Industry: A Quantitative Analysis

*Owolabi, Temitope Niyi

Schlumberger, Gabon Face Nouvelle Base Marine, Port-Gentil, Gabon

*Corresponding author

DOI: <https://dx.doi.org/10.47772/IJRISS.2024.8120228>

Received: 10 December 2024; Accepted: 14 December 2024; Published: 14 January 2025

ABSTRACT

This study investigates the impact of different leadership styles—transformational, transactional, and laissez-faire—on employee engagement within the Nigerian oil and gas industry. Recognizing the industry's complexity and its critical role in Nigeria's economy, this research aims to fill the existing gap in empirical studies focusing on leadership's influence on employee engagement in this specific context. The investigation utilizes a quantitative approach, surveying 100 employees across various job positions within the industry. The findings indicate that both transformational and transactional leadership styles have significant favorable effects on employee engagement, with transformational leadership explaining 31.4% of the variance and transactional leadership explaining 28.8% of the variance in engagement levels. Conversely, laissez-faire leadership style shows a significant negative influence, accounting for 6% of the variance. These outcomes highlight the significance of proactive and involved leadership practices in fostering employee engagement. The research contributes to the broader organizational management literature by highlighting the critical role of leadership styles in enhancing workforce engagement and suggests practical recommendations for industry leaders to adopt transformational and transactional leadership behaviors to boost engagement and drive organizational success. Additionally, the study advocates for further research to explore other variables influencing employee engagement and to extend the findings to other industries and geographical contexts.

Keywords: Nigeria; oil and gas; leadership; quantitative survey and impact

INTRODUCTION

The ability of a business to motivate its workforce and win them over to the organization's mission is becoming a key factor in determining success. The function of leadership styles, which have a big impact on worker attitudes, behaviours, and job satisfaction, is essential to this idea. How managers engage and convey expectations to their staff has a significant influence on the degree of involvement that staff members display. It is now critical to comprehend the relationship between leadership philosophies and employee engagement as companies work to develop high-performing teams and promote an innovative and collaborative culture. The oil and gas industry is a crucial Portion of Nigeria's economy, contributing approximately 90% of the country's export revenue and about 60% of its total revenue (Nigerian National Petroleum Corporation, NNPC, 2021). In 2020, Nigeria produced about 1.78 million barrels of oil per day, making it the biggest oil producer in Africa and the sixth-largest in the world (OPEC, 2020). The Oil and Gas industry of Nigeria is elaborate, dynamic, and comprised of a diverse workforce. On the other hand, from another point of view, this strategic sector is full of hurdles: the oil price is unstable, the uncertainty of regulation is high, and geopolitical risk is significant. In this context, strong leadership is essential for overcoming obstacles, encouraging innovation, and promoting organizational development. The Nigerian oil and gas industry is indicative of such a complex and multivariate sector. So bedeviled with many opportunities and challenges that Ajonbadi, (2015) noted as being part of the complex nature emanating from several factors such as technological development, the regulatory framework, and geopolitics. These are further compounded by the dynamism of the industry described by price uncertainty, changes in evolving market demands, and geopolitical uncertainties. Based on the empirical data, it appears that the foremost of these is the vulnerability of the Nigerian oil and gas sector

which greatly affects the economic stability and potential growth of the industry (Andeobu, Hettihewa, and Wright, 2015). Apart from this, other challenges include regulatory uncertainties, policy changes, and legal framework thus leaving the leading stakeholders of the power sector industry in a situation of ambiguity and unpredictability in the future operational and investment climates. The challenge is further exacerbated by geopolitical risks, whereby operational activity and investment decisions are defined by security threats, social unrest, and political instability (Andeobu, Hettihewa, and Wright, 2015). In this milieu, effective leadership becomes one of the prime determinants of success and resilience within the Nigerian oil and gas industry. According to Northouse, (2016), the theories of leadership at various levels reflect the importance of a proactive adaptive nature in the complex and uncertain environments faced by the respective leaders. Indeed, a positive mediating effect has been found to exist for transformational leadership associated with dynamic industries that eventually enhance organizational performance in general. It is only through a shared vision, the stimulation of innovation, and the promotion of organizational agility that good leadership can help an organization or subsector achieve sustainable growth in the Nigerian oil and gas industry.

The growing realization of organizations towards the fact that positive contributions and productivity are made by engaged workers to the overall growth of the organization has made leadership a significant influencer of employee engagement. The significance and influence of leadership style range from autocratic to participative, from employee attitude to motivation related to job satisfaction. Therefore, based on this rationale, the significance of this relationship between leadership styles and employee engagement can be conceived and understood by any organization that values human resources and gains sustainable competitive advantage in dynamic market environments. It is an organizational need, as well as a strategic necessity, for effective success in such a volatile industry. Also, the Nigerian petroleum industry is multicultural and multi-skilled in terms of professionals, technical experts, and unskilled laborers. This, therefore, calls for proper management of the human resource area and leadership that would harness the full capability of the workforce. The style of leadership applied influences engagement, productivity, or simply organizational performance. More so, transformational leadership is an inspiring type of leadership that is focused on motivation and innovation. Therefore, it can provoke higher motivation levels from employees and hence more commitment on their part. In contrast, transactional leadership comprises routine supervision and performance-based rewards; it gives much clarity and structure to make sure the efficiency of operations is on track (Bass & Riggio, 2006).

The Nigerian oil and gas industry, a cornerstone of the national economy, is characterized by its complexity and susceptibility to various challenges, including regulatory uncertainty, geopolitical risks, and fluctuating oil prices. Amidst these challenges, studies by authors such as Hammady, Burden, Evans, and Davidson, (2014) and Saeed et al., (2013), have further shown how factors such as effective leadership are critical for keeping up high staff engagement level, which is essential for achievement of organizational goals and sustainability. Despite the recognized importance of leadership in influencing employee engagement, there is a significant gap in empirical research examining how different leadership styles—transactional, transformational, and laissez-faire—affect employee engagement specifically within the Nigerian Oil and Gas sector. Existing studies tend to focus on other industries and geographical contexts, failing to account for the unique cultural, regulatory, and operational dynamics of the Nigerian oil and gas industry (Olabode et al., 2018). Consequently, there is a pressing need to look into how these leadership styles impact employee engagement in this specific sector to inform better leadership practices and enhance organizational performance. This research seeks to fill this gap by providing a nuanced knowledge of the connection between employee engagement and leadership styles in Nigeria's Oil and Gas sector.

Even though some research has been done regarding the impact of various leadership styles on employee involvement in other industries, there is a significant vacuum in terms of research focusing on the Nigerian oil and gas sector (Olabode, Bakare, and Iheonunekwu 2018). Furthermore, despite the critical importance of leadership in the Nigerian oil and gas sector, there has been a paucity of studies addressing the current workforce dynamics, particularly the influx of newer generations, such as Millennials and Generation Z, and their responsiveness to different leadership styles (Umuteme 2020; Min 2023). These younger employees often exhibit different expectations and values compared to their predecessors, favoring inclusive, flexible, and empowering leadership approaches. However, the existing literature has predominantly focused on older leadership models and their effects on traditional workforce structures, leaving a significant gap in

understanding how contemporary leadership styles—transactional, transformational, and laissez-faire—resonate with the evolving demographics of the current workforce. This oversight necessitates a comprehensive investigation into how these various leadership styles within the unique context of the Nigerian Oil and Gas industry, better align leadership strategies with the expectations and engagement needs of the modern workforce.

METHODS

Explanation and Justification of the Methods

It also relies on a quantitative research method to explore the effect of leadership styles on employee engagement within the Nigerian Oil and Gas industry. Justification of Selecting Quantitative Approach. The following are various reasons that can lead to the justification of using a quantitative approach. The role of quantitative research is to facilitate the collection of numerical information that provides readers with objective and quantifiable results through a statistical analysis of the data (Bell et al., 2022). This helps in studying complex phenomena, such as leadership and employee engagement, because it permits the sharp measurement of variables and generally finds some type of pattern or correlation.

Further, the quantitative methods apply a deductive research approach in this study. Deductive research bears the notion that it includes the testing of hypotheses developed from theories in action, and the quantitative methods are most appropriate for just that purpose (Saunders et al., 2023). In the context of theoretically based propositions, this entailed the quantification of certain variables, such as leadership styles and levels of employee engagement, for empirical tests and in addition to the current body of knowledge in this regard.

Moreover, quantitative research allows data to be analyzed systematically for statically correlated relationships between variables to be established by the researcher. The application of statistical techniques, such as regression analysis or correlation analysis, actually validates the examination of not only the strength but also the direction of the relationship between distinct leadership styles and their associated outcomes related to employee engagement. Rigor in analytics in this regard affects the strengthening of valid and reliable findings leading to robust making of inferences as well as recommendations.

Detailed Explanation of the Construction of the Method

The Multifactor Leadership Questionnaire and the Utrecht Work Engagement Scale, two standardized measures of employee engagement and leadership styles, will be used to develop the survey questionnaire. Interview questions are semi-structured, aiding interviewers to pursue some particular issues in a detailed manner. To a larger extent, the questions should enable the researcher to get into the respondent's experiences based on observation or practice of ways of engaging people through leadership activities.

Detailed Plan for the Delivery of the Research Method

Surveys will be pushed to a sample of workers from the different companies in the Nigerian oil and gas sector electronically. The survey will be conducted over four weeks, so they will have adequate time to express themselves. Such interviews will include purposively sampled leaders and employees who are viably dispersed geographically by video conference. The interviews will be conducted over six weeks and each session will take about one hour.

Piloting

It will allow the researcher to identify probable flaws or ambiguities in the research instruments and refine the research procedures. Piloting assures the feasibility and effectiveness of the methods employed in collecting data. Generally, piloting has at least three roles: detecting likely flaws or ambiguities within research instruments, refining procedures for conducting the research, and ensuring that methods used in collecting data are feasible and effective (Creswell & Creswell, 2018). In this study, piloting will be conducted to establish

issues regarding the validity and reliability of the surveying instruments and interview protocols developed. However, the process of piloting will involve the selection of a small sample of representatives of the target population to provide feedback regarding the clarity, comprehensibility, and relevance of the research instrument. It will form the basis for developing necessary improvements and revisions to enhance the instruments in terms of their reliability and validity.

Population and Sampling

Population:

The justification for the choice of the population as employees in the Nigerian Oil and Gas industry is that this industry forms one of the backbones of the economy in Nigeria, and the topic of research is centered on the industry. The Oil and Gas sector is one of those prime movers of the economy; it is a division having a variety of categories of workers at different levels of the hierarchy and departments. Focusing this research on this population churns out the fullest understanding of how leadership styles impact the engagement towards employees in a contextual way relevant to Nigeria's economic landscape.

Sampling and sampling size

Purposive sampling is chosen as the sampling technique because of the ability to select participants with certain attributes or characteristics relevant to the objectives at hand. Since the oil and gas industry is complex by nature and employee engagement is a nuanced concept itself, purposive sampling can enable a researcher to focus on those respondents who share valuable insights/experiences related to the research topic. This affords a sample to be made from employees with a blended category of diversified backgrounds, roles, and experience levels, ensuring depth and breadth in the collected data. As such, the researcher collected data from 100 respondents of a reputable Oil and Gas company in Nigeria using the sample size calculator as the measure for the right proportion of respondents needed from 150 employees of the company.

Data Collection

Surveys

Since the questionnaire has a structured form, it is used as the major instrument for the data collection purposes of the study since it effectively seeks to gather quantitative data concerning employee engagement. Validity and reliability of the survey instrument are made possible through the adoption of already developed instruments of measurement of employee engagement dimensions such as job satisfaction and organizational commitment (Saks, 2006). Questions on demographics were also included to enable the researcher to better understand the context of the survey responses, as well as to identify potential demographic trends or patterns that might be associated with differences in employee engagement levels.

Survey Administration

This is in line with the accessibility and convenience with which the element is made available to the participant. Moreover, electronic distribution with the online survey software is flexible and convenient for the employees if they are spread across different locations in the organization. On the other hand, in-person delivery allows for personal interaction with participants and potentially increases response rates by providing opportunities for clarifications or additional explanations on the survey purpose and assurances of complete confidentiality. Direct delivery may allow personal interaction with the participants, possibly increasing response rates since the interviewers can explain something to the respondent and assure him.

Data Analysis:

Descriptive Statistics

Descriptive statistics summarize and describe sample characteristics and levels of employee engagement.

Calculations for means, frequencies, standard deviation, and so on provide general descriptions of the dataset while making it easier to get an initial impression of how the responses were generally distributed across the various survey items and demographic variables (Field, 2013).

Inferential Statistics

This is followed by a Correlation and regression analysis of inferential statistics regarding the associations between employee engagement and the many facets of leadership style. Whereas correlation can detect the strength and direction of relationships between many variables, including leadership styles for this study, regression can predict the level of engagement in an employee while controlling as many possible confounders as possible.

Triangulation

Convergence from these triangulations of findings of quantitative analyses supports the conclusion of the study and strengthens the results since they affirm those results reached through the different methods and data sources. It is only through a confluence of insights drawn from quantitative and qualitative analyses that a better comprehension of the complex dynamics characterizing a relationship between leadership styles and employee engagement can be achieved among employees within the Nigerian oil and gas industry (Creswell & Creswell, 2018). In this sense, triangulation serves to maintain methodological rigor with a safeguard for potential biases or limits built into any one method or data source. Information convergence across sources gives more strength to the conclusions of the study and enhances confidence in the validity and reliability of the results.

Ethical Considerations

In research, ethics is a reassurance to make sure that the rights and dignity of subjects are respected and that integrity in the study is maintained throughout the whole process. Ethical considerations in this research include informed consent of subjects to assure that responses will be treated with the highest privacy and confidentiality and minimize harm or discomfort to the subject. The study's aims will be communicated to participants, who will have the liberty to discontinue participation at any point without facing any repercussions. The process will be carried out in such a manner that the identity of participants remains anonymous and individual responses are not identifiable. Moreover, the other applicable ethical standards that the research will adhere to concern the rules outlined by the institutional review boards or other ethical assessment bodies, which are indispensable for ensuring ethics in the research procedures and imparting ethics in carried-out research (Bryman & Bell, 2015).

Limitations

While it is a fairly well-planned piece of research with the defined methods in place, a few limitations in generalizing and validating the findings were there. The data were self-reported and therefore prone to the effects of social desirability bias and recall bias. Thus, through the cross-sectional design of the study, it's impossible to indicate the cause-and-effect relationship between leadership and employee engagement. Additionally, the issue of generalizability arises; the results may only be generalized to other industries and contexts that use the Nigerian oil and gas industry. Lastly, such purposive sampling may also lead to selection bias in a way that the findings do not represent fully the greater population. Rigorously, overcoming the limitations listed above, the research includes a transparent report, uses methodological triangulation, and cautiously interprets the results according to Weyant, (2022).

DATA ANALYSIS

This study aims to translate raw data into meaningful insights that elucidate the relationship between different leadership styles—transactional, transformational, and laissez-faire—and employee engagement within the Nigerian oil and gas industry.

Analyses of Distributed Questionnaire

Table 1: Analyses of Distributed Questionnaire

Characteristics	Frequency	Percentage
Total retrieved	100	76.9%
Invalid copied	8	6.2%
Unreturned copies	22	16.9%
Total questionnaire administered	130	100%

Analysis of Demographic Data

Table 2: Gender of respondent

Gender	Frequency	Percentage
Male	76	76
Female	24	24
Total	122	100

Table 3: Age of respondent

Age	Frequency	Percentage
20-29	24	24
30-39	36	36
40-49	34	34
50-59	4	4
60 and above	2	2
Total	100	100

Table 1 presents the analysis of the distributed questionnaires for this research study. Out of the total 130 questionnaires that were administered, 100 were retrieved, 8 were invalid and 22 were not filled. **Table 2** presents the demographic distribution of respondents based on gender in the study sample. The table indicates that the majority of respondents were male, constituting 76% of the total sample, while females accounted for 24%. This gender distribution reflects a predominant male presence in the study, potentially influencing the interpretation of findings based on gender perspectives. The table's clarity in presenting frequencies and percentages facilitates understanding of the demographic composition of the sample, which is crucial for analyzing how gender dynamics might intersect with perceptions of leadership styles and employee engagement in the Nigerian oil and gas industry. **Table 3** presents the distribution of respondents based on their age groups. The majority of respondents fall within the age range of 30-39 years, comprising 36% of the sample, followed closely by those aged 20-29 years at 24%. Participants aged 40-49 years account for 34%, while those aged 50-59 years and 60 years and above represent 4% and 2%, respectively. This distribution indicates a predominantly middle-aged workforce in the sample, reflecting a balanced representation across

various age groups within the study population.

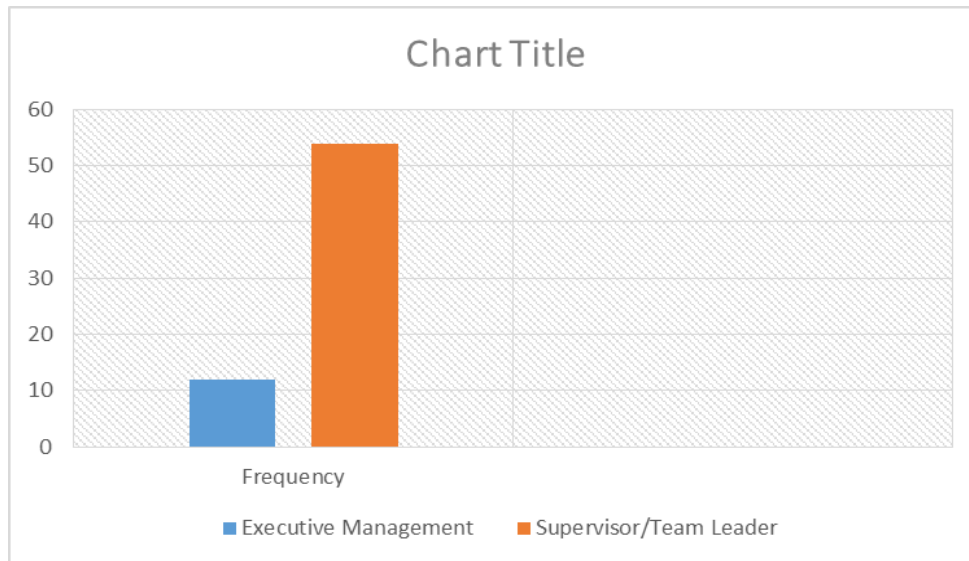


Figure 1:

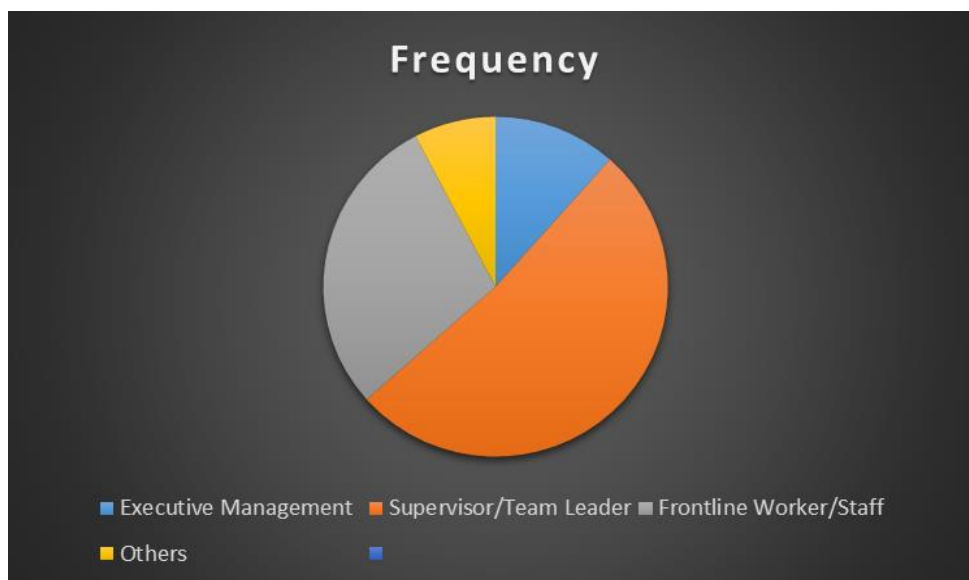


Figure 2:

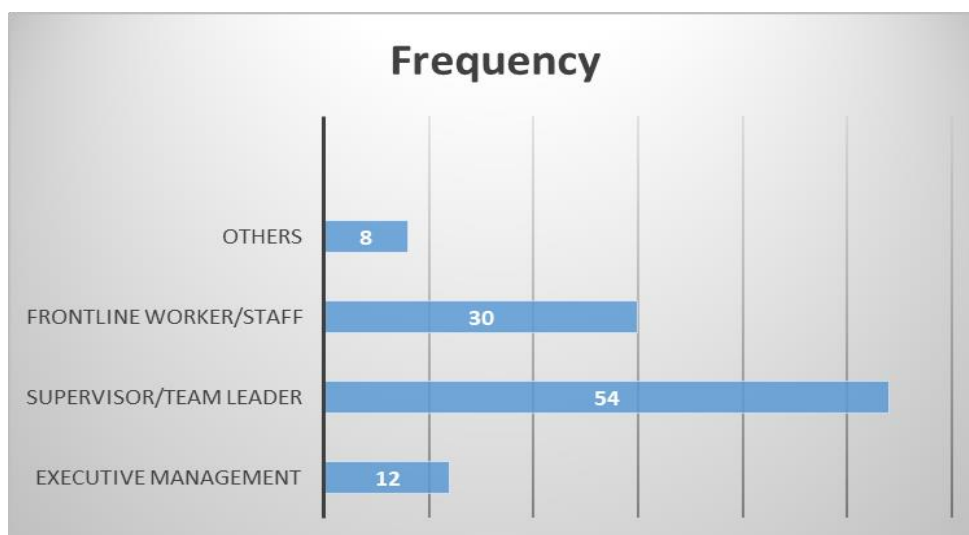


Figure 3:

Table 4: Educational background of respondent

Education	Frequency	Percentage
High school	8	8
Bachelor	31	62
Masters	26	26
PhD	0	0
Others	8	4
Total	100	100

Table 5: Job Position of Respondent

Job Position	Frequency	Percentage
Executive Management	12	12
Supervisor/Team Leader	54	54
Frontline Worker/Staff	30	30
Others	8	8
Total	100	100

Table 1 presents the analysis of the distributed questionnaires for this research study. Out of the total 130 questionnaires that were administered, 100 were retrieved, 8 were invalid and 22 were not filled. **Table 2** presents the demographic distribution of respondents based on gender in the study sample. The table indicates that the majority of respondents were male, constituting 76% of the total sample, while females accounted for 24%. This gender distribution reflects a predominantly male presence in the study, potentially influencing the interpretation of findings based on gender perspectives. The table's clarity in presenting frequencies and percentages facilitates an understanding of the demographic composition of the sample, which is crucial for analyzing how gender dynamics might intersect with perceptions of leadership styles and employee engagement in the Nigerian oil and gas industry. **Table 3** presents the distribution of respondents based on their age groups. The majority of respondents fall within the age range of 30-39 years, comprising 36% of the sample, followed closely by those aged 20-29 years at 24%. Participants aged 40-49 years account for 34%, while those aged 50-59 years and 60 years and above represent 4% and 2%, respectively. This distribution indicates a predominantly middle-aged workforce in the sample, reflecting a balanced representation across various age groups within the study population. **Table 4** provides a breakdown of the educational backgrounds of respondents participating in the study. The majority of respondents hold a Bachelor's degree, comprising 62% of the sample, followed by those with a Master's degree at 26%. Participants with a high school education constitute 8% of the sample, while the remaining 4% fall into the category labeled as "Others." Notably, no respondents reported having a PhD qualification. This distribution indicates a predominantly educated sample, with a strong representation of individuals with Bachelor's and Master's degrees, which is reflective of the professional and academic qualifications expected within the context of the study. **Table 5** provides a breakdown of the job positions held by respondents in the study, showing that supervisors or team leaders constitute the largest group at 54%, followed by frontline workers or staff at 30%, and executive management at 12%. Additionally, a small proportion categorized under "Others" accounts for 8% of the respondents. This distribution indicates a diverse representation across hierarchical levels within the organization, ensuring varied perspectives and insights into the impact of leadership styles on employee engagement in the Nigerian oil and gas industry.

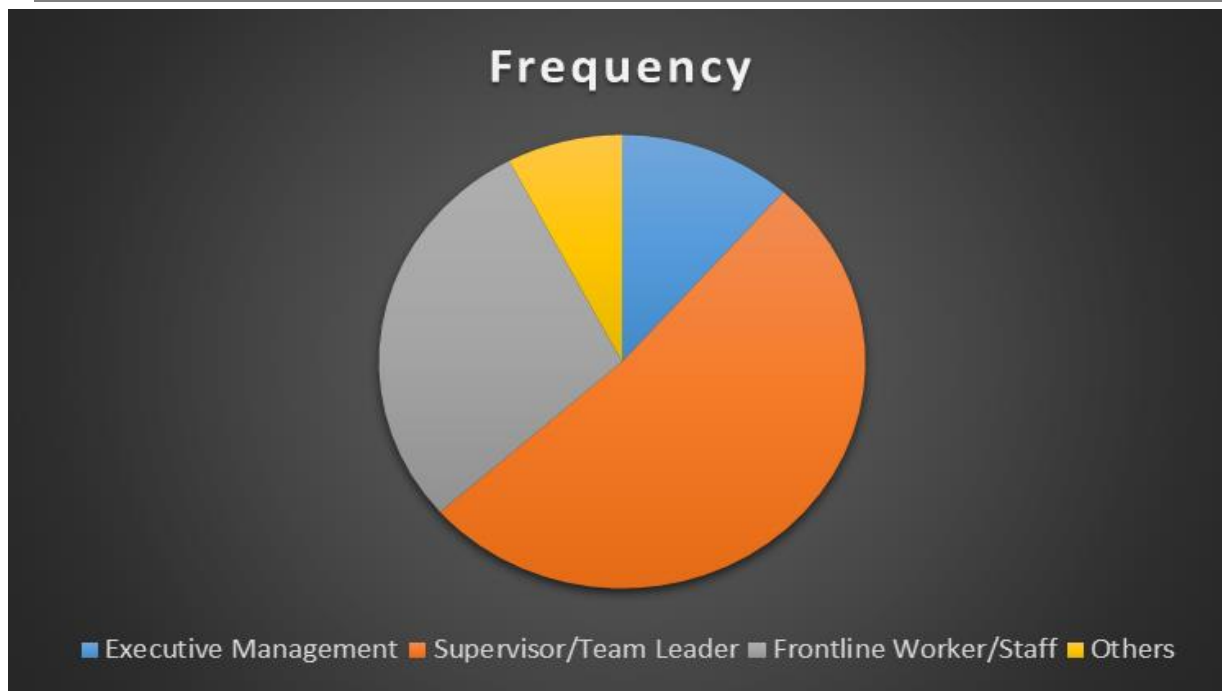


Figure 4:

Test of hypothesis

Hypothesis 1: There is a significant positive effect of transactional leadership style on employee engagement in the Nigerian oil and gas industry.

Table 6 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.560 ^a	.314	.307	.45271
a. Predictors: (Constant), Transformational				

The regression model shows that the predictors (independent variables) explain 31.4% of the variance in employee engagement (R Square = 0.314). This indicates a moderate level of explanation of the variability in employee engagement by the transactional leadership style.

Table 7 Anova

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.188	1	9.188	44.831	.000 ^b
	Residual	20.085	98	.205		
	Total	29.273	99			
a. Dependent Variable: Engagement						
b. Predictors: (Constant), Transformational						

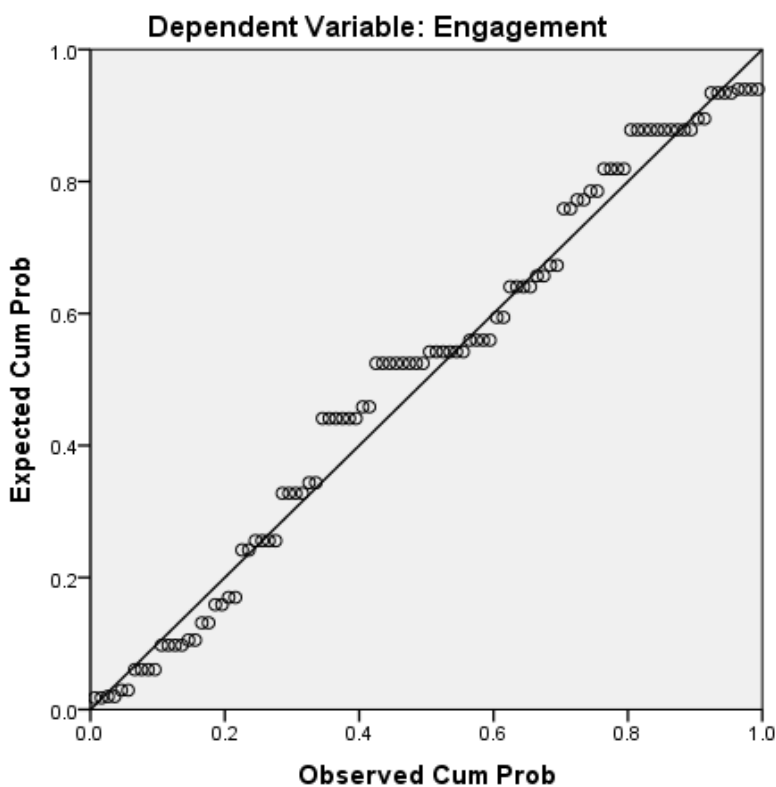
The ANOVA table indicates that the regression model is statistically significant (F(1, 98) = 44.831, p < .001). This suggests that the transformational leadership style significantly predicts employee engagement in the Nigerian Oil and Gas industry.

Table 8: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.042	.311		6.559	.000
	Transformational	.540	.081	.560	6.696	.000

a. Dependent Variable: Engagement

Normal P-P Plot of Regression Standardized Residual



The intercept is 2.042, which represents the estimated mean level of employee engagement when the transactional leadership style is zero. The coefficient for transformational leadership style is 0.540. This indicates that for every one-unit increase in transformational leadership style (assuming it is measured on a standard scale), employee engagement is predicted to increase by 0.540 units.

The standardized coefficient (Beta) for transformational leadership is 0.560, indicating a strong positive relationship with employee engagement.

The equation for the regression model is expressed as:

$$Y = \beta_0 + \beta X + \epsilon$$

$$Y = 2.042 + 0.540X$$

Where;

Y = Employee Engagement

X = Transformational Leadership

β_0 = Constant

β = Regression Coefficient

ϵ = Error Term

Decision

The findings accept Hypothesis 1, suggesting a significant positive effect of transformational leadership style on employee engagement in the Nigerian Oil and Gas industry. Specifically, higher levels of transformational leadership are associated with higher levels of employee engagement. The statistical significance ($p < .001$) further strengthens the confidence in this relationship. This analysis underscores the importance of transformational leadership in influencing and enhancing employee engagement within this specific industry context.

Hypothesis 2: There is a significant positive influence of transactional leadership style on employee engagement in the Nigerian Oil and Gas industry.

Table 9 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.536 ^a	.288	.280	.46126
a. Predictors: (Constant), Transactional				

The analysis of Hypothesis 2, which proposes a significant positive influence of transactional leadership style on employee engagement in the Nigerian Oil and Gas industry, reveals compelling findings. The regression model indicates that the transactional leadership style significantly predicts employee engagement, as evidenced by the standardized coefficient (Beta) of 0.536 ($p < .001$). This suggests that for every one-unit increase in transactional leadership behaviour, there is a corresponding increase in employee engagement by 0.536 units. The model summary shows an R Square of 0.288, indicating that 28.8% of the variance in employee engagement can be explained by the transactional leadership style.

Table 10 ANOVA^a

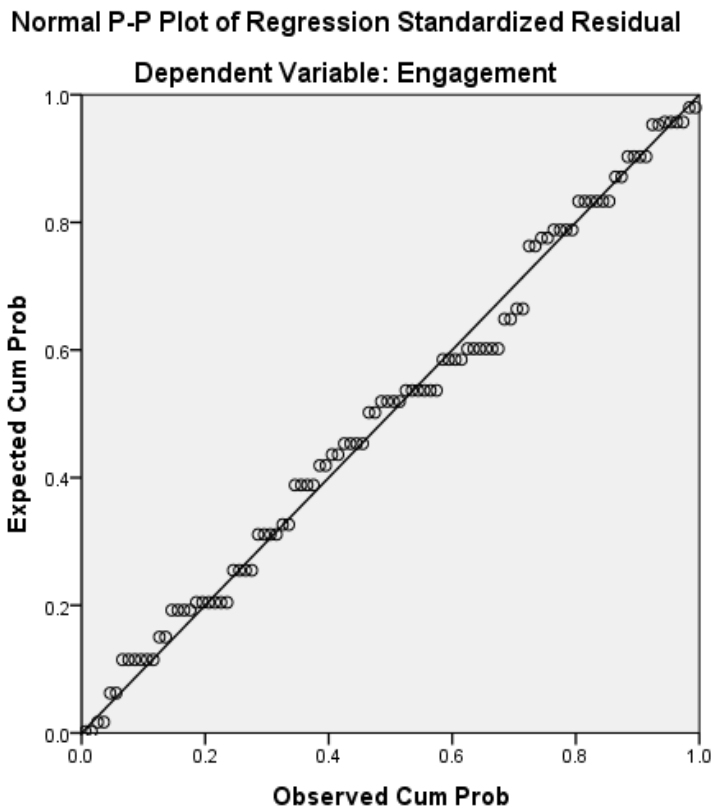
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.422	1	8.422	39.587	.000 ^b
	Residual	20.850	98	.213		
	Total	29.273	99			
a. Dependent Variable: Engagement						
b. Predictors: (Constant), Transactional						

The ANOVA results are highly significant ($F = 39.587, p < .001$), suggesting that the regression model with transactional leadership as a predictor fits the data significantly better than the intercept-only model. This reinforces the hypothesis that transactional leadership indeed has a positive impact on employee engagement within the Nigerian oil and gas industry.

Table 11 Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.627	.396		4.104	.000
	Transactional	.693	.110	.536	6.292	.000

a. Dependent Variable: Engagement



The coefficients table further supports this, with the transactional leadership coefficient (B = 0.693, p < .001) indicating a strong positive relationship with employee engagement. The intercept (Constant) also shows significance (B = 1.627, p < .001), suggesting a baseline level of engagement when transactional leadership behaviours are absent.

The equation for the regression model is expressed as:

$$Y = \beta_0 + \beta X + \varepsilon$$

$$Y = 1.627 + 0.693X$$

Where;

Y = Employee Engagement

X = Transactional Leadership

β_0 = Constant

β = Regression Coefficient

ϵ = Error Term

Decision

These results provide robust empirical acceptance of Hypothesis 2, indicating that transactional leadership style plays a pivotal role in enhancing employee engagement in the context of the Nigerian Oil and Gas industry. These findings underscore the importance of transactional leadership practices in fostering a more engaged workforce within this sector, thereby contributing to organizational effectiveness and performance.

Hypothesis 3: There is a significant negative influence of laissez-faire leadership style on employee engagement in the Nigerian Oil and Gas industry.

Table 12 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.245 ^a	.060	.050	.52989
a. Predictors: (Constant), Laissez-faire				

The analysis presented in the data examines the hypothesis that there is a significant negative influence of laissez-faire leadership style on employee engagement within the Nigerian Oil and Gas industry. The regression model summary indicates that the model accounts for a small but statistically significant proportion of the variance in employee engagement (R Square = 0.060, Adjusted R Square = 0.050, F (1, 98) = 6.253, p = 0.014). This suggests that the inclusion of laissez-faire leadership as a predictor contributes significantly to explaining the variability in employee engagement scores.

Table 13 ANOVA^a

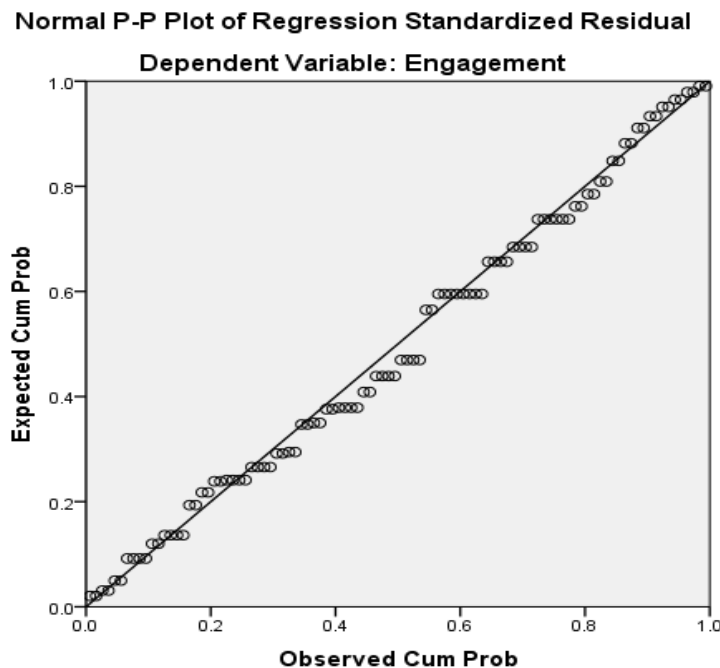
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.756	1	1.756	6.253	.014 ^b
	Residual	27.517	98	.281		
	Total	29.273	99			
a. Dependent Variable: Engagement						
b. Predictors: (Constant), Laissez-faire						

The ANOVA results further support the regression findings, indicating that the regression model is statistically significant (F(1, 98) = 6.253, p = 0.014). This suggests that the variance explained by the model is unlikely to be due to chance alone.

Table 14 Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.451	.148		30.070	.000

	Laissez-faire	-.164	.066	-.245	-2.501	.014
a. Dependent Variable: Engagement						



Specifically, the regression coefficient for laissez-faire leadership (Beta = -0.245, p = 0.014) indicates a negative relationship with employee engagement. This means that higher levels of laissez-faire leadership are associated with lower levels of employee engagement among respondents in the Nigerian Oil and Gas industry.

The equation for the regression model is expressed as:

$$Y = \beta_0 + \beta X + \varepsilon$$

$$Y = 4.451 + -0.164X$$

Where;

Y = Employee Engagement

X = Laissez-faire Leadership

β_0 = Constant

β = Regression Coefficient

ε = Error Term

Decision

While the model explains a modest amount of variance in employee engagement, the statistically significant negative coefficient for laissez-faire leadership supports the hypothesis that this leadership style has a detrimental effect on employee engagement within this specific sector. These findings underscore the importance of active and engaged leadership practices in fostering higher levels of employee engagement, particularly in industries characterized by complexity and high-performance demands like the Nigerian Oil and Gas sector.

DISCUSSION

This study systematically examines how transformational, transactional, and laissez-faire leadership styles influence employee engagement, providing a nuanced understanding of these dynamics in a complex and critical sector of the Nigerian economy. The findings underscore the importance of leadership in shaping employee engagement levels, with each leadership style exhibiting distinct impacts. Analyzing these relationships reveals how the study contributes valuable insights into effective leadership practices that can enhance employee motivation, satisfaction, and overall organizational performance.

Transformational Leadership and Employee Engagement

The results of the analysis provide strong evidence supporting **Hypothesis 1**: There is a significant positive effect of transformational leadership style on employee engagement in the Nigerian Oil and Gas industry. The model summary reveals that transformational leadership explains a substantial portion of the variance in employee engagement, with an R Square of 0.314. This means that approximately 31.4% of the variability in employee engagement can be attributed to transformational leadership, which indicates a moderate level of explanation. The ANOVA results further reinforce the significance of this finding. The regression model is statistically significant ($F(1, 98) = 44.831, p < .001$), indicating that the transformational leadership style significantly predicts employee engagement. This high level of statistical significance suggests that the observed relationship is unlikely to be due to chance and underscores the robustness of the model. Examining the coefficients, we find that the intercept (β_0) is 2.042, which represents the baseline level of employee engagement when transformational leadership is absent. The regression coefficient for transformational leadership (β) is 0.540, indicating that each unit increase in transformational leadership corresponds to a 0.540-unit increase in employee engagement. The standardized coefficient (Beta) of 0.560 signifies a robust positive correlation exists between employee engagement and transformational leadership. The regression equation derived from the model is:

$$[Y = 2.042 + 0.540X]$$

where (Y) represents employee engagement and (X) represents the transformational leadership score. This equation succinctly captures the predictive power of transformational leadership on employee engagement. These findings align with the existing literature of scholars such as Avolio, Bass, and Jung (1999) and Andretta (2011), who also emphasizes the influence of transformational leadership in fostering a motivated and engaged workforce. Transformational leaders, through behaviors such as Idealized influence, intellectual stimulation, inspirational motivation, and personalized attention all combine to produce a work atmosphere where staff members feel appreciated, inspired, and dedicated to their jobs (Bass & Avolio, 1994). This leadership style is particularly effective in dynamic and complex environments like the Nigerian Oil and Gas industry, where fostering a high level of employee engagement is critical for organizational success and sustainability (Walumbwa et al., 2008). The significant positive relationship between transformational leadership and employee engagement highlights the fundamental function leadership plays in enhancing workforce performance in the Nigerian Oil and Gas sector. It recommends that businesses in this sector make investments in leadership development initiatives that foster transformative leadership qualities to boost employee engagement, which in turn can lead to higher productivity, better job satisfaction, and lower turnover rates. As such, the acceptance of Hypothesis 1 underscores the need for transformational leadership in driving employee engagement within the Nigerian oil and gas industry. This research offers insightful information to policymakers and organizational executives who want to improve worker engagement and, consequently, organizational performance in this pivotal sector.

Transactional Leadership and Employee Engagement

The analysis of Hypothesis 2 reveals significant and compelling findings that support the hypothesis. The regression model indicates that the transactional leadership style significantly predicts employee engagement, evidenced by the standardized coefficient (Beta) of 0.536 ($p < .001$). This suggests that for every one-unit increase in transactional leadership behavior, there is a corresponding increase in employee engagement by 0.536 units. The model summary shows an R Square of 0.288, indicating that 28.8% of the variance in

employee engagement can be explained by the transactional leadership style. This is a substantial proportion, highlighting the critical role of transactional leadership in enhancing employee engagement within the Nigerian Oil and Gas industry. The ANOVA results further substantiate these findings, showing a highly significant F-value ($F = 39.587, p < .001$). This indicates that the regression model with transactional leadership as a predictor fits the data significantly better than an intercept-only model, reinforcing the hypothesis that transactional leadership has a positive impact on employee engagement. The significant F-value demonstrates that the model's explanatory power is robust and not due to random chance. From the coefficients table, the transactional leadership coefficient ($B = 0.693, p < .001$) further supports the hypothesis, indicating a strong positive relationship with employee engagement. The significant intercept ($B = 1.627, p < .001$) suggests a baseline level of engagement even when transactional leadership behaviors are absent. This baseline engagement could be attributed to other factors within the organizational environment but is notably elevated by the presence of transactional leadership practices. The equation for the regression model is expressed as:

$$[Y = 1.627 + 0.693X]$$

Where:

- (Y) = Employee Engagement

- (X) = Transactional Leadership

- (β_0) = Constant

- (β) = Regression Coefficient

These results provide robust empirical support for **Hypothesis 2**, indicating that the transactional leadership style plays a pivotal role in enhancing employee engagement in the context of the Nigerian Oil and Gas industry. This discovery, which supports that of Podsakoff et al. (1990) underscores the importance of transactional leadership practices, such as contingent reward and active management by exception, in fostering a more engaged workforce. This explains why Devi and Narayanamma (2016) asserted that engaged employees are likely to be more productive, innovative, and committed, contributing to organizational effectiveness and performance. The significant positive influence of transactional leadership on employee engagement suggests that leaders who clearly define roles, provide rewards for meeting objectives, and actively monitor and correct deviations from standards can effectively boost employee engagement. This insight is particularly valuable for the Nigerian Oil and Gas industry, where leadership styles that enhance engagement can lead to improved job satisfaction, higher productivity, and better overall organizational performance. These findings contribute to the broader organizational management literature by highlighting the specific impacts of transactional leadership in a critical economic sector.

Laissez-faire Leadership and Employee Engagement

The analysis conducted to test this hypothesis has yielded significant insights into the dynamics of leadership and employee engagement within the Nigerian Oil and Gas industry. The regression model summary reveals that laissez-faire leadership accounts for a small but statistically significant portion of the variance in employee engagement ($R^2 = 0.060, \text{Adjusted } R^2 = 0.050$). This indicates that approximately 6% of the variation in employee engagement can be attributed to the laissez-faire leadership style, which is statistically significant ($F(1, 98) = 6.253, p = 0.014$). The ANOVA results further confirm the significance of the regression model, with a p-value of 0.014, which is well below the conventional threshold of 0.05. This reinforces the conclusion that the observed relationship between laissez-faire leadership and employee engagement is unlikely to be due to random chance. Also, the unstandardized regression coefficient for laissez-faire leadership is -0.164 with a standard error of 0.066, leading to a t-value of -2.501 and a p-value of 0.014. The negative coefficient indicates that as the degree of laissez-faire leadership increases, the level of employee engagement decreases. The standardized coefficient (Beta) of -0.245 signifies a moderate negative relationship between these variables. The regression equation derived from the analysis is:

$$Y = 4.451 - 0.164X$$

where (Y) represents employee engagement and (X) represents laissez-faire leadership. This equation implies that for every unit increase in laissez-faire leadership, employee engagement decreases by 0.164 units. These findings are critical for the Nigerian Oil and Gas industry, which is characterized by its complexity and the necessity for effective leadership to navigate its multifaceted challenges. The negative impact of laissez-faire leadership on employee engagement underscores the need for more proactive and involved leadership styles. The Negative correlations between laissez-faire leadership styles and employee engagement also align with Abasilim et al. 2018, Dariush et al. (2016), and Yasir et al. (2016) findings. Moreover, in an industry where employee motivation and engagement are crucial for operational efficiency and innovation, the study gives a glimpse of the possibility of detrimental effects of a hands-off leadership approach which can hinder organizational performance and sustainability. The modest amount of variance explained by the model suggests that while laissez-faire leadership is an important factor, there are other significant variables affecting employee engagement that need to be explored. Nevertheless, the statistically significant negative coefficient for laissez-faire leadership supports the hypothesis and highlights the adverse consequences of this leadership style on employee engagement within this context. As such, the findings advocate for a shift towards more active and engaged leadership practices in the Nigerian Oil and Gas sector. Such a shift could enhance employee satisfaction, retention, and overall organizational performance, contributing to the sector's stability and growth. These insights provide a valuable foundation for developing leadership training and development programs aimed at fostering a more engaged and motivated workforce.

CONCLUSION

This study has provided an in-depth analysis of the research findings about the effects of various leadership philosophies on worker engagement in Nigeria's Oil and Gas sector. The results of the analysis demonstrate that transformative leadership significantly raises employee engagement and accounts for a large amount of the variation in engagement levels. Transactional leadership also positively influences employee engagement, highlighting the importance of reward-based and corrective actions in fostering a motivated workforce. Conversely, laissez-faire leadership negatively affects employee engagement, underscoring the detrimental impact of a hands-off leadership approach in this complex and dynamic sector. The findings underscore the critical role of effective leadership in enhancing employee engagement, which is essential for organizational success and sustainability in the Nigerian oil and gas industry. By providing empirical evidence on the influence of various leadership styles, this chapter offers valuable insights for organizational leaders and policymakers aiming to improve workforce engagement and performance. The implications of these findings extend beyond the Nigerian oil and gas sector, contributing to the broader literature on leadership and employee engagement.

REFERENCES

1. Abasilim U. D., Gberevbie D. E., Osibanjo O. A. (2018, October 18–19). Canonical analysis of perceived leadership styles and employees' commitment in Nigeria [Paper presentation]. 14th European Conference on Management, Leadership, and Governance (p. 317). University of Applied Sciences, Utrecht.
2. Adekoya, O. O., Adefemi, A., Tula, O. A., Umoh, A. A., & Gidiagba, J. O. (2024). A comprehensive review of Liquefied Natural Gas (LNG) market dynamics: Analyzing the current trends, challenges, and opportunities in the global LNG market. *World Journal of Advanced Research and Reviews*, 21(1), 058-074.
3. Albrecht, S. L., & Andretta, M. (2011). The influence of empowering leadership, empowerment and engagement on affective commitment and turnover intentions in community health service workers: Test of a model. *Leadership in Health Services*, 24(3), 228–237.
4. Akyereko, F. A. (2021). Leadership style and employee performance at Cummins Ghana (Doctoral dissertation, University of Cape Coast).
5. Ajonbadi, H.A., (2015). The dynamics of policies and practices of labour contracting in the Nigerian oil and gas sector. *Open Access Library Journal*, 2(9), pp.1-15.

6. Alimo-Metcalfe, B., Alban-Metcalfe, J., Bradley, M., Mariathasan, J. and Samele, C., (2008). The impact of engaging leadership on performance, attitudes to work and wellbeing at work: A longitudinal study. *Journal of Health Organization and Management*, 22(6), pp.586-598.
7. AlNoaimi, F. A., & Mazzuchi, T. A. (2021). Risk management application in an oil and gas company for projects. *International Journal of Business Ethics and Governance*, 1-30.
8. Andeobu, L., Hettihewa, S., & Wright, C. S. (2015). Risk management in the extractive industry: an empirical investigation of the Nigerian oil and gas industry. *The Journal of Applied Business and Economics*, 17(1), 86.
9. Audi, R., (2010). *Epistemology: A contemporary introduction to the theory of knowledge*. Routledge.
10. Babcock-Roberson, M.E. and Strickland, O.J., (2010). The relationship between charismatic leadership, work engagement, and organizational citizenship behaviors. *The Journal of psychology*, 144(3), pp.313-326.
11. Bakker, A. B., & Demerouti, E. (2008). Towards a model of work engagement. *Career development international*, 13(3), 209-223.
12. Bakker, A. B., Albrecht, S. L., & Leiter, M. P. (2011). Work engagement: Further reflections on the state of play. *European journal of work and organizational psychology*, 20(1), 74-88.
13. Bass, B. M. (1985). Leadership: Good, better, best. *Organizational Dynamics*, 13(3), 26-40. doi:10.1016/00902616(85)90028-2
14. Bass, B. M. (2000). The future of leadership in learning organizations. *Journal of Leadership & Organizational Studies*, 7(3), 18-40. doi:10.1177/107179190000700302
15. Bass, B. M., & Riggio, R. E. (2006). *Transformational leadership*. Psychology press.
16. Batista-Taran, L.C., Shuck, M.B., Gutierrez, C.C. and Baralt, S., (2013). The role of leadership style in employee engagement.
17. Bell, E., Bryman, A., & Harley, B. (2022). *Business research methods*. Oxford university press.
18. Bhalla, A. S. (2023). Understanding Leadership Challenges: A Framework. In *National and Global Responses to the COVID-19 Pandemic: Do Leaders Matter?* (pp. 79-108). Cham: Springer Nature Switzerland.
19. Breevaart, K., Bakker, A., Hetland, J., Demerouti, E., Olsen, O.K. and Espevik, R., (2014). Daily transactional and transformational leadership and daily employee engagement. *Journal of occupational and organizational psychology*, 87(1), pp.138-157.
20. Britt, T. W., & Garrity, M. J. (2006). Attributions and personality as predictors of the road rage response. *British Journal of Social Psychology*, 45(1), 127-147.
21. Burns, J. M. (1978). *Leadership*. New York, NY: HarperCollins.
22. Çetin, M., Karabay, M. E., & Efe, M. N. (2012). The effects of leadership styles and the communication competency of bank managers on the employee's job satisfaction: the case of Turkish banks. *Procedia-Social and Behavioral Sciences*, 58, 227-235.
23. Chaparak, A. (2023). Toward a new stage for the epistemology of futures studies: Exploring social epistemology. *Futures*, 153, 103237.
24. Christian, M. S., Garza, A. S., & Slaughter, J. E. (2011). Work engagement: A quantitative review and test of its relations with task and contextual performance. *Personnel Psychology*, 64(1), 89-136.
25. Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. *Journal of Management*, 31(6), 874-900.
26. Cropanzano, R., Rupp, D. E., & Byrne, Z. S. (2003). The relationship of emotional exhaustion to work attitudes, job performance, and organizational citizenship behaviors. *Journal of Applied Psychology*, 88(1), 160.
27. Dare, S. (2022). The impact of leadership styles on organizational performance at the Dangote Group Nigeria: a framework of African business leadership. University of Wales Trinity Saint David (United Kingdom).
28. Dariush L., Choobdar G., Valadkhani P., Mehrali E. (2016). Leader facilitating organizational commitment of employees (Tehran). *International Journal of Economics, Commerce and Management*, 4(5), 640–655.
29. Devi, R. V., & Narayanamma, L. P. (2016). Impact of leadership style on employee engagement. *Pacific Business Review International*, 1(1), 91-98.
30. Dubé, L. and Paré, G., (2003) Rigor in information systems positivist case research: current practices,

- trends, and recommendations. *MIS Quarterly*, pp.597-636.
31. Eze, A. N., Eluke, B. C., Eluke, C. C., Ezigbo, E., & Uzoma, I. (2019). The effect of chronic occupational exposure to petroleum products on haematological and biochemical parameters of petrol attendants. *J Adv Med Med Res*, 28(6), 1-8.
 32. Giallonardo, L.M., Wong, C.A. and Iwasiw, C.L., (2010). Authentic leadership of preceptors: a predictor of new graduate nurses' work engagement and job satisfaction. *Journal of Nursing Management*, 18(8), pp.993-1003.
 33. Graen, G. B., & Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective. *The Leadership Quarterly*, 6(2), 219-247.
 34. Hammady, S., Burdden, A., Evans, C., & Davidson, L. (2014). *Filling the pipeline: How oil and gas leaders can engage, enable and retain technical experts*. United Kingdom: Hay Group.
 35. Herminingsih, A. (2020). Transformational leadership positive influence toward employee engagement through job satisfaction and its effect on improving organizational commitment. *Jurnal Manajemen Dan Pemasaran Jasa*, 13(2), 281-296.
 36. Harris, K. J., Kacmar, K. M., & Carlson, D. S. (2006). An examination of temporal variables and relationship quality on promotability ratings. *Group & Organization Management*, 31(6), 677-699.
 37. Jay, A. (2014). *The principals' leadership style and teachers performance in secondary schools of Gambella regional state*. Unpublished Masters Thesis. The Department of Educational Planning And Management. Jimma University: University Press.
 38. Jin, J., & Men, L. R. (2023). How avoidant leadership style turns employees into adversaries: The impact of laissez-faire leadership on employee-organization relationships and employee communicative behavior. *International Journal of Business Communication*, 23294884231190397.
 39. Judge, T. A., & Piccolo, R. F. (2004). Transformational and transactional leadership: a meta-analytic test of their relative validity. *Journal of applied psychology*, 89(5), 755.
 40. Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of management journal*, 33(4), 692-724.
 41. Kaliannan, M., & Adjovu, S. N. (2015). Effective employee engagement and organizational success: a case study. *Procedia-Social and Behavioral Sciences*, 172, 161-168.
 42. Kanungo, R. N. (1982). Measurement of job and work involvement. *Journal of applied psychology*, 67(3), 341.
 43. Kotter, J. P. (2008). *Force for change: How leadership differs from management*. Simon and Schuster.
 44. Lewin, K., Lippitt, R., & White, R. K. (1939). Patterns of aggressive behaviour in experimentally created "social climates". *The Journal of social psychology*, 10(2), 269-299.
 45. Liden, R. C., Wayne, S. J., & Stilwell, D. (1993). A longitudinal study on the early development of leader-member exchanges. *Journal of applied psychology*, 78(4), 662.
 46. Macey, W. H., & Schneider, B. (2008). The meaning of employee engagement. *Industrial and organizational Psychology*, 1(1), 3-30.
 47. Martin, R., Guillaume, Y., Thomas, G., Lee, A., & Epitropaki, O. (2016). Leader-member exchange (LMX) and performance: A meta-analytic review. *Personnel psychology*, 69(1), 67-121.
 48. Maslach, C., & Leiter, M. P. (2008). Early predictors of job burnout and engagement. *Journal of applied psychology*, 93(3), 498.
 49. MIN, L., (2023). *Work engagement among generation z in malaysian private sectors*.
 50. Northouse, P. G. (2021). *Leadership: Theory and practice*. Sage publications.
 51. Ogunlana, F. (2018). *The role of entrepreneurship as the driver of economic growth*.
 52. Okechukwu, N., & Nwosu, P. D. M. F. O. (2020). *The Role of Leadership in The Empowerment of Nigerian Employees*. *Education*, 4(1), 1-23.
 53. Olabode, S.O., Bakare, A. and Iheonunekwu, W., (2018). Leadership style and employee performance in Nigerian oil and gas sector. *LASU Journal of Employment Relations & Human Resource Management*, 1(1), pp.195-209.
 54. Olayisade, A., & Awolusi, O. D. (2021). The effect of leadership styles on employee's productivity in the Nigerian oil and gas industry. *Information Management and Business Review*, 13(1 (I)), 47-64.
 55. O'Reilly, C. A., & Chatman, J. A. (2020). Transformational leader or narcissist? How grandiose narcissists can create and destroy organizations and institutions. *California Management Review*, 62(3),

5-27.

56. Papalexandris, N. and Galanaki, E., (2009). Leadership's impact on employee engagement: Differences among entrepreneurs and professional CEOs. *Leadership & Organization Development Journal*, 30(4), pp.365-385.
57. Podsakoff, P. M., MacKenzie, S. B., Paine, J. B., & Bachrach, D. G. (2000). Organizational citizenship behaviors: A critical review of the theoretical and empirical literature and suggestions for future research. *Journal of Management*, 26(3), 513-563
58. Rich, B. L., Lepine, J. A., & Crawford, E. R. (2010). Job engagement: Antecedents and effects on job performance. *Academy of management journal*, 53(3), 617-635.
59. Rotimi, M. E. (2021). Oil price shocks, exchange rates and output performance in Africa's oil exporting countries (Doctoral dissertation).
60. Saeed, R., Mussawar, S., Lodhi, R. N., Iqbal, A., Nayab, H. H., & Yaseen, S. (2013). Factors affecting the performance of employees at work place in the banking sector of Pakistan. *Middle-East Journal of Scientific Research*, 17(9), 1200-1208. doi:DOI: 10.5829/idosi.mejsr.2013.17.09.12256
61. Saks, A. M. (2006). Antecedents and consequences of employee engagement. *Journal of managerial psychology*, 21(7), 600-619.
62. Saunders, C. H., Sierpe, A., von Plessen, C., Kennedy, A. M., Leviton, L. C., Bernstein, S. L., ... & Leyenaar, J. K. (2023). Practical thematic analysis: a guide for multidisciplinary health services research teams engaging in qualitative analysis. *bmj*, 381.
63. Schaufeli, W.B., Salanova, M., González-Romá, V. and Bakker, A.B., (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness studies*, 3, pp.71-92.
64. Shuck, B., Adelson, J. L., & Reio Jr, T. G. (2017). The employee engagement scale: Initial evidence for construct validity and implications for theory and practice. *Human Resource Management*, 56(6), 953-977.
65. Skogstad, A., Einarsen, S., Torsheim, T., Aasland, M. S., & Hetland, H. (2007). The destructiveness of laissez-faire leadership behavior. *Journal of occupational health psychology*, 12(1), 80.
66. Smith, B. (2012). Ontology. In *The furniture of the world* (pp. 47-68). Brill.
67. Spreitzer, G. M. (1995). Psychological empowerment in the workplace: Dimensions, measurement, and validation. *Academy of management Journal*, 38(5), 1442-1465.
68. Tavanti, M., 2008. Transactional leadership. *Leadership: The key concepts*, pp.166-170.
69. Thanh, N. H., & Quang, N. V. (2022). Transformational, transactional, laissez-faire leadership styles and employee engagement: Evidence from Vietnam's public sector. *Sage Open*, 12(2), 21582440221094606.
70. Umuteme, O.M., (2020) The influence of leadership career development on the organizational adaptiveness of millennial engineers in the Nigerian oil and gas industry. *The International Journal of Humanities and Social Studies*, 8(6).
71. Vij, T. (2022). Transformational Leadership Model & Its Philosophical Applications. *International Journal of Innovative Research in Engineering & Management*, 9(2), 159-163.
72. Voon, M. L., Lo, M. C., Ngui, K. S., & Ayob, N. B. (2011). The influence of leadership styles on employees' job satisfaction in public sector organizations in Malaysia. *International journal of business, management and social sciences*, 2(1), 24-32.
73. Wefald, A.J., Reichard, R.J. and Serrano, S.A., (2011). Fitting engagement into a nomological network: The relationship of engagement to leadership and personality. *Journal of Leadership & Organizational Studies*, 18(4), pp.522-537.
74. Weyant, E. (2022). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*: by John W. Creswell and J. David Creswell, Los Angeles, CA: SAGE, 2018, \$38.34, 304pp., ISBN: 978-1506386706.
75. Xu, J. and Thomas, H.C., (2011). How can leaders achieve high employee engagement? *Leadership & Organization Development Journal*, 32(4), pp.399-416.
76. Yadav, V. G., Yadav, G. D., & Patankar, S. C. (2020). The production of fuels and chemicals in the new world: critical analysis of the choice between crude oil and biomass vis-à-vis sustainability and the environment. *Clean technologies and environmental policy*, 22, 1757-1774.
77. Yasir M., Imran R., Irshad M. K., Mohamad N. A., Khan M. M. (2016). Leadership styles in relation to

- employees' trust and Organizational Change Capacity. Sage Open, 6(4), 1–12. <https://doi.org/10.1177/2158244016675396>
78. Yukl, G. (2012). Leadership. Cases in Leadership (3rd. ed. pp. 1–42). Thousand Oaks, CA: Sage.
79. Zhu, W., Avolio, B.J., Walumbwa, F.O., (2009). Moderating role of follower characteristics with transformational leadership and follower work engagement. *Group & Organization Management*, 34(5), pp.590-619.