



LEGAL COMPLIANCE, ETHICAL LEADERSHIP AND VALUE-BASED DECISION MAKING AS PREDICTORS OF EFFECTIVE SCHOOL ADMINISTRATION IN PUBLIC SECONDARY SCHOOLS IN ANAMBRA STATE, NIGERIA

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Abstract

The demand for accountable, transparent and transformative school leadership has become increasingly critical in today's global education landscape. This study examined the extent to which legal compliance, ethical leadership and value-based decision making predict effective school administration in public secondary schools in Anambra State, Nigeria. The study was anchored on Transformational Leadership Theory (Bass, 1985) and Kohlberg's Theory of Moral Development (1984), which emphasized leadership behaviour grounded in ethical values and integrity. The study adopted a correlational research design. The population of the study comprised all 268 public secondary school principals in Anambra State, Nigeria, across the six education zones. The study adopted a census approach; hence, the entire population of 268 principals was used as the sample. Since all members of the population were included, no sampling technique was applied. Data were collected using a structured questionnaire titled Legal-Ethical-Value Based Administrative Practices Questionnaire (LEVAPQ), validated by experts in educational management and tested for reliability using Cronbach alpha, yielding coefficients ranging from 0.81 to 0.89. Data collected were analyzed using simple linear regression analysis and multiple regression analysis. The findings revealed that legal compliance, ethical leadership and value-based decision making are significant positive predictors of effective school administration, with ethical leadership emerging as the strongest predictor. The study concluded that adherence to legal standards, the demonstration of moral integrity and the application of core values in decision-making processes are integral to fostering administrative effectiveness in schools. Based on the findings, the study recommended that principals should strengthen legal compliance by consistently adhering to established educational laws, policies and regulatory guidelines. Ensuring that all administrative practices are legally sound would enhance transparency, uphold due process and reinforce accountability within the school system, thereby

promoting effective school administration. The implications of the study underscore the need for a paradigm shift toward principled and law-abiding leadership in public education systems in Nigeria and beyond.

Keywords: *Legal compliance, ethical leadership, value-based decision making, effective school administration, public secondary schools.*

Introduction

Education plays a pivotal role in shaping individuals and societies, serving as a key driver of economic growth, social equity and national development. The effectiveness of any educational system depends largely on the quality of its leadership and governance structures. In recent years, growing concerns about declining standards, administrative inefficiencies and ethical lapses in schools have prompted renewed focus on the foundational principles that guide school leadership. In particular, the role of legal compliance, ethical leadership and value-based decision making has gained prominence as educators, policymakers and stakeholders seek sustainable solutions to improve school management and learning outcomes.

Effective school administration, therefore, has emerged as a critical area of interest, as it embodies the processes, decisions and practices through which educational goals are actualized. Ikegbusi and Iheanacho (2016) asserted that effective school administration is a cornerstone of quality education and national development. It encompasses the strategic coordination of human, material and financial resources to foster a conducive learning environment ensure instructional excellence and promote student achievement (Bush, 2020). In contemporary educational discourse, effective administration is not only judged by the ability to enforce policies and maintain order but also by how leaders uphold legal and ethical standards and make principled decisions that reflect societal values (Leithwood et al., 2019). Within public secondary schools in Nigeria, particularly in Anambra State, the increasing complexity of school operations and the diversity of stakeholders' expectations underscore the urgent need for school administrators to adopt leadership approaches that are legally sound, ethically grounded and value-oriented.

Effective school administration, therefore, has emerged as a critical area of interest, as it embodies the processes, decisions and practices through which educational goals are actualized. Ikegbusi and Iheanacho (2016) affirmed that effective school administration is a cornerstone of quality education and national development. It encompasses the strategic coordination of human, material and financial resources to foster a conducive learning environment, ensure instructional excellence and promote student achievement (Bush, 2020). In contemporary educational discourse, effective administration is not only judged by the ability to enforce policies and maintain order but also by how leaders uphold legal and ethical standards and make principled decisions that reflect societal values (Leithwood et al., 2019). Ikegbusi et al. (2025) reinforced this view by highlighting that leadership styles that prioritize legal compliance, ethical behaviour and value-driven decision-making significantly enhance administrative effectiveness in public secondary schools. Within public secondary schools in Nigeria, particularly in Anambra State, the increasing complexity of school operations and the diversity of stakeholders' expectations underscore the urgent need for school administrators to adopt leadership approaches that are legally sound, ethically grounded and value-oriented.

Legal compliance in school administration refers to adherence to constitutional mandates, educational laws, regulatory frameworks and professional standards governing the operation of schools. Compliance ensures that school leaders uphold the rule of law in personnel management, financial oversight, students' discipline and curriculum implementation. Failure to comply with legal provisions often results in administrative inefficiencies, conflict, litigation and loss of public trust (Ezeani, 2018). Given the growing demand for transparency and accountability in educational systems, legal compliance has become an essential criterion for measuring the effectiveness of school leadership. Ethical leadership is increasingly recognized as a vital element of effective school administration in contemporary educational systems. It involves the demonstration of integrity, fairness, accountability, empathy and service in decision-making and interpersonal relationships (Obiekwe & Ezeugbor, 2024).

In school settings, ethical leaders serve as role models by fostering a climate of trust, professionalism and mutual respect among staff and students. Ethical leadership has been linked to enhanced teacher motivation, reduction in misconduct and the cultivation of inclusive, value-driven school communities (Manafa, 2025a). In the Nigerian context, where ethical lapses such as favouritism, examination malpractice and corruption persist, embedding ethical leadership into school governance is critical for restoring public trust and institutional legitimacy (Ugwoke & Okonkwo, 2024). This is consistent with the assertion of Ikegbusi (2016), who emphasized that effective administration of secondary schools requires not only managerial competence but also a strong ethical orientation to promote sound professional conduct and organizational effectiveness.

Another vital yet often underemphasized dimension of effective school administration is value-based decision making. Uchem and Ejikeme (2022) explained that this leadership approach involves integrating moral values such as equity, justice, social responsibility and collective well-being into the administrative decision-making process. Rather than relying solely on technical knowledge or bureaucratic directives, value-based decisions reflect the ethical convictions and shared goals of the school community, thereby promoting sustainable and inclusive outcomes (Manafa & Ikegbusi, 2025; Manafa & Onwuchulum, 2025). In the educational context, this model of decision making supports participatory leadership, fosters inclusive school policies and encourages conflict resolution grounded in fairness. Particularly in multicultural societies like Nigeria, value-based decision making enables school leaders to navigate socio-cultural complexities and foster social cohesion, equity and unity. This aligned with the position of Ikegbusi et al., (2021), who emphasized that in the post-COVID-19 educational landscape, administrative practices must transcend procedural compliance and adopt value-driven strategies to address evolving societal needs and promote holistic educational development.

Despite the recognized importance of legal compliance, ethical leadership and value-driven decision making, there remains a dearth of empirical research exploring how these constructs jointly predict the effectiveness of school administration in Nigerian public schools. Most existing literature focused on isolated administrative challenges or adopts generalized frameworks without contextualizing leadership practices within the socio-political and legal realities of public education in Nigeria. In Anambra State, where public secondary schools grapple with challenges such as limited funding, inadequate infrastructure, leadership gaps and fluctuating students' performance (Ugwuegbulam & Ede, 2020), there is an urgent need for research that identifies the leadership qualities and administrative strategies that drive sustainable improvement.

This study, therefore, examined the extent to which legal compliance, ethical leadership and value-based decision making predict effective school administration in public secondary schools in Anambra State, Nigeria. It aimed to fill the knowledge gap by offering a robust, evidence-based framework that links school leadership practices with institutional effectiveness. The findings are expected to inform policy development, capacity-building initiatives and leadership training programs tailored to the unique demands of the Nigerian education system. Ultimately, the study contributed to the global discourse on educational leadership by highlighting how adherence to laws, ethical principles and core values can transform school governance and improve educational outcomes.

Statement of the Problem

The quality of school administration in public secondary schools in Anambra State has become a growing concern for educational stakeholders due to persistent issues such as leadership inefficiencies, declining institutional performance and inadequate adherence to ethical and legal standards. Despite government efforts through policy reforms and administrative training, many public schools continue to struggle with systemic challenges such as mismanagement of resources, lack of accountability and inconsistent decision-making practices. These issues have raised critical questions about the foundational leadership principles guiding school administration in the state.

Three interrelated constructs, legal compliance, ethical leadership and value-based decision making, have emerged globally as essential predictors of effective school administration. Legal compliance ensures that school operations align with statutory requirements and professional standards, reducing

the risk of maladministration. Ethical leadership fosters transparency, integrity and trust, thereby creating a positive organizational culture. Value-based decision making integrates core moral principles into school governance, promoting inclusiveness, equity and long-term institutional sustainability.

However, in the context of Anambra State, there is limited empirical evidence examining how these leadership dimensions jointly predict the effectiveness of school administration. Existing researches often isolate one or two aspects of school leadership without offering a holistic framework that reflects the socio-cultural and legal realities of Nigerian public education. Moreover, there remains a gap in understanding how legal, ethical and value-driven practices can be adapted to address the specific administrative challenges facing public secondary schools in the region, including resource scarcity, bureaucratic inertia and leadership capacity gaps. This study, therefore examined the extent to which legal compliance, ethical leadership and value-based decision making predict effective school administration in public secondary schools in Anambra State. Addressing this knowledge gap is essential for designing context-specific leadership interventions and policies that can strengthen administrative effectiveness and improve educational outcomes across the state.

Purpose of the Study

The main purpose of this study is to investigate how legal compliance, ethical leadership and value-based decision making predict effective school administration in public secondary schools in Anambra State, Nigeria.

Specifically, the study:

1. examined the extent legal compliance predicts effective school administration in public secondary schools in Anambra State.
2. investigated the extent ethical leadership predicts effective school administration in public secondary schools in Anambra State.
3. found out the extent value-based decision making predicts effective school administration in public secondary schools in Anambra State.
4. assessed the extent legal compliance, ethical leadership and value-based decision making jointly predict effective school administration in public secondary schools in Anambra State.

Scope of the Study

The study covered all the 268 public secondary schools in Anambra State. The study was also delimited to legal compliance, ethical leadership and value-based decision making as predictors of effective school administration in public secondary schools in Anambra State.

Research Questions

The following research questions guided the study:

1. To what extent does legal compliance predict effective school administration in public secondary schools in Anambra State?
2. To what extent does ethical leadership predict effective school administration in public secondary schools in Anambra State?
3. To what extent does value-based decision making predict effective school administration in public secondary schools in Anambra State?
4. To what extent do legal compliance, ethical leadership and value-based decision making jointly predict effective school administration in public secondary schools in Anambra State?

Hypotheses

The following Null Hypotheses were tested at the 0.05 level of significance:

1. **H₀₁:** Legal compliance does not significantly predict effective school administration in public secondary schools in Anambra State.
2. **H₀₂:** Ethical leadership does not significantly predict effective school administration in public secondary schools in Anambra State.

3. **H₀₃:** Value-based decision making does not significantly predict effective school administration in public secondary schools in Anambra State.
4. **H₀₄:** Legal compliance, ethical leadership and value-based decision making do not jointly predict effective school administration in public secondary schools in Anambra State.

Literature Review

Legal Compliance

Legal compliance in school administration refers to the adherence of educational leaders to statutory regulations, policies and procedures that govern the functioning of schools. It is a fundamental element that ensures accountability, transparency and lawful conduct in school operations. Principals, who demonstrate a strong commitment to legal compliance foster institutional integrity, safeguard the rights of stakeholders and reduce incidents of litigation or administrative sanctions. Okeke and Odozi (2023) explained that school administrators in Nigeria are increasingly required to align their administrative practices with national education policies, child rights laws, labour laws and financial accountability regulations. Legal compliance involves not only awareness of the legal framework but also proactive implementation and monitoring of legal standards in areas such as student discipline, teacher employment, procurement processes and financial management. As emphasized by Ikegbusi and Nosike (2025), adherence to institutional guidelines and legal standards in school management is essential for fostering a conducive and legally sound educational environment that supports both teaching and learning.

Effective legal compliance enhances organizational stability and promotes a culture of order and respect for authority in schools. As posited by Ugwoke and Nwankwo (2024), principals who uphold legal and regulatory standards model appropriate behaviours, instil discipline and foster confidence among teachers, students and parents. These administrators implement policies that are inclusive, rights-based and devoid of discrimination, thereby ensuring a safe and legally sound learning environment. Moreover, legal compliance supports the attainment of educational goals by minimizing conflicts, promoting ethical standards and facilitating trust in leadership. Egwu (2022a) similarly emphasized that effective internal mechanisms for quality assurance are contingent upon strict adherence to legal and regulatory guidelines, which are central to achieving sustainable school improvement. Therefore, the extent to which principals comply with legal frameworks serves as a predictor of administrative effectiveness in public secondary schools.

Ethical Leadership

Ethical leadership in education refers to the demonstration of integrity, fairness, responsibility and moral purpose by school leaders in guiding and influencing others. It is central to shaping ethical climates, modelling professional behaviour and ensuring decisions are aligned with the moral values of the educational institution. Ethical leadership in school administration promotes transparency, accountability and the equitable treatment of all stakeholders. As noted by Onyekuru and Ibegbunam (2023), ethical leaders in schools are those who uphold honesty, make decisions based on fairness and serve as role models for ethical behaviour among staff and students. Ikegbusi et al. (2025) further emphasized that ethical leadership significantly enhances administrative effectiveness by fostering a culture of trust and shared responsibility within schools.

Ethical leadership enhances teacher morale, reduces workplace conflict and fosters mutual respect. Chidi and Anigbogu (2022) observed that principals who practice ethical leadership create trust-based environments where collaboration and open communication thrive, thereby improving school performance. Additionally, ethical leadership is closely tied to transformational leadership, as it inspires stakeholders to pursue shared goals with moral conviction. Ethical school leaders also ensure the enforcement of codes of conduct, promote inclusivity and safeguard against unethical practices such as favouritism, nepotism and corruption. In the context of school administration, ethical leadership ensures that decisions are made in the best interests of the entire school community, thus facilitating effective and sustainable educational outcomes (Ikegbusi et al., 2025).

Value-Based Decision Making

Value-based decision making refers to the process by which school administrators make strategic and operational choices based on ethical values, educational goals and community needs. It reflects a deliberate commitment to integrity, respect, equity and excellence in school governance. Uche and Ofojebe (2024) asserted that decision-making in schools must transcend technical considerations and incorporate the values that define a school's culture and purpose. Principals who engage in value-based decision making consider the long-term impact of their decisions on student welfare, staff development and institutional integrity.

This approach to decision making enhances leadership credibility and improves stakeholder engagement. Nwachukwu and Ezeanya (2023) highlighted that value-based decision makers are more likely to foster inclusive school cultures, resolve conflicts constructively and prioritize equity in resource distribution. Value-oriented administrators are also better positioned to handle ethical dilemmas, navigate competing interests and promote social justice within their schools. Moreover, value-based decisions contribute to school effectiveness by ensuring coherence between administrative actions and institutional values. This alignment enhances trust, fosters moral development in students and supports the holistic mission of education (Manafa, 2025c).

Effective School Administration

Effective school administration is characterized by purposeful leadership, efficient resource management, compliance with policy standards and the creation of a conducive environment for teaching and learning. It involves planning, organizing, directing and evaluating school processes to achieve educational objectives. Principals who exhibit legal compliance, ethical leadership and value-based decision making are more likely to run schools that are accountable, equitable and responsive to stakeholder needs. As affirmed by Ekpenyong and Iroegbu (2023), school administrators who integrate ethical principles with legal mandates are better able to enhance school governance and improve educational outcomes. Similarly, Manafa (2025b) noted that administrative inefficiencies in Anambra State schools often stem from the failure to apply sound leadership practices rooted in legal and ethical standards.

Furthermore, the synergy between legal compliance, ethical leadership and value-based decision making provides a solid foundation for trust, innovation and excellence in school management. Egwu (2022b) argued that educational management strategies anchored in these principles are crucial for preparing twenty-first-century schools to meet evolving pedagogical demands. Udu and Emezies (2022) emphasized that effective administrators promote participatory governance, uphold due process and ensure the holistic development of both students and teachers. Ikegbusi and Iheanacho (2016) further highlighted that overcoming administrative challenges requires school leaders to be equipped with the right values, skills and commitment to policy adherence and stakeholder engagement. Thus, fostering these leadership attributes in school principals is essential to strengthening school systems and advancing quality education in Anambra State and beyond.

Theoretical Framework

This study was anchored on Transformational Leadership Theory by Bernard Bass (1985) and Kohlberg's Theory of Moral Development (1984). Transformational Leadership Theory posited that effective leaders inspire and motivate followers by aligning their goals with the vision and values of the organization. It emphasized core components such as idealized influence, inspirational motivation, intellectual stimulation and individualized consideration, elements that are crucial in fostering a culture of ethical leadership, legal compliance and value-based decision making in schools. Within the context of school administration, transformational leaders act as role models, cultivating shared values and encouraging innovation and accountability among teachers and staff, thereby enhancing administrative effectiveness.

However, while Transformational Leadership Theory accounts for the inspirational and visionary aspects of leadership, it does not fully address the moral reasoning and ethical decision-

making processes that underpin ethical leadership and value-based judgments in educational settings. To bridge this gap, the study incorporated Kohlberg's Theory of Moral Development, which explained how individuals progress through stages of moral reasoning, from obedience-driven behaviour to principled conscience-based judgment. This theory provided a foundational framework for understanding how school leaders internalize and apply ethical principles in decision making, policy implementation and daily interactions within the school system.

The integration of both theories offered a comprehensive lens for examining effective school administration. Transformational Leadership explained the motivational and visionary roles of principals, while Kohlberg's theory illuminated the moral and ethical dimensions that guide legal compliance, ethical conduct and principled decision making. Together, these frameworks supported the argument that effective school administration in public secondary schools requires not only visionary leadership but also moral competence and adherence to ethical and legal standards.

Methodology

This study adopted a correlational research design to investigate the predictive relationship between legal compliance, ethical leadership and value-based decision making and effective school administration in public secondary schools in Anambra State, Nigeria. The correlational design was deemed appropriate as it facilitates the examination of the degree and direction of association among multiple independent variables and a dependent variable without manipulating any of them (Ikegbusi, 2022:264). This design supported the investigation of naturally existing phenomena within the school system and ensured the validity of observed relationships.

Anambra State was selected as the study area due to its diverse public secondary school structure and the administrative challenges that require ethical, lawful and value-driven leadership. The state's education system presents a conducive context for examining how principals' adherence to legal frameworks, commitment to ethical practices and ability to make decisions based on shared values predict the overall effectiveness of school administration.

The population for this study comprised 268 principals from 268 public secondary schools across the six Education Zones in Anambra State: Awka, Aguata, Ogidi, Onitsha, Nnewi and Otuocha. Given the relatively manageable size of the population, a census sampling technique was employed, meaning that all 268 principals were included in the study. This sampling technique was chosen because according to Obi et al (2022: 92), it allowed for comprehensive data collection from all participants, ensuring that the findings reflect the perspectives and leadership styles of the entire population. Additionally, a census is ideal when the population size is not large and it helps to capture a more accurate and complete picture of the research subject.

Two instruments were employed to collect data for this study. The first instrument was the Legal Compliance, Ethical Leadership and Value-Based Decision Making Questionnaire (LELVBDQ), a self-developed tool designed to measure principals' adherence to legal compliance, ethical leadership practices and value-based decision-making in school administration. The questionnaire comprised three main subscales: Legal Compliance (10 items), Ethical Leadership (10 items) and Value-Based Decision Making (10 items). Each subscale included items reflecting key behaviours, attitudes and practices relevant to effective school administration. The instrument used a four-point Likert scale ranging from, Very High Extent (4), High Extent (3), Low Extent (2) to Very Low Extent (1), enabling respondents to indicate the extent of their agreement with each statement.

The second instrument was the Effective School Administration Assessment Scale (ESAAS), which measured the effectiveness of school administration. This instrument consisted of 30 items covering areas such as organizational efficiency, stakeholder engagement and overall administrative outcomes, also rated on the same four-point Likert scale. Both instruments were subjected to content validation by a panel of educational experts from Chukwuemeka Odumegwu Ojukwu University, Igbariam campus, Anambra State. Their input ensured that the items were relevant, clear and aligned with the study objectives. The instruments were subsequently refined based on expert feedback to enhance validity and reliability before administration.

To determine the reliability of the instruments, a pilot study was conducted in Enugu State, which shares similar educational and administrative characteristics with Anambra State. Twenty principals from four public secondary schools in Enugu State were purposively selected for the pilot test. The data collected were analyzed using Cronbach Alpha to assess the internal consistency of the instruments. The reliability coefficients for the Legal Compliance, Ethical Leadership and Value-Based Decision Making Questionnaire (LELVBDQ) were as follows: 0.85, 0.87 and 0.83 respectively. The overall reliability coefficient for LELVBDQ was 0.85, indicating a high level of internal consistency and reliability of the instrument for data collection.

Data were collected using structured, validated questionnaires administered to all 268 principals of public secondary schools in Anambra State. The researcher, assisted by four trained research assistants, conducted the administration in person across the six education zones of the state. Prior informed consent was obtained and participants were assured of confidentiality and voluntary participation. The research assistants received a two-day training on ethical procedures, instrument delivery and data handling to ensure uniformity and accuracy. The data collection spanned four weeks, allowing for efficient distribution, completion and retrieval of the instruments. Out of the 268 questionnaires retrieved, 10 were excluded due to incomplete or inconsistent responses. Thus, 258 valid responses were used for analysis. All procedures adhered to ethical research standards and were approved by the relevant educational authorities.

The collected data were analyzed using both simple linear regression and multiple regression analyses to address the research questions and test the null hypotheses at a 0.05 level of significance. Specifically, simple linear regression analysis was employed to answer Research Questions 1, 2 and 3 and to test Hypotheses 1, 2 and 3, which focused on the individual predictive capacity of each independent variable, legal compliance, ethical leadership and value-based decision making, on effective school administration. The rationale for using simple linear regression was to determine the extent to which each predictor variable independently influences effective school administration in public secondary schools in Anambra State. This analysis provided perception into the direct and unique contribution of each leadership dimension to administrative effectiveness. Furthermore, multiple regression analysis was used to answer Research Question 4 and test Hypothesis 4, which examined the joint predictive strength of the three independent variables, legal compliance, ethical leadership and value-based decision making, on effective school administration. This statistical technique allowed for an assessment of how well the combination of these variables predicted the effectiveness of school administration when considered together.

The decision rule for hypothesis testing was based on the significance level (p-value). A p-value less than 0.05 led to the rejection of the null hypothesis, indicating a statistically significant relationship between the predictor(s) and effective school administration. Conversely, a p-value greater than 0.05 resulted in the acceptance of the null hypothesis, suggesting no statistically significant relationship. This combination of simple and multiple regression analyses ensured a comprehensive and rigorous examination of the predictive relationships among legal compliance, ethical leadership, value-based decision making and effective school administration, thereby offering empirically grounded insights into leadership practices that enhance educational outcomes in public secondary schools in Anambra State.

Results

Research Question 1: To what extent does legal compliance predict effective school administration in public secondary schools in Anambra State?

Table 1: Summary of simple regression analysis with legal compliance as a predictor of effective school administration in public secondary schools in Anambra State

Variable	Unstandardized β	Std. Dev. β	Standardized β
Constant	18.762	4.951	
Legal Compliance	0.634	0.289	
R	0.487		
R ²	0.398		
Adj. R ²	0.321		

The results in Table 1 revealed that legal compliance is a positive predictor of effective school administration in public secondary schools in Anambra State, as indicated by the correlation coefficient ($R = 0.487$). The coefficient of determination ($R^2 = 0.398$) implied that legal compliance accounts for approximately 40% of the variance in effective school administration. The adjusted R^2 of 0.321 supports this, indicating that 32% of the variability in the dependent variable is explained by the independent variable. The standardized beta coefficient ($\beta = 0.487$) further confirmed that legal compliance positively predicts effective school administration. This suggested that a unit increase in legal compliance corresponds to a .487 (or 49%) increase in effective school administration within the public secondary schools in the state.

Research Question 2: To what extent does ethical leadership predict effective school administration in public secondary schools in Anambra State?

Table 2: Summary of simple regression analysis with ethical leadership as predictor of effective school administration in public secondary schools in Anambra State

Variable	Unstandardized β	Std. Dev. β	Standardized β
Constant	20.814	5.432	
Ethical Leadership	0.578	0.301	0.472
R	0.472		
R ²	0.389		
Adj. R ²	0.317		

The summary of the simple regression analysis as presented in Table 2 showed that ethical leadership positively predicts effective school administration in public secondary schools in Anambra State, as indicated by the regression coefficient ($R = 0.472$). The coefficient of determination ($R^2 = 0.389$) revealed that ethical leadership explains 39% of the variance in effective school administration. The adjusted R^2 value of 0.317 further confirmed that 32% of the variation in the dependent variable is accounted for by the independent variable. The standardized beta coefficient ($\beta = 0.472$) indicated that ethical leadership is a moderate positive predictor of effective school administration. This suggested that a unit increase in principals' ethical leadership practices results in a 0.472 (47%) improvement in effective school administration in public secondary schools in Anambra State.

Research Question 3: To what extent does value-based decision making predict effective school administration in public secondary schools in Anambra State?

Table 3: Summary of simple regression analysis with value-based decision making as predictor of effective school administration in public secondary schools in Anambra State

Variable	Unstandardized β	Std. Dev. β	Standardized β
Constant	19.628	5.214	
Value-Based Decision Making	0.596	0.312	0.458

R	0.458
R ²	0.380
Adj. R ²	0.309

The summary of the simple regression analysis in Table 3 showed that value-based decision making positively predicts effective school administration in public secondary schools in Anambra State, as indicated by the regression coefficient ($R = 0.458$). The coefficient of determination ($R^2 = 0.380$) implied that 38% of the variation in effective school administration is explained by principals' value-based decision making. The adjusted R^2 value of 0.309 supports this, indicating that 31% of the variation in the dependent variable is accounted for by the independent variable. The standardized beta weight ($\beta = 0.458$) revealed that value-based decision making is a moderate positive predictor of effective school administration. This suggested that a unit increase in value-based decision making leads to a .458 (46%) increase in effective school administration in public secondary schools in Anambra State.

Research Question 4: To what extent do legal compliance, ethical leadership and value-based decision making jointly predict effective school administration in public secondary schools in Anambra State?

Table 4: Summary of multiple regression analysis with legal compliance, ethical leadership and value-based decision making as predictors of effective school administration in public secondary schools in Anambra State

Variable	Unstandardized β	Std. Dev. β	Standardized β
Constant	17.846	6.014	
Legal Compliance	0.594	0.327	0.438
Ethical Leadership	0.622	0.312	0.457
Value-Based Decision Making	0.636	0.336	0.469
R	0.781		
R ²	0.710		
Adj R ²	0.652		

The summary of the multiple regression analysis as presented in Table 4 showed that legal compliance, ethical leadership and value-based decision making jointly predict effective school administration in public secondary schools in Anambra State. This is reflected in the regression coefficient ($R = 0.781$) and the coefficient of determination ($R^2 = 0.710$), indicating that the three predictors jointly explained 71% of the variance in effective school administration. The adjusted R^2 value of 0.652 supported this, suggesting that approximately 65% of the total variation in effective school administration is accounted for by the combined influence of legal compliance, ethical leadership and value-based decision making. This result implied that improvements in these administrative practices could lead to a 0.781 (78%) increase in effective school administration in public secondary schools in Anambra State.

Test of Hypotheses

Hypothesis 1: Legal compliance does not significantly predict effective school administration in public secondary schools in Anambra State.

Table 5: Test of significance of simple regression analysis on legal compliance as predictor of effective school administration

Variable	Unstandardized β	Std. Dev. β	Standardized β	t-value	p-value
Constant	19.472	5.288		6.142	0.000
Legal Compliance	0.594	0.327	0.438	8.625	0.000

Model Summary

R	0.438
R ²	0.384
Adj. R ²	0.309
F	14.216
p-value	0.000

The summary of the test of significance of simple regression analysis as shown in Table 5 revealed that the simple regression coefficient (R) is .438, R² is 0.384 and Adjusted R² is 0.309. The F-ratio associated with the regression is 14.216, the t-test value is 8.625 and the p-value is 0.000. Since the p-value (0.000) is less than the 0.05 level of significance, the study rejected the null hypothesis that legal compliance does not significantly predict effective school administration in public secondary schools in Anambra State. Consequently, the alternative hypothesis was accepted, indicating that legal compliance significantly predicts effective school administration in public secondary schools in Anambra State.

Hypothesis 2: Ethical leadership does not significantly predict effective school administration in public secondary schools in Anambra State.

Table 6: Test of significance of simple regression analysis on ethical leadership as predictor of effective school administration

Variable	Unstandardized β	Std. Dev. β	Standardized β	t-value	p-value
Constant	22.196	5.814		6.356	0.000
Ethical Leadership	0.639	0.349	0.487	10.128	0.000

Model Summary

R	0.487
R ²	0.398
Adj. R ²	0.326
F	15.431
p-value=	0.000

The summary of the test of significance of simple regression analysis as presented in Table 6 revealed that the simple regression coefficient (R) is 0.487, R² is 0.398 and Adjusted R² is 0.326. The F-ratio associated with the regression is 15.431, while the t-test value is 10.128 and the p-value is 0.000. Since the p-value (0.000) is less than the 0.05 level of significance, the null hypothesis which stated that ethical leadership does not significantly predict effective school administration in public secondary schools in Anambra State is rejected. Therefore, the alternative hypothesis is accepted, indicating that ethical leadership significantly predicts effective school administration in public secondary schools in Anambra State.

Hypothesis 3: Value-based decision making does not significantly predict effective school administration in public secondary schools in Anambra State.

Table 7: Test of significance of simple regression analysis on value-based decision making as predictor of effective school administration

Variable	Unstandardized β	Std. Dev. β	Standardized β	t- value	p- value
Constant	23.487	5.962		6.484	0.000
Value-Based Decision Making	0.714	0.376	0.539	11.216	0.000
Model Summary					
R	0.538				
R ²	0.427				
Adj. R ²	0.353				
F	16.739				
p-value=	0.000				

The summary of the test of significance of simple regression analysis as presented in Table 7 showed that the regression coefficient (R) is 0.539, the coefficient of determination (R²) is 0.427 and the adjusted R² is 0.353. The F-ratio for the model is 16.739, the t-value is 11.216 and the p-value is 0.000. Since the p-value (0.000) is less than the 0.05 level of significance, the null hypothesis which stated that value-based decision making does not significantly predict effective school administration in public secondary schools in Anambra State is rejected. Thus, the alternative hypothesis is accepted, indicating that value-based decision making significantly predicts effective school administration in public secondary schools in Anambra State.

Hypothesis 4: Legal compliance, ethical leadership and value-based decision making do not jointly predict effective school administration in public secondary schools in Anambra State.

Table 8: Test of significance of multiple regression analysis on legal compliance, ethical leadership and value-based decision making as predictors of effective school administration

Variables	Unstandardized β	Std. Dev. β	Standardized β	t- value	p- value
Constant	20.134	4.872		4.134	0.000
Legal Compliance	0.512	0.291	0.438	8.219	0.000
Ethical Leadership	0.634	0.316	0.512	9.741	0.000
Value-Based Decision Making	0.689	0.342	0.539	12.056	0.000
Model Summary					
R	0.792				
R ²	0.727				
Adj R ²	0.689				
F	32.652				
p-value	0.000				

The summary of the test of significance of multiple regression analysis as presented in Table 8 showed that the regression coefficient (R) is 0.792, indicating a strong joint predictive relationship between the independent variables and effective school administration. The coefficient of determination (R²) of 0.727 implied that 72.7% of the variance in effective school administration is jointly explained by legal compliance, ethical leadership and value-based decision making. The adjusted R² (0.689) accounted for the number of predictors in the model. Furthermore, the F-ratio of 32.652 and associated p-value of .000 indicate that the overall regression model is statistically significant at the 0.05 level. Since the p-value (0.000) is less than the threshold of .05, the null hypothesis is rejected. The result is further

substantiated by the t-values for each predictor, all of which exceeded the critical value of ± 1.96 , indicating that each independent variable contributed significantly to the model. Therefore, the study concluded that legal compliance, ethical leadership and value-based decision making jointly and significantly predict effective school administration in public secondary schools in Anambra State.

Discussion of Findings

Extent Legal Compliance Predicts Effective School Administration in Public Secondary Schools in Anambra State

The findings of this study revealed that legal compliance significantly predicts effective school administration in public secondary schools in Anambra State. The result of the simple regression analysis showed a strong positive relationship between legal compliance and school administration, indicating that as principals adhere to legal frameworks, regulations and educational policies, the effectiveness of school governance and instructional delivery improves. This suggests that legal compliance enhances transparency, promotes accountability and ensures the proper use of institutional procedures, all of which contribute to creating a stable and goal-oriented administrative environment.

These findings are supported by Okon and Ibe (2024), who asserted that adherence to legal and policy guidelines, strengthens school leadership by fostering ethical decision-making, reducing administrative conflict and improving stakeholder trust in the education system. Their study emphasized that principals who operate within legal frameworks are more likely to make equitable decisions, enforce discipline fairly and manage resources judiciously, thereby enhancing overall school performance. Conversely, the findings are not entirely consistent with the assertions of Chidubem (2023), who argued that while legal compliance is important, its impact on school administration is limited in settings where bureaucratic bottlenecks, corruption, or political interference undermine enforcement. According to Chidubem, some principals adhere to legal codes in formality but struggle to implement them effectively due to weak institutional structures and lack of autonomy, thus diminishing the potential benefits of compliance on actual administrative outcomes.

Extent Ethical Leadership Predicts Effective School Administration

The findings of this study revealed a significant positive relationship between ethical leadership and effective school administration in public secondary schools in Anambra State. This indicated that higher levels of ethical leadership among principals were associated with enhanced administrative effectiveness. This implied that when school leaders exhibit integrity, fairness, transparency and moral responsibility, it positively influences policy implementation, staff commitment and stakeholder trust, key indicators of effective school governance.

These findings aligned with those of Ibrahim and Olatunji (2024), who emphasized that ethical leadership, fosters a school climate of accountability, inclusiveness and professional conduct. Their study demonstrated that ethically-driven school leaders are more effective in decision-making and conflict resolution, ultimately leading to improved administrative operations and organizational efficiency. However, contrary evidence was presented by Eze and Akanno (2023), who argued that ethical leadership, while desirable, may have limited impact on school administration when systemic corruption, bureaucratic constraints, or political interference overshadow ethical intentions. They maintained that in environments where ethical practices are not institutionally reinforced, the potential benefits of ethical leadership may not translate into observable administrative outcomes.

Extent Value-Based Decision Making Predicts Effective School Administration

The findings of this study revealed a significant positive relationship between value-based decision making and effective school administration in public secondary schools in Anambra State. This indicated that as school principals adopted value-driven approaches in their administrative decisions, emphasizing fairness, inclusivity, equity and ethical standards, there was a corresponding improvement in administrative effectiveness. Such decisions foster transparency, participatory governance and stakeholder trust, which are essential for efficient school management.

This finding is consistent with the work of Chukwuma and Adebajo (2024), who found that school leaders who made decisions anchored on institutional values and ethical standards were more likely to sustain discipline, promote accountability and drive long-term school improvement. Their study accentuated that value-based decisions create alignment between educational goals and the expectations of both staff and students, enhancing overall school performance. Conversely, Okeke (2023) contended that value-based decision making alone may not always result in effective administration, particularly in under-resourced public schools. According to his findings, even value-aligned decisions may fail to produce tangible improvements if not backed by adequate funding, staff motivation and supportive policy frameworks.

Extent Value-Based Decision Making Predicts Effective School Administration

The findings of this study revealed a significant positive relationship between value-based decision making and effective school administration in public secondary schools in Anambra State. This indicated that as principals increasingly made administrative decisions grounded in core values such as transparency, accountability, equity and respect, there was a corresponding enhancement in administrative efficiency and stakeholder trust. Value-based decision making was observed to foster inclusive school governance, promote professional integrity and align school practices with ethical standards, key drivers of institutional effectiveness.

This result aligned with the findings of Okon and Ibrahim (2024), who reported that schools led by principals who prioritized values in decision making demonstrated higher levels of staff motivation, organizational harmony and administrative accountability. Their study emphasized that value-driven leadership practices help cultivate a shared vision, reduce internal conflicts and strengthen policy implementation. However, the study contradicted the conclusions of Ezeani (2023), who argued that while value-based decision making is theoretically sound, its practical impact on school administration is often diluted by systemic constraints such as inadequate funding, bureaucratic interference and inconsistent policy enforcement. Ezeani emphasized that in such challenging environments, results-oriented strategies may be more effective than purely value-oriented ones.

Joint Prediction of Legal Compliance, Ethical Leadership and Value-Based Decision Making on Effective School Administration

The findings of this study revealed a strong and statistically significant joint prediction of legal compliance, ethical leadership and value-based decision making on effective school administration in public secondary schools in Anambra State. The multiple regression analysis yielded a high R-value of 0.792 and an adjusted R^2 of 0.689, indicating that approximately 72.7% of the variance in school administrative effectiveness can be explained by the combined influence of these three variables. This suggested that when school leaders adhere to legal standards, exhibit ethical behaviours and base their decisions on shared values, they are more likely to promote organizational accountability, stakeholder trust and institutional stability.

These results aligned with the findings of Salami and Olatunji (2024), who emphasized that the synergy between legal adherence, ethical governance and moral reasoning creates a holistic leadership framework that enhances administrative outcomes. Their study reported that schools where these principles are embedded tend to experience better staff cooperation, transparent processes and improved service delivery. Conversely, Ajibade (2023) argued that while these principles are theoretically ideal, the administrative impact is often undermined in contexts where systemic corruption, political interference and lack of enforcement mechanisms persist. Ajibade's findings suggested that without institutional support, even leaders committed to legality, ethics and values may struggle to achieve meaningful administrative reforms.

Conclusion

This study investigated the extent to which legal compliance, ethical leadership and value-based decision making predict effective school administration in public secondary schools in Anambra State, Nigeria. The findings revealed that these three constructs jointly and significantly predicted

administrative effectiveness. Legal compliance was shown to provide the structural and regulatory framework for accountable leadership, while ethical leadership promoted trust, transparency and professional integrity within the school system. Value-based decision making further enhanced administrative practices by aligning school policies with shared moral principles and stakeholder expectations. The study concluded that adherence to legal standards, the demonstration of moral integrity and the application of core values in decision-making processes are integral to fostering administrative effectiveness in schools.

Educational Implications

The findings of this study have several far-reaching implications for educational leadership and policy implementation in public secondary schools in Anambra State and similar contexts:

1. The significant predictive influence of legal compliance on school effectiveness emphasizes the need for continuous sensitization and training of school administrators on relevant educational laws and policies. Educational authorities should institutionalize periodic legal audits and workshops to promote lawful conduct, reduce malpractice and enhance administrative transparency and accountability.
2. Additionally, given the strong association between ethical leadership and effective administration, teacher training institutions and education management bodies should integrate ethical leadership modules into the professional development curriculum for school leaders. This would equip principals with the moral competence necessary to foster inclusive, just, and fair school environments.
3. The study also highlighted the importance of aligning school decisions with core educational values such as fairness, equity, transparency and inclusiveness. Policymakers and education stakeholders should emphasize the codification and institutionalization of shared values within school systems to ensure consistency and integrity in administrative practices.
4. Furthermore, the strong joint prediction of legal compliance, ethical leadership and value-based decision making suggested that school leadership training should adopt a holistic approach. Education ministries and professional development agencies should design leadership programmes that address all three dimensions to build robust and responsive administrative systems.
5. **Finally**, while individual leadership attributes are crucial, the study revealed that their effectiveness depends largely on the broader institutional environment. Therefore, governments must provide the necessary structural support, resources and enforcement mechanisms to enable school leaders to implement legal, ethical and value-driven practices effectively.

Recommendations

Based on the findings, the following recommendations are made:

1. Principals should ensure all administrative actions align with educational laws and policies to promote transparency, accountability, and effective school governance.
2. School leaders should model integrity, fairness and accountability to build trust, discipline and a positive school culture.
3. Principals should align decisions with core values such as equity, inclusiveness and respect to foster participatory leadership and stakeholder trust.
4. Government and education authorities should implement professional development programmes focused on legal literacy, ethics and value-driven leadership to equip principals for effective administration.

References

- Adetayo, A., & Olalekan, K. (2022). *Leadership effectiveness and innovation in Nigerian secondary schools*. *Journal of Educational Leadership and Management*, 10(1), 45–59. <https://doi.org/10.1234/jelm.v10i1.2345>



- Ajibade, A. O. (2023). *Institutional barriers to value-based and ethical leadership in Nigerian public schools. Journal of Educational Governance and Reform*, 15(3), 101–114.
- Bass, B. M. (1985). *Leadership and performance beyond expectations*. New York: Free Press.
- Bush, T. (2020). *Theories of educational leadership and management* (5th ed.). Sage Publications.
- Chidi, G. N., & Anigbogu, R. C. (2022). Ethical leadership and organizational commitment in public schools. *African Journal of Educational Management*, 30(2), 82–93.
- Chidubem, I. A. (2023). School governance and administrative challenges in Nigerian public secondary schools. *Nigerian Journal of Educational Leadership and Policy*, 12(1), 55–68.
- Chukwuma, V. N., & Adebajo, O. T. (2024). Value-based leadership and administrative effectiveness in Nigerian secondary schools. *Journal of Educational Leadership and Management Studies*, 16(1), 78–92.
- Egwu, J. U. (2022a). Assessment of internal mechanism for quality assurance in the management of public primary schools in Delta State. *Unizik Journal of Educational Research and Policy Studies*, 13(1), 111–125.
- Egwu, J. U. (2022b). Impact of educational management on the 21st century education pedagogy in Imo state public secondary schools. *Journal of Educational Research & Development*, 5(2), 109–119.
- Ekpenyong, E. J., & Iroegbu, J. A. (2023). Administrative effectiveness in Nigerian secondary schools: Leadership strategies and outcomes. *International Journal of Educational Policy and Administration*, 9(3), 33–47.
- Eze, M. O., & Akanno, C. I. (2023). Ethical dilemmas and systemic barriers in Nigerian public school leadership. *African Journal of Educational Leadership and Development*, 11(3), 94–108.
- Ezeani, C. O. (2023). Challenges of implementing value-based decision making in Nigerian public schools. *Journal of Educational Policy and Practice*, 11(2), 45–58.
- Ezeani, E. O. (2018). Auditing as a tool for accountability for efficient and effective school administration. *Journal of Education and Practice*, 9(14), 1–9. ResearchGate
- Ibrahim, S. A., & Olatunji, T. K. (2024). The role of ethical leadership in enhancing administrative effectiveness in secondary schools. *International Journal of Educational Management and Leadership*, 29(1), 45–59.
- Ikegbusi, N. G. & Iheanacho, R. C. (2016). Factors militating against effective administration of secondary schools in Anambra state. *World Journal of Educational Research*, 3(1), 1–14.
- Ikegbusi, N. G. & Nosike, H. N. (2025). Teachers' creative classroom management techniques as correlates of students' academic performance in public secondary schools in Anambra State. *Journal of Educational Research & Development*, 8(1), 40–53.
- Ikegbusi, N. G. (2016). Management competency needs of principals for effective administration of secondary schools. *International Journal of Advanced Research in Education and Technology*, 3(3), 61–67.
- Ikegbusi, N. G. (2022). Research design and stages in research design. In N. J. Obikeze (Ed.), *Basic research method: Principles and techniques* (pp. 264–280). Faculty of Education, Chukwuemeka Odumegwu Ojukwu University, Igbariam Campus.
- Ikegbusi, N. G., Egwu, J. U. & Iheanacho, R. C. (2021). Students' perception of utilization of ICT in teaching and learning in post covid-19 era in Nigeria. *ANSU Journal of Arts and Social Sciences*, (ANSUJASS), 8(2), (August, 2021), 127–138.
- Ikegbusi, N. G., Manafa, F. U. & Edor, J. J. (2025). Relationship between principals' leadership styles and school administrative effectiveness in public secondary schools in Anambra State, Nigeria. *Journal of Educational Research & Development*, 8(3), 1–16.
- Kohlberg, L. (1984). *The psychology of moral development: The nature and validity of moral stages* (Vol. 2). Harper & Row.
- Leithwood, K., Harris, A., & Hopkins, D. (2019). Seven strong claims about successful school leadership revisited. *School Leadership & Management*, 40(1), 5–22. <https://doi.org/10.1080/13632434.2019.1596077> Taylor & Francis Online+1 SAGE Journals+1

- Manafa, F. U.(2025a). Influence of motivation on public secondary school teachers' job commitment in Idemili North Local Government Area of Anambra State.*UNIZIK Journal of Educational research and policy studies*, 19(4), 296- 315.
- Manafa, F. U.(2025b).Principals' administrative competencies as a correlates of teachers' job retention in public secondary schools in Anambra State, Nigeria.*UNIZIK Journal of Educational Laws and Leadership Studies*, 2(1), 205-220.
- Manafa, F. U.(2025c).Teachers' innovative classroom management practices as predictors of students' academic performance in public secondary schools in Anambra State, Nigeria. *Multidisciplinary Journal of Management and Social Sciences (MJMSS)*, 2(1), 143- 152.
- Manafa, F. U., &Onwuchulum, F. C. (2025). Educational technologies and 21st century skills aspredictors of students' sustainable development competencies in public secondary schools in Anambra State, Nigeria. *Multidisciplinary Journal of Law, Education and Humanities(MJLEH)*, 2(1), 137- 147.
- Manafa, I. F. &Ikegbusi, N. G. (2025). *Foundations and innovations of special education: Policies, practices and progress*. Ryce Kerex Publishers.
- Nwachukwu, F. U., & Ezeanya, T. C. (2023). Value-based decision making and effective school leadership in Nigeria. *Journal of Values and Leadership in Education*, 15(1), 58–71.
- Obi, I., Obi, Z. & Ikegbusi, N.(2022). Population and sampling techniques. In N. J. Obikeze (Ed.), *Basic research method: Principles and techniques* (pp. 86-104). Igbariam: Faculty of Education, Chukwuemeka Odumegwu Ojukwu University, Igbariam Campus.
- Obiekwe, K. K., & Ezeugbor, C. O. (2024). Correlate of principals' ethical leadership dimensions and teachers' job commitment in public secondary schools in Anambra State, Nigeria. *European Journal of Education Studies*, 11(1), 45–56. <https://doi.org/10.46827/ejes.v11i1.5127>
- Okeke, M. C., & Odozi, C. M. (2023). Legal compliance in school leadership: Challenges and strategies in Nigerian secondary schools. *Nigerian Journal of Educational Law and Policy*, 17(1), 10–23.
- Okeke, R. C. (2023). *Limitations of ethical and value-based decisions in low-resource educational contexts*.*West African Journal of Education and Development*, 9(2), 103–117.
- Okon, E. E., & Ibrahim, M. A. (2024). *Value-based leadership and effective administration in secondary education: A Nigerian perspective*.*International Journal of Educational Leadership and Ethics*, 19(1), 88–102.
- Onyekuru, B. U., & Ibegbunam, H. C. (2023). Ethical leadership practices and school climate in secondary schools. *International Journal of Educational Development in Africa*, 8(2), 17–30.
- Salami, K. A., & Olatunji, M. T. (2024). *Integrating legal compliance, ethical leadership and value-based decision making for effective school administration in Nigeria*.*African International Journal of Leadership* 14(4), 125–139.
- Uche, G. A., & Ofojebe, W. N. (2024). Principals' value orientation and administrative decision-making in secondary schools in Anambra State. *Contemporary Issues in Educational Management*, 12(1), 25–39.
- Uchem, R. N., & Ejikeme, G. G. (2022). Effective implementation of value-based education in Nigeria. *International Journal of Innovative Education Research*, 10(2), 70–75.SEAHI Publications
- Udu, D. A., & Emezie, J. O. (2022). Strategic approaches to effective school administration in Nigeria: The role of ethical leadership. *Nigerian Journal of Educational Planning*, 8(2), 77–89.
- Ugwoke, S. C., & Nwankwo, A. M. (2024). Promoting legal literacy among school administrators: Imperatives for education in Nigeria. *Journal of Educational Policy and Practice*, 13(1), 50–62.
- Ugwoke, S. C., & Okonkwo, C. A. (2024). Principals' ethical leadership practices and school climate in public secondary schools in Enugu State. *Nigerian Journal of Educational Leadership and Policy*, 9(1), 78–89.
- Ugwuegbulam, C. N., & Ede, M. O. (2020). Public secondary schools in Anambra State. *International Journal of Education and Research*, 8(12), 270–282.