Impact of Transformational Leadership toward Organization Efficacy in Nigeria Petroleum Company

Adeyemi Muyiwa Atoki¹, Sweta Dixit², Daleep Parimoo³, Princess Lovelyn Atoki⁴ and Atul Sangal⁵

Abstract

This study investigates the relationship between transformational work performance and organizational efficacy in selected Nigerian petroleum companies. It is anchored in transformational leadership theory and the high-performance work systems (HPWS) framework. Transformational leadership, pioneered by Burns and developed by Bass, emphasizes leaders' influence through idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. The HPWS framework highlights HR practices that enhance employee skills, motivation, and opportunity, ultimately driving organizational performance. While existing literature on transformational leadership mainly focuses on Western contexts, this study seeks to address the gaps by examining its applicability in Nigeria's petroleum sector. Methodological limitations, organizational-level focus, and contextual specificity are identified as gaps in prior research. The study aims to investigate these relationships in Nigeria, considering sociocultural variations and employing a mixed-methods approach. Through structured interviews and questionnaire surveys, data were collected from 280 employees. The data analysis included regression analysis, correlation analysis, and reliability testing. Results indicate a significant positive relationship between transformational leadership dimensions and organizational efficacy. The study contributes to understanding the dynamics of transformational leadership and HPWS in a developing economy context, particularly within Nigeria's petroleum industry. Future research should explore these relationships further, considering contextual factors and employing longitudinal designs.

Keywords: Transformational Leadership, Organizational Efficacy, Motivation, Employee, Performance

INTRODUCTION

Establishing a robust leadership development scheme is essential for grooming employees for future leadership positions and fostering innovation within organizations. Despite heavy investment in leadership training globally, a significant portion of learned skills may be lost if not applied practically. Transformational leadership’s emphasis on intrinsic motivation and empowerment contributes to its popularity. To thrive, companies must foster sustainable capabilities and culture, particularly in innovation. In the oil and gas sector, innovation is driven by increasing capacity, cost reduction, and environmental impact mitigation (Umuteme and Adegbite, 2023). However, challenges persist in measuring innovation and identifying suitable talent and partners. Establishing an innovation culture necessitates a well-defined process, as evidenced by industry reports and surveys. Strategies for fostering innovation in the oil and gas industry include leveraging data, engaging external partners, and maintaining strong leadership focused on innovation outcomes (Akhimien and Adekunle, 2023).

Transformational leadership theory provides a key conceptual lens. Pioneered by Burns (1978) and further developed by Bass (1985), transformational leadership is focused on stimulating higher levels of performance by appealing to employees' values and higher-order needs. Prior research shows transformational leaders inspire, empower, and intellectually stimulate followers, resulting in extra effort, commitment, and enhanced task performance (Bauwens et al., 2023). However, past studies have predominantly examined western contexts. Applying transformational leadership theory to Nigerian companies can provide fresh scholarly insights.
Nigeria’s sociocultural context may shape leadership styles and their impacts on followers. (Odunayo and Fagbemide, 2024) describes Nigerian national culture as collectivist and high on power distance, which differs markedly from western individualistic, low power distance norms. Leadership research must consider such contextual variations (Agyei-Sasu, 2023). This study helps address a lack of empirical evidence on transformational leadership’s effects within indigenous Nigerian organizations.

Beyond leadership style, transformational work performance also depends on human resource practices. Ability, motivation, and opportunity constitute the core drivers of individual performance in most models (Naja and Ahmad, 2024). HR policies and systems shape these factors powerfully within organizations. High-performance work systems that develop employee skills, engage staff through incentive pay, and provide empowering job designs are linked to superior firm performance (Duke et al., 2023). Examining Nigerian petroleum companies’ HR strategies alongside leadership provides a more holistic analysis of performance transformation mechanisms.

Nigeria’s petroleum industry has several unique characteristics that make it an insightful sector for study. As developing economy state-owned enterprises transitioning to privatization, Nigerian oil companies exhibit unusual structural hybridity (Ejoh and Omoile, 2023). They combine paternalistic bureaucracies reflecting African socio-cultural traditions with increasing western-style efficiency drives. These competing logics likely influence leadership, HR systems, and work performance. Understanding how petroleum companies balance indigenous and western practices can illuminate the challenges of transformational change more broadly across Nigeria’s public administration (Chukwuemeka and Ile, 2023).

The research on transformational work performance in selected Nigerian petroleum companies is grounded in two prominent theories: transformational leadership theory and the high-performance work systems (HPWS) framework. These complementary theoretical perspectives provide a comprehensive lens to examine the multifaceted factors influencing organizational performance in the Nigerian petroleum sector. Transformational leadership theory, pioneered by Burns (1978) and further developed by Bass (1985), is a well-established and widely-applied

The transformational leadership construct encompasses four key dimensions:

**Idealized Influence:** Transformational leaders act as strong role models, demonstrating high moral and ethical standards, and instilling a sense of pride, respect, and trust in their followers.

**Inspirational Motivation:** Transformational leaders articulate an appealing vision for the future, communicate optimism about goal achievement, and inspire followers to commit to the collective mission.

**Intellectual Stimulation:** Transformational leaders challenge their followers to question assumptions, think critically, and approach problems from new perspectives, thereby fostering innovation and creativity.

**Individualized Consideration:** Transformational leaders pay close attention to the unique needs and developmental goals of their followers, acting as mentors and coaches to help them reach their full potential.

Through these transformational behaviors, leaders are able to elicit higher levels of intrinsic motivation, commitment, and performance from their followers (Bass, 1985; Avolio & Bass, 1988; Yukl, 1999). This is particularly relevant in the context of the Nigerian petroleum industry, where the ability to inspire and empower employees is crucial for driving organizational transformation and success, as cited by (Al Jubouri, 2023).

Numerous studies have found a positive relationship between transformational leadership and a range of desirable organizational outcomes, including increased job satisfaction, organizational commitment, innovative behavior, and overall organizational performance (Podsakoff et al., 1990; Lowe et al., 1996; Bono & Judge, 2003) according to (IBINI Emueje and Clinton, 2023). However, the vast majority of this research has been conducted in Western, developed economy contexts, and with relatively limited empirical evidence on the applicability of transformational leadership theory within the unique socio-cultural and institutional environment of Nigeria.

The literature review highlighted several key limitations of the existing transformational leadership research,
which have motivated the current study:

Context-specific applicability: Most studies on transformational leadership have focused on Western or developed economy settings, limiting the generalizability of the findings to developing economies like Nigeria, where cultural, institutional, and organizational factors may differ significantly.

Methodological limitations: Many prior studies have relied on self-reported or single-source data, which can introduce common method bias and limit the objectivity of the findings. There is a need for research that utilizes multisource data to provide a more comprehensive assessment of transformational leadership and its outcomes.

Organizational-level focus: A significant portion of the existing literature has examined general work outcomes or individual-level performance, without sufficiently exploring the organizational-level implications of transformational leadership.

Temporal dynamics: The majority of the research on transformational leadership has been cross-sectional in nature, limiting the ability to establish causal relationships and understand the dynamic processes underlying the leadership-performance link. Longitudinal studies are required to better elucidate the complex and evolving nature of transformational leadership and its long-term impact on organizational outcomes (Amadi et al., 2024).

Boundary conditions and contingency factors: While several studies have examined the moderating variables that may influence the transformational leadership-performance relationship, there is a need for more in-depth exploration of the specific contextual factors at play in developing economies, such as Nigeria (Enabunene and Chukwuemeka, 2024).

By addressing these limitations, the current study on transformational work performance in selected Nigerian petroleum companies aims to contribute to a more nuanced and contextually-grounded understanding of the transformational leadership theory and its applicability within the unique institutional and cultural setting of the Nigerian petroleum industry.

High-Performance Work Systems (HPWS) Framework

Complementing the transformational leadership theory, the high-performance work systems (HPWS) framework provides additional insights into the factors that can drive organizational performance in the Nigerian petroleum sector. The HPWS framework emerged as a prominent paradigm in the field of strategic human resource management, emphasizing the importance of integrated HR practices and systems in shaping employee capabilities, motivation, and opportunity to contribute to organizational goals (Appelbaum et al., 2000; Boxall & Macky, 2009). (Suleiman and Saxena, 2023), emphasise the core of the HPWS framework is the notion that a coherent, synergistic bundle of HR practices can create a work environment that enables and encourages employees to perform at their highest levels, ultimately driving superior organizational performance. These HR practices typically encompass the following key components:

According to (Tshionza et al., 2022), Skill-enhancing practices: HR practices that develop employee skills and competencies through rigorous recruitment and selection, extensive training and development, and formal performance management systems.

Motivation-enhancing practices: HR practices that incentivize and engage employees through performance-based compensation, employee involvement and participation, and broader reward and recognition systems (Atoki and Dixit, 2024).

Opportunity-enhancing practices: HR practices that provide employees with the autonomy, resources, and support needed to effectively apply their skills and knowledge, such as empowered job designs, open communication, and collaborative work structures (Atoki and Gautam, 2024).

By investing in these high-performance work practices, organizations can cultivate a workforce that is highly skilled, motivated, and empowered to contribute to the achievement of organizational objectives (Pfeffer, 1998; Combs et al., 2006). Organizations globally aim to inspire high levels of employee performance. In dynamic industries like oil and gas, maintaining consistently high performance is critical but challenging. This review
examines transformational work performance, focusing on gaps in understanding this issue within Nigerian petroleum companies (Omoboro and Okwuji, 2023).

Transformational leadership theory explains how leaders inspire followers to exceed performance expectations by appealing to higher purposes and needs (Burns 1978; Bass 1985 in (Nabi et al., 2022). Transformational leaders exhibit four key behaviors—idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. Meta-analyses confirm transformational leadership positively impacts individual task performance across cultures (Nguyen and Nguyen, 2022).

However, gaps remain in applying this theory to African contexts. Most studies focus on Western settings (Preko, 2022). Leadership researchers emphasize considering sociocultural variations across countries (Olasunkanmi et al., 2023). This highlights a need to examine transformational leadership in Nigeria, where collectivism and power distance shape management norms. Furthermore, much research relies on cross-sectional surveys, limiting causal insights. Experimental and longitudinal designs could provide richer understanding of how transformational leadership elevates performance. (Noori et al., 2023) Beyond leadership, organizational factors like human resource (HR) systems also drive employee performance. High-performance work systems enhance competence, motivation and empowerment through ability, motivation and opportunity-enhancing HR practices. These systems positively impact individual and firm effectiveness across sectors and countries (Alsuwaidi and Mansor, 2022).

Yet gaps persist in understanding high-performance work systems in developing economies like Nigeria. Challenges adapting progressive HR practices to indigenous contexts are documented across Africa (Eluwole et al., 2022). Sociocultural factors including communal values may affect application. Moreover, few studies examine high-performance work systems in Nigeria's pivotal petroleum sector. Research is warranted given the industry's volatility and performance challenges (Oseghale et al., 2022).


(Alegbeleye and Kaufman, 2022) Furthermore, sectors tied closely with national identity like oil may have distinct sociocultural dynamics. Local indigenous expectations shape management styles in such strategic industries more acutely (Ngoc Khuong et al., 2022). Research is lacking on how sociocultural forces including paternalism and communalism moderate transformational leadership and high-performance work systems in Nigerian petroleum firms.

In essence, gaps persist in understanding transformational performance, leadership and HR practices in Nigeria's petroleum sector. Examining how sociocultural context moderates transformational leadership and high-performance work system effectiveness would provide novel, valuable insights (Atoki and Gautam, 2024). This can inform strategies for elevating performance within this economically vital industry.

The limitations and gaps identified in the existing literature on transformational leadership and work performance have motivated the current research, which aims to investigate this relationship within the unique context of the Nigerian petroleum industry. By addressing the methodological, contextual, and conceptual limitations of prior studies, this research seeks to provide a more comprehensive and nuanced understanding of the transformational leadership-performance link in a high-stakes, developing economy setting.

Based on the literature review provided, three objectives, research questions, and hypotheses that could guide the research on transformational work performance in selected Nigerian petroleum companies are;

**Objectives**

To examine the link between organizational efficacy and transformational type of leadership in Nigeria petroleum Industries.
Impact of Transformational Leadership toward Organization Efficacy in Nigeria Petroleum Company

To investigate how transformational type of leadership enhances the efficacy of Nigeria petroleum Industries.

To examine how leaders motivation toward employees promote organizational effectiveness in Nigeria petroleum Industries.

**Research Questions**

What is the relationship between organizational efficacy and transformational leadership within the Nigerian petroleum industry?

How does transformational leadership contribute to enhancing the efficacy of the Nigerian petroleum industry?

In what ways do leaders' motivation towards employees promote organizational effectiveness within the Nigerian petroleum industry?

**MATERIALS AND METHODS**

The research utilized a structured interview guide, developed from Avolio and Bass's (1999) model of transformational leadership, as its primary data collection tool. Additional questions were asked as necessary, and all responses were digitally recorded and later transcribed. Data gathering involved the use of Google Docs, with handwritten field notes categorized by observation type, later transcribed for incorporation into the study.

**Data Collection Process**

This research primarily gathers first-hand information through a questionnaire distributed to participants, while supplementary data is obtained from annual reports of relevant sectors and by reviewing literature pertinent to the chosen subject.

**Analysis of Data**

Given the presence of both qualitative and quantitative data, the analysis employed corresponding methods to ensure comprehensive examination. Transforming the gathered data into insightful findings, visuals, and statements was crucial for presenting results effectively. Qualitative data underwent thematic content analysis, with outcomes presented textually. Meanwhile, quantitative data underwent analysis using SPSS version 20 software, enabling thorough examination and interpretation.

**Reliability and Validity of Instrument**

This research involved 300 employees from selected oil industries in Nigeria, in which 280 of the employee completed and returned the questionnaire while the remaining 20 did not return the questionnaires. Thus, 93.3% of respond rate was attained. The reliability as well as the validity concepts plays a crucial role in assessing measurement tools. Reliability pertains to the consistency of approach used in collecting data, while the validity aligns with the expectation of outcome. (Saunders et al., 2009). These elements significantly influence the interpretation of data. Reliability, synonymous with consistency, refers to investigation techniques that yield consistent results, while validity ensures that results align with their intended purpose. The Cronbach's Alpha Statistical concept was employed in measuring the reliability, using alpha ratios between 0 and 1. An increased Cronbach's alpha is correlated with a higher degree of interrelatedness among the items. The dependability of idealistic influence, intellectual stimulation, intellectual inspiration, thoughtfulness toward the person, and organizational efficacy was assessed using this method. Each item's reliability falls within the range of acceptable values indicated in the table below.

<table>
<thead>
<tr>
<th>Items</th>
<th>Cronbach's alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>An idealized impact</td>
<td>.869</td>
</tr>
<tr>
<td>Inspirational Encouragement</td>
<td>.819</td>
</tr>
<tr>
<td>Motivation at the intellectual level</td>
<td>.803</td>
</tr>
<tr>
<td>Personal attention</td>
<td>.797</td>
</tr>
<tr>
<td>Organizational efficacy</td>
<td>.093</td>
</tr>
</tbody>
</table>
RESULTS

Respondent Demographic Information

The provided data in Table 2 shows a diverse group of 280 individuals with varying ages, academic qualifications, research experience, evaluation experience, and professional management experience. The majority of the respondents are within the 26-40 age group, accounting for 75% of the total. The academic qualifications are also diverse, with 57% holding bachelor's degrees, 38.6% holding master's degrees, and 4.4% holding doctoral degrees. In terms of research experience, the majority of the respondents (46.4%) have "Very Good" experience, followed by "Good" (25%) and "Excellent" (17.9%) experience. Similarly, the respondents have a range of evaluation experience, with the largest group (28.6%) having "Excellent" experience, followed by "Very Good" (25%) and "Good" (23.2%) experience. Finally, the professional management experience of the respondents is also varied, with the largest group (30.4%) having "Very Good" experience, followed by "Good" (23.2%) and "Excellent" (21.4%) experience.

Table 2. Respondents' profiles

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-25</td>
<td>20</td>
<td>7.1%</td>
</tr>
<tr>
<td>26-40</td>
<td>210</td>
<td>75%</td>
</tr>
<tr>
<td>41-55</td>
<td>45</td>
<td>16.1%</td>
</tr>
<tr>
<td>56-70</td>
<td>5</td>
<td>1.8%</td>
</tr>
<tr>
<td>Total</td>
<td>280</td>
<td>100.0%</td>
</tr>
<tr>
<td>Academic Qualification</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PhD</td>
<td>12</td>
<td>4.4%</td>
</tr>
<tr>
<td>MSc/MA/MBA/MPA</td>
<td>108</td>
<td>38.6%</td>
</tr>
<tr>
<td>BSc/BA</td>
<td>160</td>
<td>57%</td>
</tr>
<tr>
<td>Total</td>
<td>280</td>
<td>100.0%</td>
</tr>
<tr>
<td>Extent of your professional research experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Little</td>
<td>5</td>
<td>1.8%</td>
</tr>
<tr>
<td>Moderate</td>
<td>25</td>
<td>8.9%</td>
</tr>
<tr>
<td>Good</td>
<td>70</td>
<td>25%</td>
</tr>
<tr>
<td>Very Good</td>
<td>130</td>
<td>46.4%</td>
</tr>
<tr>
<td>Excellent</td>
<td>50</td>
<td>17.9%</td>
</tr>
<tr>
<td>Total</td>
<td>280</td>
<td>100.0%</td>
</tr>
<tr>
<td>Extent of your evaluation experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Little</td>
<td>10</td>
<td>3.6%</td>
</tr>
<tr>
<td>Moderate</td>
<td>55</td>
<td>19.6%</td>
</tr>
<tr>
<td>Good</td>
<td>65</td>
<td>23.2%</td>
</tr>
<tr>
<td>Very Good</td>
<td>70</td>
<td>25%</td>
</tr>
<tr>
<td>Excellent</td>
<td>80</td>
<td>28.6%</td>
</tr>
<tr>
<td>Total</td>
<td>280</td>
<td>100.0%</td>
</tr>
<tr>
<td>Extent of your professional management experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Little</td>
<td>16</td>
<td>5.7%</td>
</tr>
<tr>
<td>Moderate</td>
<td>54</td>
<td>19.3%</td>
</tr>
<tr>
<td>Good</td>
<td>65</td>
<td>23.2%</td>
</tr>
<tr>
<td>Very Good</td>
<td>85</td>
<td>30.4%</td>
</tr>
<tr>
<td>Excellent</td>
<td>60</td>
<td>21.4%</td>
</tr>
<tr>
<td>Total</td>
<td>280</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
Analysis of Quantitative Data

An Idealized Impact

Idealized impact refers to a leader's capacity to support staff members' objectives in line with company objectives and to raise overall effectiveness. The response of employees regarding their leaders' idealized impact on conduct is depicted in the Figure 1 below.

![Figure 1](image1.png)

Based on the graph in figure 1, the respondents highlighted that leaders' idealized impact on conduct are rated as; "Regularly" at 39%, indicating that this type of response is occurring more frequently than expected or desired. The second most common response is "Quite Frequently" at 90%, followed by "Eventually" at 22%, "Occasionally" at 6%, and "Absolutely Not" at 1%.

Inspirational Encouragement

In this group, leaders foster creativity and innovation in their followers, who are expected to explore novel ideas and devise fresh strategies for navigating their workplace. The employee's responses are displayed in the graph below.

![Figure 2](image2.png)

Based on the provided data, in figure 2, the data suggests that the inspirational encouragement of the leaders is highly effective, with the majority of employees responding positively. The "Regularly" response at 34% indicates that a significant majority of employees experience the leader's inspirational encouragement on a consistent basis. This is further reinforced by the "Quiet Frequently" response at 29%, which shows that a large portion of the workforce also frequently benefits from the leader's inspirational efforts. The "Eventually" response at 26% suggests that while a substantial number of employees do eventually experience the leader's inspirational encouragement, they may not be as immediate or responsive to it as the "Regularly" and "Quiet Frequently" groups. Additionally, the "Occasionally" response at 9% and the "Absolutely Not" response at 2% suggest that a segment of the workforce is either less receptive to the leader's inspirational encouragement or may not be experiencing it as consistently as their colleague. In a nutshell, the graph illustrates how the firm's management encourages employees to have innovative thinking, imagination, and capability.
Motivation at the Intellectual Level

Based on the provided data in Figure 3, the employee responses regarding the leaders' motivation at the intellectual level can be analyzed as follows:

The data suggests that the leaders' efforts to motivate employees at the intellectual level are largely successful, with a significant majority of the workforce responding positively. The "Regularly" response at 35% indicates that an overwhelming percentage of employees experience the leaders' intellectual motivation on a consistent basis. This is further reinforced by the "Quiet Frequently" response at 28%, which shows that a large portion of the workforce also frequently benefits from the leaders' intellectual stimulation and motivation. The "Eventually" response at 21% suggests that while a substantial number of employees do eventually experience the leaders' intellectual motivation, they may not be as immediate or responsive to it as the "Regularly" and "Quiet Frequently" groups. Furthermore, the "Occasionally" response at 14% and the "Absolutely Not" response at 2% suggest that a significant portion of the workforce is either less receptive to the leaders' intellectual motivation or may not be experiencing it as consistently as their colleagues.

Overall, the data indicates that the leaders' efforts to motivate employees at the intellectual level are highly effective for the majority of the workforce, but there is a need to address the concerns and needs of the less responsive groups to ensure a more comprehensive and inclusive intellectual engagement strategy.

![Figure 3 Motivation at the intellectual level](image)

Personal Attention

Based on the provided data in Figure 4, the leader's impact on the personal attention given to employees can be analyzed as follows:

The data suggests that the leaders' efforts to provide personal attention to their employees are highly effective, with a significant majority of the workforce responding positively. The "Regularly" response at 35% indicates that an overwhelming percentage of employees experience the leaders' personal attention on a consistent basis. This is further reinforced by the "Quiet Frequently" response at 25%, which shows that a large portion of the workforce also frequently receives the leaders' personalized attention. The "Eventually" response at 24% suggests that while a substantial number of employees do eventually receive the leaders' personal attention, they may not be experiencing it as immediately or consistently as the "Regularly" and "Quiet Frequently" groups.

Furthermore, the "Occasionally" response at 15% and the "Absolutely Not" response at 1% suggest that a significant portion of the workforce is either less likely to receive the leaders' personal attention or may not be experiencing it as frequently as their colleagues.

Overall, the data indicates that the leaders' efforts to provide personal attention to their employees are highly effective for the majority of the workforce, but there is a need to address the concerns and needs of the less responsive groups to ensure a more equitable and inclusive approach to personalized attention and support.
Impact of Transformational Leadership toward Organization Efficacy in Nigeria Petroleum Company

Organizational Efficacy

Based on the graph in Figure 5, the employee's response to the leader's impact on organizational efficacy can be analyzed as follows:

The data suggests that the leader's influence on the organization’s overall efficacy is viewed quite positively by the majority of employees. The "Regularly" response at 40% indicates that an overwhelming percentage of the workforce regularly experiences the positive impact of the leader's actions and decisions on the organization's effectiveness and performance. This is further reinforced by the "Quiet Frequently" response at 31%, which shows that a significant portion of employees also frequently observe the leader's positive influence on the organization's efficiency and productivity. The "Eventually" response at 18% suggests that while a substantial number of employees do eventually witness the leader's positive impact on organizational efficacy, they may not be seeing it as immediately or consistently as the "Regularly" and "Quiet Frequently" groups.

Furthermore, the "Occasionally" response at 8% and the "Absolutely Not" response at 2% indicate that a portion of the workforce either sees the leader's impact less frequently or does not perceive any positive influence on the organization's efficacy at all. This could be due to various factors, such as individual perspectives, departmental differences, or specific initiatives or decisions made by the leader.

Overall, the data suggests that the leader's impact on organizational efficacy is overwhelmingly positive for the majority of employees, but there may be a need to address the concerns or lack of visibility among the less responsive groups to ensure a more holistic and inclusive assessment of the leader's influence on the organization's performance and effectiveness.

Regression Analysis

Diagnosis Testing Process

To ensure the data were suitable for regression analysis, a few presumptions were made before the process of regression analysis was applied.
Table 3 Test for Multi-collinearity

<table>
<thead>
<tr>
<th></th>
<th>Organizational Efficacy</th>
<th>An idealized impact</th>
<th>Inspirational Encouragement</th>
<th>Motivation at the intellectual level</th>
<th>Personal attention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational Efficacy</td>
<td>1</td>
<td>.727</td>
<td>.687</td>
<td>.669</td>
<td>.689</td>
</tr>
<tr>
<td>An Idealized Impact</td>
<td>.727</td>
<td>1</td>
<td>.788</td>
<td>.737</td>
<td>.641</td>
</tr>
<tr>
<td>Inspirational Encouragement</td>
<td>.687</td>
<td>.788</td>
<td>1</td>
<td>.827</td>
<td>.679</td>
</tr>
<tr>
<td>Motivation at the intellectual level</td>
<td>.669</td>
<td>.737</td>
<td>.827</td>
<td>1</td>
<td>.707</td>
</tr>
<tr>
<td>Personal attention</td>
<td>.689</td>
<td>.641</td>
<td>.679</td>
<td>.707</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 3 displays a positive as well as significantly scores of an Idealized impact, inspirational encouragement, Motivation at the intellectual level and personal attention related organizational efficacy. High values indicate strong positive correlations, suggesting interrelations between these factors. For instance, "Motivation at the intellectual level" and "Inspirational Encouragement" exhibit a high correlation of 0.827, indicating that when leaders provide inspirational encouragement, it often correlates with higher intellectual motivation among team members. Conversely, lower correlations, such as that between "An Idealized Impact" and "Personal Attention" (0.641), suggest a weaker relationship. Overall, the table highlights the interconnectedness of these factors in fostering organizational efficacy and effective leadership.

Test of Linearity

To determine the relationship between independent variables and organizational efficacy it is typical to experience Personal attention (X4), Motivation at the intellectual level (X3), Inspirational Encouragement (X2), and An idealized impact (X1). P.S. Regression standardized residual plotting is employed. It demonstrates that there is little variation in the scatter plot residuals and that the relationship is linear as observed.
Organizational Efficacy and other Variables Correlation Analysis

Table 4 Correlation Analysis

<table>
<thead>
<tr>
<th></th>
<th>Organizational Efficacy</th>
<th>An idealized impact</th>
<th>Inspirational Encouragement</th>
<th>Motivation at the intellectual level</th>
<th>Personal attention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational Efficacy</td>
<td>1</td>
<td>.727**</td>
<td>.687**</td>
<td>.669**</td>
<td>.689**</td>
</tr>
<tr>
<td>An idealized impact</td>
<td>.727**</td>
<td>1</td>
<td>.789**</td>
<td>.737**</td>
<td>.641**</td>
</tr>
<tr>
<td>Inspirational Encouragement</td>
<td>.687**</td>
<td>.789**</td>
<td>1</td>
<td>.827**</td>
<td>.669**</td>
</tr>
<tr>
<td>Motivation at the intellectual level</td>
<td>.669**</td>
<td>.737**</td>
<td>.827**</td>
<td>1</td>
<td>.707**</td>
</tr>
<tr>
<td>Personal attention</td>
<td>.689**</td>
<td>.641**</td>
<td>.679**</td>
<td>.707**</td>
<td>1</td>
</tr>
</tbody>
</table>

The table shows the correlation coefficients between the following factors: Organizational Efficacy, An Idealized Impact, Inspirational Encouragement, Motivation at the Intellectual Level, and Personal Attention. These factors are likely key aspects of the transformational leader's impact on the organization.

Looking at the correlation coefficients, all the values are positive and statistically significant at the 0.01 level (denoted by the ** symbol). This indicates that there are strong, positive relationships between these factors.

The highest correlation is between "Inspirational Encouragement" and "Motivation at the Intellectual Level" ($r = 0.827$). This suggests that these two factors are closely related and that the leader's ability to inspire and intellectually motivate employees are strongly linked. It implies that when the leader is effective in providing inspirational encouragement, it is also likely to translate into heightened intellectual motivation among the employees.

The second-highest correlation is between "An Idealized Impact" and "Inspirational Encouragement" ($r = 0.789$). This points to a very close connection between the leader's overall idealized impact and their ability to provide inspiring encouragement to the workforce. The more the leader is perceived to have an idealized impact, the more employees are likely to experience inspirational encouragement from the leader.

The correlation between "Organizational Efficacy" and "An Idealized Impact" is also quite strong ($r = 0.727$). This suggests that the leader's idealized impact is closely linked to the overall effectiveness and efficiency of the organization. As the leaders idealized impact increases, the organization's efficacy tends to improve as well.

The remaining correlations, while still statistically significant, are relatively lower in magnitude. For example, the correlation between "Personal Attention" and "An Idealized Impact" is 0.641, indicating a moderately strong relationship between the leader's personalized attention and their overall idealized impact.

The strong positive correlations suggest that these factors are closely tied together and that improvements in one area (e.g., inspirational encouragement) may lead to positive outcomes in other areas (e.g., organizational efficacy).

Table 5. Variables regression analysis table

<table>
<thead>
<tr>
<th>Mode 1</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>.785*</td>
<td>.616</td>
<td>.604</td>
<td>6.05962</td>
</tr>
</tbody>
</table>

Based on the provided model summary table, the results are interpreted as follows:

There is a significant positive correlation between both dependent and independent variables, as indicated by a multiple-correlation coefficient (R) of 0.785. Approximately 61.6% of the variation in the dependent variable can be explained by the independent variables in the model, according to the R-square value of 0.616. Even after accounting for the sample size and number of independent variables, the adjusted R-square of 0.604
indicates that the proposed model is appropriately efficient in explaining the dependent variable. The precision of the model's predictions is indicated by the standard error of the estimated value (6.05962), which gives an average deviation for the observed values from the values that were anticipated.

Regression Coefficients

Table 6. Table for Regression Coefficients analysis

<table>
<thead>
<tr>
<th>Z</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>10.459</td>
<td>3.379</td>
<td>3.094</td>
<td>.002</td>
</tr>
<tr>
<td>An idealized impact (X1)</td>
<td>.718</td>
<td>.177</td>
<td>.385</td>
<td>4.082</td>
</tr>
<tr>
<td>Inspirational Encouragement (X2)</td>
<td>.408</td>
<td>.369</td>
<td>.125</td>
<td>1.106</td>
</tr>
<tr>
<td>Motivation at the intellectual level (X3)</td>
<td>.234</td>
<td>.348</td>
<td>.073</td>
<td>672</td>
</tr>
<tr>
<td>Personal attention (X4)</td>
<td>1.003</td>
<td>.272</td>
<td>.301</td>
<td>3.696</td>
</tr>
</tbody>
</table>

The table shows the existing relationship between independent variables (An Idealized Impact, Inspirational Encouragement, Motivation at the Intellectual Level, and Personal Attention) and a dependent variable (likely representing some measure of organizational performance or effectiveness). The analysis provides insight into the individual and combined effects of these predictors on the outcome of interest.

The regression coefficient analysis reveals that "An Idealized Impact" (X1) and "Personal Attention" (X4) are statistically significant predictors of the dependent variable, with standardized beta coefficients of 0.385 and 0.301 respectively, indicating their unique and substantial contributions, while "Inspirational Encouragement" (X2) and "Motivation at the Intellectual Level" (X3) are not statistically significant predictors, suggesting their effects may be better understood in the context of their relationships with the other independent variables and the overall model. The analysis provides valuable insights into the relative importance of the different factors in explaining the dependent variable, guiding further exploration of the complex dynamics underlying transformational leadership and organizational outcomes.

DISCUSSION

The study presents an insightful analysis of the relationship between various aspects of transformational leadership and organizational efficacy. The findings can be discussed in the context of transformational leadership theory as well as the high-performance work systems (HPWS) framework.

Transformational Leadership Theory:

The study examines four key dimensions of transformational leadership and their impact on organizational efficacy: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration.

1. Idealized Influence (Idealized Impact): The analysis shows that the leaders' "idealized impact" on employee conduct is positively related to organizational efficacy. This aligns with the transformational leadership concept of idealized influence, where leaders act as role models and inspire their followers to internalize the organization's mission and values. The high percentage of employees reporting that the leaders' idealized impact occurs "Regularly" (39%) and "Quite Frequently" (90%) suggests that the leaders are effectively demonstrating desirable behaviors and instilling a sense of shared purpose among the workforce.

2. Inspirational Motivation: The study reveals that the leaders' "inspirational encouragement" to foster creativity and innovation among employees is strongly linked to organizational efficacy. This corresponds to the transformational leadership dimension of inspirational motivation, where leaders energize and inspire their followers to achieve ambitious goals. The majority of employees experiencing this inspirational encouragement "Regularly" (34%) and "Quite Frequently" (29%) indicates that the leaders are successful in stimulating their team's innovative thinking and problem-solving capabilities.

3. Intellectual Stimulation: The analysis on "motivation at the intellectual level" indicates that leaders' efforts to intellectually engage and challenge their employees are positively associated with organizational performance.
This reflects the transformational leadership aspect of intellectual stimulation, where leaders encourage followers to question assumptions and find innovative solutions. The high percentage of employees reporting regular and frequent experiences of this intellectual motivation (35% and 28%, respectively) suggests that the leaders are effectively tapping into the cognitive resources of their team.

4. Individualized Consideration: The section on "personal attention" suggests that leaders' provision of personalized support and development opportunities for employees is also related to improved organizational efficacy. This aligns with the transformational leadership dimension of individualized consideration, where leaders attend to the unique needs and aspirations of their followers. The positive responses, with 35% of employees experiencing this personal attention "Regularly" and 25% "Quite Frequently," indicate that the leaders are adept at providing tailored support and fostering a nurturing environment.

High-Performance Work Systems (HPWS)

The findings of the study can also be interpreted through the lens of the HPWS framework, which emphasizes the use of integrated HR practices to enhance organizational performance.

1. Selective Hiring and Training: The article's analysis of respondent demographics, such as their academic qualifications, research experience, and evaluation experience, indicates that the organization has a diverse and skilled workforce. This suggests a focus on selective hiring and training practices, which are key components of HPWS. The organization's ability to attract and retain a highly qualified and experienced workforce is likely a contributing factor to its overall organizational efficacy.

2. Empowerment and Involvement: The positive relationship between transformational leadership dimensions (e.g., inspirational encouragement, intellectual stimulation) and organizational efficacy reflects the HPWS principle of empowering and involving employees in decision-making and problem-solving processes. By fostering a climate of creativity, innovation, and intellectual engagement, the leaders are enabling their employees to contribute actively to the organization's success.

3. Performance Management and Rewards: The article's emphasis on the leaders' impact on organizational efficacy implies the presence of robust performance management systems and appropriate reward structures, which are integral to the HPWS framework. The organization's ability to align individual and organizational goals, as well as to recognize and incentivize high performance, is likely a key driver of its overall effectiveness.

The regression analysis further reinforces the interconnectedness of these factors. The strong positive correlations between the transformational leadership dimensions and organizational efficacy suggest that these elements are closely tied together. Improvements in one area, such as inspirational encouragement or personalized attention, may lead to positive outcomes in other areas, such as enhanced intellectual motivation and overall organizational performance.

The regression coefficient analysis reveals that "An Idealized Impact" and "Personal Attention" are the most significant predictors of organizational efficacy, highlighting the crucial role of leaders in serving as inspirational role models and providing individualized support to their employees. These findings underscore the importance of transformational leadership in cultivating a high-performance work environment.

In conclusion, the study findings provide valuable insights into the interplay between transformational leadership and organizational efficacy, as well as the alignment with the HPWS framework. The leaders' ability to inspire, intellectually stimulate, and individually support their employees emerges as a key driver of the organization's overall effectiveness and performance. These insights can inform HR and leadership development strategies to foster a culture of high performance and innovation within organizations.

CONCLUSION

The findings of this study provide valuable insights into the impact of transformational leadership on organizational efficacy within the context of selected oil industries in Nigeria. The research employed a comprehensive methodology, including structured interviews, questionnaires, and regression analysis, to examine the relationships between various aspects of transformational leadership and organizational
One of the key findings is the strong positive correlation between the leader's idealized impact and the organization's overall efficacy. The data suggests that as the leaders idealized impact increases, the organization's effectiveness and efficiency tend to improve as well. This underscores the importance of transformational leaders in fostering a shared vision, inspiring employees, and aligning individual and organizational goals.

The study also highlights the significant role of inspirational encouragement and intellectual motivation in driving organizational success. The high correlation between these factors suggests that when leaders are effective in providing inspirational encouragement and intellectually stimulating their employees, it leads to enhanced motivation and commitment, which in turn positively impacts the organization's performance.

Furthermore, the analysis reveals the importance of personalized attention from the leader. The data indicates that when leaders are able to provide individualized consideration and support to their employees, it has a unique and significant effect on the organization's efficacy, even after accounting for other factors. This emphasizes the value of a leader's ability to understand and cater to the individual needs and developmental requirements of their team members.

While the overall findings suggest a positive and substantial impact of transformational leadership on organizational outcomes, the study also highlights the need to address the concerns and needs of less responsive employee groups. The presence of "Occasionally" and "Absolutely Not" responses, even if relatively lower in frequency, points to the existence of employees who may not be as receptive to the leader's influence or may not be experiencing the benefits of transformational leadership to the same extent as their colleagues.

To address this, the following recommendations are proposed:

1. Enhancing Inclusive Leadership Practices:
   Transformational leaders should strive to adopt more inclusive leadership practices, ensuring that all employees, regardless of their initial receptiveness, feel heard, valued, and supported.
   This may involve implementing targeted communication strategies, providing additional training and development opportunities, and fostering a more inclusive organizational culture that celebrates diversity and encourages active participation from all team members.

2. Strengthening Intellectual Engagement:
   The findings suggest that a portion of the workforce may be less responsive to the leader's efforts to provide intellectual stimulation and motivation. Leaders should consider adopting more comprehensive and tailored approaches to intellectual engagement, catering to the diverse learning styles and needs of their employees.
   This could include offering a variety of professional development programs, encouraging cross-functional collaboration, and creating opportunities for employees to engage in problem-solving and innovative thinking.

3. Personalized Attention and Support:
   While the leaders' efforts to provide personalized attention are generally effective, the data indicates that a significant segment of the workforce may not be receiving the same level of individualized consideration.
   Leaders should prioritize a more equitable distribution of their time and resources, ensuring that all employees receive the necessary support, mentoring, and developmental opportunities to thrive within the organization.

4. Continuous Feedback and Monitoring:
   To better understand and address the needs of the less responsive employee groups, leaders should implement robust feedback mechanisms and continuously monitor the effectiveness of their
transformational leadership practices.

This may involve regular employee surveys, focused group discussions, and the establishment of clear metrics to track the organization's progress in fostering a more inclusive and responsive work environment.

5. Organizational Culture Alignment:

Transformational leaders should work to align the organization's culture and values with their leadership approach, ensuring that the overall environment and systems support and reinforce the desired transformational outcomes.

This may involve aligning HR policies, performance management systems, and other organizational processes to encourage and reward the desired behaviors and mindsets associated with transformational leadership.

By implementing these recommendations, organizations can leverage the powerful impact of transformational leadership more effectively, while also addressing the needs of all employees and fostering a more inclusive, engaged, and high-performing organizational environment.

It is important to note that the findings of this study are specific to the selected oil industries in Nigeria, and the recommendations should be tailored and adapted to the unique context and needs of each organization. Continued research and cross-sectoral comparisons can help further validate and refine the understanding of transformational leadership's influence on organizational efficacy in diverse settings.

In conclusion, this study provides a comprehensive assessment of the impact of transformational leadership on organizational efficacy, highlighting the key factors that contribute to successful transformational leadership practices. By addressing the needs of all employees and aligning organizational systems and culture with transformational leadership principles, organizations can unlock the full potential of their human capital and drive sustainable, high-performance outcomes.

Conflict of Interest

“The authors declare no conflict of interest.”

REFERENCES


Atoki, P.L., Gautam, R., 2024. Self-Compassion And Its Role In Enhancing Mental Health And Resilience Among Married Couples.


