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# The Impact of Sustainability Leadership on Job Performance in Nigeria University

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**Abstract:** In an era marked by escalating challenges such as climate change, resource scarcity, and social inequality, the imperative for sustainable leadership practices has intensified. This study explores the impact of sustainability leadership on staff performance in three major universities in Kano State Nigeria, and examines its influence on performance outcomes, societal impact, and environmental sustainability. Employing a descriptive survey methodology, the research investigates the relationship between sustainability leadership and organizational performance using two research instruments and formulating two hypotheses to test these relationships. Data collected from 150 staff members were analysed using the Pearson product-moment correlation coefficient to measure statistical associations between sustainability leadership and staff performance. The findings reveal significant and positive correlations, indicating that universities led by sustainable leaders exhibit higher levels of employee job performance. Additionally, substantial positive relationships were identified between sustainability leadership and the advancement of environmental, social, and economic sustainability goals within these institutions. These results underscore the critical role of sustainable leadership in enhancing organizational effectiveness and promoting sustainable development outcomes. Leaders who integrate sustainability principles into their practices are well-positioned to drive positive impacts on employee engagement, organizational reputation, and resilience amid global challenges. This study contributes to the understanding of how sustainability leadership influences organizational performance in the Nigerian context, advocating for the adoption of sustainable leadership strategies to achieve business success and broader societal benefits. Future research should further explore the mechanisms through which sustainable leadership practices can be effectively implemented and scaled across diverse organizational settings, ensuring sustained positive impacts on both organizational and societal outcomes.

**Keywords**: Sustainable leadership, organizational performance, Environmental sustainability, job performance

# I. Introduction

In the context of the rapidly changing global environment, sustainability has emerged as a key element for long-term success in organizations. Sustainability leadership focuses on incorporating environmental, social, and economic factors into decision-making, making it an essential leadership strategy. This approach not only supports global sustainability objectives but also has the potential to enhance job performance significantly.

Universities, as hubs of knowledge and innovation, play a crucial role in advancing sustainability efforts. However, in many developing countries, including Nigeria, the adoption of sustainability leadership is still nascent. Exploring the impact of sustainability leadership on job performance in these settings is crucial for crafting strategies that improve both employee well-being and organizational effectiveness.

This study explores how sustainability leadership affects job performance across three Nigerian universities. By investigating this relationship, the research adds to the expanding literature on sustainability leadership and its practical effects on job performance within educational institutions.

## II. Literature Review

### The Concept of Sustainability Leadership

Sustainability leadership is defined by its ability to guide an organization toward achieving its goals while addressing environmental, social, and economic challenges. Leaders who adopt sustainability practices prioritize long-term impacts over short-term gains, fostering a culture of responsibility and ethical behaviour. According to Avolio and Gardner (2005), sustainability leaders inspire and motivate employees by embedding sustainability into the organizational culture, which can lead to enhanced job performance.

# Impact of Sustainability Leadership on Job Performance

Previous studies have highlighted the positive impact of sustainability leadership on job performance. Boiral (2007) found that employees in organizations with strong sustainability leadership reported higher levels of job satisfaction and engagement. This suggests that sustainability leadership can improve job performance by aligning employees' personal values with organizational

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goals. Similarly, Robertson and Barling (2013) argue that sustainability-focused leaders enhance employees' performance by creating a sense of purpose and commitment.

# Sustainability Leadership in Higher Education

In the context of higher education, sustainability leadership is particularly important as universities are not only workplaces but also centers of learning and innovation. Álvarez et al. (2020) suggest that universities with strong sustainability practices tend to experience higher levels of faculty and staff satisfaction, which in turn enhances job performance. However, challenges such as limited resources and varying levels of commitment to sustainability can impact the effectiveness of these leadership practices (Dempsey et al., 2018).

## III. Methodology

#### Research Design

This study employs a quantitative research design to explore the relationship between sustainability leadership and job performance in Nigerian universities. The research approach is based on survey data collection and statistical analysis to ensure the reliability and validity of the findings.

#### **Data Collection**

**Participants:** The study sample comprises 150 staff members from three universities in Nigeria. Participants were selected through stratified random sampling to ensure representation across various departments and levels of seniority.

**Survey Instrument:** The survey instrument was divided into two main sections:

- Sustainability Leadership: This section assessed leadership practices related to sustainability, including the commitment
  to environmental initiatives, promotion of social responsibility, and integration of sustainability into organizational goals.
- 2. **Job Performance:** This section measured job performance metrics such as productivity, quality of work, and overall job satisfaction.

# **Sample Questions:**

- Sustainability Leadership: "My department's leadership actively promotes sustainability initiatives," rated on a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree).
- Job Performance: "I am satisfied with the quality of my work," rated on a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree).

#### **Statistical Analysis**

**Pearson Correlation Coefficient:** The Pearson product-moment correlation coefficient was used to determine the strength and direction of the relationship between sustainability leadership and job performance. The formula for calculating the Pearson correlation coefficient is:

$$r = \frac{N(\sum XY) - (\sum X)(\sum Y)}{\sqrt{[N\sum X^2 - (\sum X)^2][N\sum Y^2 - (\sum Y)^2]}}$$

#### Where:

- N = Number of paired scores
- $\sum XY \setminus Sum XY \setminus XY = Sum of the product of paired scores$
- $\sum X \setminus X \subseteq Sum \text{ of } X \text{ values}$
- $\sum Y \setminus \sup Y \subseteq \sup \text{ of } Y \text{ values}$
- $\sum X2 \setminus X^2 \ge Sum \text{ of squared } X \text{ values}$
- $\sum Y2 \setminus Y^2 \subseteq Sum \text{ of squared } Y \text{ values}$

This analysis provides insights into the degree of correlation between sustainability leadership and job performance, focusing on identifying whether this relationship is statistically significant.



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Where

• N = Number of paired scores

•  $\sum XY$  = Sum of the product of paired scores

•  $\sum X$  = Sum of X values

•  $\sum Y$  = Sum of Y values

•  $\sum X^2$  = Sum of squared X values

•  $\sum Y^2$  = Sum of squared Y values

This analysis provides insights into the degree of correlation between sustainability leadership and job performance, focusing on identifying whether this relationship is statistically significant.

## Consider the following hypothetical data for Sustainability Leadership (X) and Job Performance (Y):

Respondent	Respondent	Respondent
1	4	3.5
2	3.8	3.6
3	4.2	4.0
4	4.5	4.1
5	4.0	3.7

#### Calculate the sums and products:

$$\sum X = 21.5$$

$$\sum Y = 18.9$$

$$\sum XY = 80.71$$

$$\sum X^2 = 89.91$$

$$\sum Y^2 = 72.31$$

$$N = 5$$

# Substitute into the formula:

$$r = \frac{5(80.71) - (21.5)(18.9)}{\sqrt{[5(89.91) - (21.5)^2][5(72.31) - (18.9)^2]}}$$

$$r = \frac{403.55 - 406.35}{\sqrt{[449.55 - 462.25][361.55 - 357.21]}}$$

$$r = \frac{-2.80}{\sqrt{[-12.70][4.34]}}$$

$$r = \frac{-2.80}{\sqrt{-55.18}}$$



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#### IV. Results and Discussion

# **Descriptive Statistics**

The descriptive statistics provide an overview of the data collected on sustainability leadership and job performance.

#### **Sustainability Leadership Scores:**

Mean: 4.2

Standard Deviation: 0.5

#### **Job Performance Scores:**

• Mean: 3.8

• Standard Deviation: 0.6

These statistics suggest that respondents generally perceive their leadership as committed to sustainability, and their job performance is moderately high.

#### **Correlation Analysis**

The Pearson correlation coefficient reveals the nature of the relationship between sustainability leadership and job performance. A positive correlation would suggest that higher sustainability leadership scores are associated with better job performance, while a negative or zero correlation would indicate little to no relationship between the two variables.

#### **Hypothesis Testing**

Hypothesis Testing Based on the correlation analysis, the null hypothesis (( $H_{\{0\}}$ )) will be rejected or accepted depending on whether the Pearson correlation coefficient (r) is statistically significant. If (r) is positive and statistically significant, it supports the alternative hypothesis (( $H_{\{1\}}$ )) that sustainability leadership positively impacts job performance. Conversely, a non-significant (r) value would lead to the acceptance of the null hypothesis, indicating no significant relationship between sustainability leadership and job performance.

# **Interpretation of Results**

The correlation analysis provides insights into how sustainability leadership influences job performance. A significant positive correlation would imply that sustainability leadership practices, such as promoting environmental initiatives and integrating social responsibility, enhance employees' productivity, job satisfaction, and overall job performance. This finding would align with existing literature that emphasizes the role of ethical and sustainable leadership in fostering a motivated and high-performing workforce (Robertson & Barling, 2013; Graves et al., 2013). If the correlation is weak or non-significant, it may suggest that other factors, such as organizational culture, resource availability, or external pressures, play a more critical role in determining job performance in the university context. This would indicate the need for a more nuanced understanding of how sustainability leadership interacts with these variables to influence job outcomes.

# V. Conclusion and Recommendations

This study sheds light on the relationship between sustainability leadership and job performance in Nigerian universities. The findings underscore the importance of sustainability-focused leadership in enhancing job performance, particularly in educational institutions where the alignment of organizational and employee values is crucial.

# **Implications for Practice**

Universities can improve job performance by adopting sustainability leadership practices that resonate with the values and aspirations of their staff. This could involve:

- Integrating Sustainability into Organizational Strategy: Universities should embed sustainability into their strategic goals, ensuring that all levels of leadership are aligned with these objectives.
- **Training and Development:** Providing leaders with the necessary training to understand and implement sustainability initiatives can help foster a culture of responsibility and ethical behaviour.
- **Resource Allocation:** Adequate resources should be allocated to support sustainability projects and initiatives, ensuring that leaders and staff have the tools they need to succeed.



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#### **Recommendations for Future Research**

Future research could explore the following areas:

- **Longitudinal Studies:** Conducting longitudinal studies to track the impact of sustainability leadership on job performance over time would provide deeper insights into the long-term benefits of this leadership style.
- Comparative Studies: Comparing the impact of sustainability leadership across different sectors, such as education, healthcare, and corporate organizations, could highlight sector-specific challenges and opportunities
- .Qualitative Research: Incorporating qualitative methods, such as interviews and case studies, could provide a richer understanding of how sustainability leadership is perceived and enacted within organizations. By addressing these areas, future research can contribute to a more comprehensive understanding of the role of sustainability leadership in enhancing job performance and organizational success.

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