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I have the honour of introducing the inaugural issue of the *LASU Journal of Multidisciplinary Nigerian Studies (LASUJMNS)*, Volume 1, Number 1 (December 2025). This maiden publication represents a significant step in the commitment of Lagos State University to advancing rigorous, multidisciplinary scholarship focused on Nigerian realities.

LASUJMNS was established to provide a credible academic platform for high-quality research that interrogates the social, economic, political, educational, cultural, and technological frameworks in Nigeria. The journal responds to the growing need for scholarly work that moves beyond single-discipline approaches and offers integrated, evidence-based perspectives capable of informing policy, practice, and public discourse.

As a peer-reviewed, biannual, open-access journal, LASUJMNS is committed to academic excellence, ethical publishing, and accessibility. All submissions undergo a rigorous double-blind peer review process in line with international best practices and the principles of the Committee on Publication Ethics (COPE). Only original, methodologically sound, and relevant manuscripts are considered for publication.

The articles featured in this inaugural issue reflect the multidisciplinary scope and scholarly standards of the journal. They address contemporary Nigerian issues across key sectors, which offers insightful analyses, empirical findings, and practical implications that contribute meaningfully to national development discussions.

I sincerely appreciate the dedication of the Editorial and Advisory Boards, the professionalism of our reviewers, and the confidence of the authors who contributed to this first volume. Their collective efforts have laid a strong foundation for the journal. On behalf of the Editorial Board, I invite scholars, policymakers, and practitioners to engage with this issue and to partner with us in building a vibrant platform for multidisciplinary Nigerian studies.

Prof. M. O. B. Mohammed, FNAEAP

Editor-in-Chief

LASU Journal of Multidisciplinary Nigerian Studies (LASUJMNS)

Lagos State University.

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COGNITIVE, TECHNICAL, INTERPERSONAL SKILLS AND LEADERSHIP EFFECTIVENESS OF PUBLIC SENIOR SECONDARY SCHOOL PRINCIPALS IN LAGOS STATE, NIGERIA

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Abstract

This study examined the relationship between principals' leadership skills—specifically cognitive, technical, and interpersonal skills—and their leadership effectiveness in public senior secondary schools in Lagos State, Nigeria. The study was prompted by the persistent decline in students' academic performance and the perceived inadequacies in school management, which may be attributed to the leadership competencies of school principals. Guided by the skills approach to leadership, the study adopted a correlational research design. A sample of 1,052 principals and teachers was drawn from public senior secondary schools across Lagos State using a stratified random sampling technique. Data were collected using validated instruments that measured cognitive, technical, and interpersonal skills as well as leadership effectiveness. Data analysis was conducted using the Pearson Product Moment Correlation (PPMC) to test the hypotheses at 0.05 level of significance. The results revealed a significant positive relationship between principals' cognitive skills and leadership effectiveness ($r = .371, p < .05$), between technical skills and leadership effectiveness ($r = .370, p < .05$), and between interpersonal skills and leadership effectiveness ($r = .377, p < .05$). These findings indicate that the more proficient principals are in these leadership skill domains, the more effective they are in achieving expected school outcomes. The study concludes that effective school leadership depends largely on the integration of cognitive, technical, and interpersonal skills. It recommends that principals be exposed to continuous professional development programmes that enhance these competencies to improve school management and student outcomes.

Keywords:

Cognitive skill, Technical skill, Interpersonal skill, Leadership Effectiveness, Senior Secondary School Principals

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Introduction

Education is widely regarded as the key that unlocks personal and national development, serving as the foundation upon which all other rights and powers are built. Across Africa, and particularly in Nigeria, there is an increasing awareness of the indispensable role of education in achieving sustainable development. Education remains the bedrock of modernity, scientific advancement, and technological innovation—reasons why nations across the world accord it immense priority (Abdulrasheed & Salihu-Bello, 2015). Guided by the principles of the

National Policy on Education (2004), Nigeria strives to provide quality and affordable education for all citizens. Among the various levels of education, secondary education occupies a strategic position. It is the bridge between primary and tertiary education and is administered by principals who serve as key leaders within the school system (Abdulrasheed & Salihu-Bello, 2015).

Educational research in school management has consistently emphasized the pivotal role of the principal as a leader. Consequently, school leadership has become a central focus of educational policy and reform initiatives globally (Akinola, 2013). Effective school leadership significantly influences school outcomes by shaping teacher motivation, instructional quality, and the overall learning environment. Researchers affirm that the leadership of secondary school principals is crucial for improving educational performance and achieving quality service delivery (Yukl, 2006).

In relation to education sector, leadership refers to the interaction among individuals or groups towards the assignment of some pre-determined educational goals. It involves the process of directing and coordinating the activities and efforts of pupils, non-teaching and teaching staff towards the attainment of educational objectives for which schools are established (Ekpoh & Akeke, 2017). Effective educational leadership profoundly affects the planning, organization, and implementation of school policies and programmes. Thus, the attainment of educational objectives largely depends on the quality of leadership provided. In the face of rapid and unprecedented global changes especially those resulting from the COVID-19 pandemic, educational leaders must be dynamic, resourceful, creative, and skillful to ensure continued effectiveness.

The principal, as the leader of a secondary school, bears the primary responsibility for managing all aspects of school operations and ensuring that the institution adapts to change while maintaining desired standards and outcomes. Leadership effectiveness refers to the extent to which a principal achieves expected school outcomes through the application of appropriate leadership skills. Such outcomes include students' academic achievement, teacher productivity, staff motivation, clear articulation of school vision, effective resource allocation, maintenance of safe and conducive learning environments, and the development of organizational structures that support teaching and learning. The effectiveness of educational leaders is therefore tied to the acquisition and application of relevant leadership skills. The absence of such skills diminishes both the leader's success and the school's overall performance (Hosseinpour, Tamimi, Hosseinpour, Hashami, & Jafarzadeh, 2014). Successful school management requires a blend of skills and the ability to understand people and situations, integrating appropriate leadership behaviours accordingly (Pant & Baronti, 2008).

A skilled and competent principal is one who effectively utilizes available resources to achieve educational goals. Leadership skills can be defined as the acquired abilities that enable a leader to produce desired results efficiently, often with optimal use of time and energy. These skills can be learned and developed through training and experience. The skills approach to

leadership, as identified in various studies, emphasizes that leadership effectiveness can be cultivated through learning and exposure to relevant experiences.

Robert Katz identified three major abilities/skills that a leader should have to be effective namely cognitive, technical and inter-personal skills. According to Robert Katz, skills are what leaders can accomplish (Harvard Business Review, 2015). Cognitive skill is ability to work with ideas and concepts. Cognitive skill is the most fundamental of the leadership skills. Cognitive skill requires a sound mental ability to coordinate and integrate the interests and activities of the organisation towards achieving a specific objective. A principal's perception of the workings of the various components as a whole and how a change in any one can affect the entire system requires a high level of intelligence (Abari & Mohammed, 2006). A leader with sound cognitive skill should be able to conceptualize a problem at first glance and immediately evolve a process of diagnosis and therapy that would enable him to quickly get to the root of the problem through data collection, observation and analysis, and consequently, come up with a solution (Abari & Mohammed, 2006). Variables for measuring cognitive skill include remembering, understanding, application, analysis, evaluation, and creation (Emporia State University, n.d.).

Technical skill is proficiency, based on specific knowledge, in a particular area of work. Technical skill refers to the ability of the principal to use tools, methods, processes, procedures and techniques in a specialized field to perform a task (Abari & Mohammed, 2006). For example, the use of certain computer software packages for teaching and learning and also, the use of online administrative tools to enhance remote learning due to the pandemic (covid-19) being experienced around the world which has placed limitations on assessing physical school facilities. A school principal will require more of the technical skill because he is concerned with the day to day running of the school enterprise (Abari & Mohammed, 2006). Technical skill requires mastery in the use of special tools and techniques and practical competence in behaviour and activity. Leaders often learn these skills through education and training courses which are characterized by knowledge, techniques and methods for planning, budgeting, controlling, accounting, finance, personnel, business, and so on. Technical skills needed for educational leaders are educational assessment, training tips, techniques and teaching methods and techniques of administrative and financial education (Mohammad, Omolbanin, Ali, Hassan, Seyed & Mehrdad, 2015). Variables used to measure technical skills are naturalization (displaying high level of proficiency), articulation, precision, manipulative and imitative tendencies of the principal. (Emporia State University, n.d.).

Interpersonal skill is knowledge about the ability to work with people. It is quite different from technical skill, which has to do with working with *things* (Harvard Business Review, 2015). Interpersonal skills are people skills. They are the abilities that help a leader to work effectively with subordinates, peers, and superiors to accomplish the organization's goals. Leaders with interpersonal skills adapt their own ideas to those of others. Furthermore, they create an atmosphere of trust where employees feel comfortable and secure and where the employees feel encouraged to become involved in the planning of things that will affect them. Human

skills are important to school leaders at all levels. Upper-level administrators (superintendents) must use these skills to deal effectively with school boards, with groups outside of the school district, and with subordinate administrators. Middle-level administrators (principals) need human skills to manage individuals from a wide variety of departments or subject matter areas, other technical experts (such as counselors, social workers, school psychologists, and department heads), and to interact productively with upper-level administrators. First-level supervisors (department heads, team leaders) must use human skills to challenge, motivate and coordinate the work of teachers who are responsible for the education of the students. Variables to measure in determining the level of interpersonal skill are receptiveness, response, valuing (behaviour consistent with a single belief), organization (commitment to a set of values) and characterization (behaviour displayed consistent with one's value) (Emporia State University, n.d.).

Principals as leaders who are in a position to influence others must have the skills that make them take advantage of that position (Akinola, 2013). It could be said that leadership effectiveness depend on the competence of a principal and to be competent as school leaders, principals need the requisite leadership skills. This study, therefore, examines the relationship between principals' cognitive, technical, and interpersonal skills and their leadership effectiveness in public senior secondary schools in Lagos State, Nigeria.

State of the Problem

In recent times, the academic achievement of students in Nigerian secondary schools has become a major concern to parents, teachers, policymakers, and education stakeholders. Several studies (United Nations Educational, Scientific and Cultural Organization [UNESCO], 2000; Awwalu & Yusof, 2012) have documented a persistent decline in the quality and efficiency of secondary school education in Nigeria. This decline has continued to hinder the realization of school success and the broader goals of secondary education (Federal Ministry of Education [FME], 2005). Aina (2011) further observed that many secondary school principals lack essential leadership competencies, resulting in poor instructional quality, staff and student indiscipline, and general administrative inefficiency. These recurring challenges have continued to undermine the effectiveness of principals as instructional leaders and administrators. It is possible that the persistent decline in school performance may be attributed, at least in part, to principals' inadequate possession or ineffective application of essential leadership skills—specifically, cognitive, technical, and interpersonal skills. The extent, to which these skills influence principals' leadership effectiveness, either individually or collectively, remains an area that requires further empirical investigation. This study, therefore, seeks to examine the relationship between principals' cognitive, technical, and interpersonal skills and their leadership effectiveness in public secondary schools in Lagos State, Nigeria. The findings are expected to provide valuable insights into how principals can enhance their leadership competencies to improve school outcomes and educational quality.

Hypotheses

1. There is no significant relationship between Cognitive skill and leadership effectiveness of Principals in Public Senior Secondary Schools in Lagos state
2. There is no significant relationship between Technical skill and leadership effectiveness of Principals in Public Senior Secondary Schools in Lagos state
3. There is no significant relationship between Interpersonal skill and leadership effectiveness of Principals in Public Senior Secondary Schools in Lagos state

Methodology

The descriptive and correlational designs were adopted for this study; the population comprises all principals in public senior secondary schools in the six Education Districts in Lagos State. Study sample was drawn on cluster basis from the six Education Districts in Lagos State. Ten schools were purposively chosen from each Education District taking into consideration the schools in which the principals have spent not less than five years making a total of 60 schools which were sampled. In each sampled school, 20 teachers were purposively selected. Therefore, a total of 200 teachers were sampled from each education district making a grand total of 1,200 teachers being selected. Two instruments developed by the researcher titled: Principal Leadership Skill Questionnaire (PLSQ) and Principal Leadership Effectiveness Questionnaire (PLEQ) were used for data collection from the respondents. The instruments were subjected to content validity using the expert opinion method while that reliability was determined using Cronbach Alpha which yielded a reliability index of 0.83 and 0.88 respectively for PLSQ and PLEQ. The data collected through the instruments were subjected to statistical analyses using correlation and descriptive research designs. The scores in the instruments were analyzed by graphical representations, percentages, descriptive statistics, Correlational Matrix (R-values) and Pearson Product-Moment Correlation Statistics, using Statistical Package for Social Sciences (SPSS). The formula used to calculate the Pearson Product-Moment Correlation Statistics is given by:

Findings

H₀₁: There is no significant relationship between Cognitive skill and leadership effectiveness of Principals in Public Senior Secondary Schools in Lagos state

Results presented in Table I show that there is a moderate positive relationship between cognitive skills and leadership effectiveness ($r = 0.371$, $N = 1052$, $p < 0.05$). This implies that principals with higher cognitive skills tend to demonstrate higher levels of leadership effectiveness. Given that the p-value (.000) is less than the 0.05 level of significance, the null hypothesis — which states that there is no significant relationship between cognitive skills and leadership effectiveness of public senior secondary school principals in Lagos State — is rejected. It is therefore concluded that there exists a significant relationship between cognitive skills and leadership effectiveness among public senior secondary school principals in Lagos State. The descriptive statistics revealed that principals had a mean score of 79.72 ($SD = 10.503$) in leadership effectiveness and 76.34 ($SD = 7.971$) in cognitive skills, indicating generally high levels of both variables among the respondents.

Table 1 Pearson Correlation between Cognitive Skill and Leadership effectiveness of Principals

Variable Decision	Mean	SD	N	df	r	p	Rmks
LE	79.72	10.503	1052	1050	.371	.000	Sig Reject H ₀₁
Cognitive Skills	76.34	7.971					

A Pearson Product Moment Correlation (PPMC) analysis was conducted to determine the relationship between technical skills and leadership effectiveness of public senior secondary school principals in Lagos State, Nigeria. The result presented in Table 2 show a moderate positive relationship between technical skills and leadership effectiveness ($r = 0.370$, $N = 1052$, $p < 0.05$). This indicates that principals who possess higher levels of technical skills tend to demonstrate higher levels of leadership effectiveness. The positive correlation suggests that as principals' technical skills increase, their leadership effectiveness also improves. Given that the p-value (.000) is less than the 0.05 level of significance, the null hypothesis — which states that there is no significant relationship between technical skills and leadership effectiveness of public senior secondary school principals in Lagos State — is rejected. Therefore, there is a statistically significant relationship between technical skills and leadership effectiveness among public senior secondary school principals in Lagos State. The descriptive statistics show that principals had a mean score of 79.72 ($SD = 10.503$) in leadership effectiveness and 78.12 ($SD = 11.003$) in technical skills, indicating that both variables were generally high among the respondents.

H₀₂: There is no significant relationship between Technical skill and leadership effectiveness of Principals in Public Senior Secondary Schools in Lagos state

Table 2 Pearson Correlation between Technical Skills and Leadership Effectiveness of Principals

Variable Decision	Mean	SD	N	df	r	p	Rmks
LE	79.72	10.503	1052	1050	.370	.000	Sig Reject H ₀₂
Technical Skills	78.12	11.003					

The result revealed a moderate positive relationship between interpersonal skills and leadership effectiveness ($r = 0.377$, $N = 1052$, $p < 0.05$, 2-tailed). This indicates that principals who exhibit stronger interpersonal skills tend to be more effective in their leadership roles. The positive correlation implies that as principals' interpersonal skills improve, their level of leadership effectiveness also increases. Since the p-value (.000) is less than the 0.05 level of significance,

the null hypothesis — which states that there is no significant relationship between interpersonal skills and leadership effectiveness of public senior secondary school principals in Lagos State — is rejected. Thus, there is a statistically significant relationship between interpersonal skills and leadership effectiveness among the principals. Descriptive statistics further show that the principals obtained a mean score of 79.72 (SD = 10.503) in leadership effectiveness and 84.25 (SD = 13.321) in interpersonal skills, indicating generally high ratings in both variables across the sample. This is depicted in Table 3

H_03 : There is no significant relationship between Interpersonal skill and leadership effectiveness of Principals in Public Senior Secondary Schools in Lagos state

Table 3 Pearson Correlation between Interpersonal Skill and Leadership Effectiveness of Principals

Variable Decision	Mean	SD	N	df	r	p	Rmks
L E	79.72	10.503	1052	1050	.377	.000	Sig Reject H_03
Interpersonal Skills	84.65	13.231					

In table, results indicated a moderate positive correlation between the two variables ($r = 0.377$, $df = 1050$, $N = 1052$). The associated probability value is $p < .05$, which is less than the 0.05 level of significance. This implies that the observed relationship did not occur by chance. Given that the p-value is statistically significant, the null hypothesis is rejected. This study therefore concludes that interpersonal skills have a significant relationship with leadership effectiveness of principals in public senior secondary schools in Lagos State.

Discussion of Findings

The result of the first analysis revealed a moderate, positive, and significant relationship between cognitive skills and leadership effectiveness among public senior secondary school principals in Lagos State. This finding suggests that principals who possess higher levels of cognitive ability tend to perform more effectively in their leadership roles. In essence, the ability to think critically, analyze complex situations, and make sound judgments contributes significantly to a principal's overall leadership performance. The study also shows that principals possess cognitive skill that have impact on their effectiveness as leaders as perceived by the teachers based on their training in tertiary institutions, development on the job through in-service trainings, the experience acquired as they rose through the ranks and file in the secondary school setting and training provided by the state government on appointment as principals. This finding corroborates earlier studies which established that cognitive competence is a strong determinant of effective leadership, particularly in educational settings where strategic planning, decision-making, and problem-solving are essential. The result is supported by Akinola, (2013) who stated that the possession of cognitive skill by principals

lead to the promotion of a healthy school climate, fosters collaboration and communication around instruction, influences academic press of the school and as a result, has positive impact on leadership effectiveness. This result is in consistency with the work of Mojtaba R., Hadi A., Mohammad S. G., Eman S. (2013) who states that a leader with cognitive skill is comfortable talking about the ideas that shape an organization and the intricacies involved. The moderate correlation coefficient indicates that while cognitive skills substantially influence leadership effectiveness, other factors such as emotional intelligence, interpersonal relationships, and administrative experience may also play vital roles. Therefore, continuous professional development programmes that enhance principals' cognitive and analytical capacities could further strengthen their leadership effectiveness in managing schools and promoting quality education delivery in Lagos State.

The second findings revealed a moderate, positive, and significant relationship between technical skills and leadership effectiveness among public senior secondary school principals in Lagos State. This finding implies that principals who possess strong technical competencies — such as planning, organizing, supervising, and implementing educational programmes are more likely to be effective leaders. The moderate strength of the correlation suggests that technical skills are an important, though not the sole, determinant of leadership effectiveness. Effective school leadership requires a blend of technical proficiency with other competencies such as cognitive and human relations skills. Principals who are technically skilled are better positioned to interpret educational policies, utilize instructional technologies, and ensure efficient school administration, thereby enhancing their leadership outcomes. This is affirmed by the works of Pant & Barondi (2008); Afshari , Honari , & Ghafouri (2010); Gentry W.A., Harris, L.S., Baker B.A. & Leslie J.B., (2008) and Gladson & Augustine (2008); who affirmed that leaders with a higher level of technical skills can better understand the knowledge, tools, techniques and the resources needed to understand and achieve organizational goals and make better use of them as well. This finding aligns with established leadership theories which emphasize that technical competence forms the foundation for managerial efficiency, particularly in education systems that demand accountability and innovation. Consequently, professional development initiatives aimed at improving principals' technical capacities are vital for sustaining effective leadership practices and promoting quality education across public secondary schools in Lagos State.

The third discussion revealed a moderate, positive, and statistically significant relationship between interpersonal skills and leadership effectiveness among public senior secondary school principals in Lagos State. This finding implies that principals who are better at building relationships, communicating effectively, and understanding the emotions and needs of others tend to perform better as leaders. Interpersonal skills — such as empathy, communication, collaboration, and conflict resolution are essential for effective leadership, particularly in educational institutions where human interaction is constant and diverse. The moderate correlation coefficient indicates that while interpersonal skills play an important role in leadership effectiveness, they function alongside other competencies such as cognitive and technical skills. This result aligns with the human relations theory of management, which

emphasizes that effective leadership depends largely on the leader's ability to maintain positive relationships with subordinates and stakeholders. Principals with strong interpersonal abilities are more likely to inspire teachers, foster teamwork, and create a supportive school climate, which in turn enhances organizational performance and student outcomes. This result is further strengthened by the findings of Namvaran, Rabavi and Avarsin (2013) that there is a positive and significant relationship between the human skill and the effectiveness of the managers from the viewpoint of the teachers. It can be inferred that leaders who are interpersonally skilled are well equipped to listen attentively and self-monitor, or adjust their own behavior to better fit situations. Therefore, by assembling the circumstances of reinforcing the inter-personal skill and interaction with people, the leaders' effectiveness can be improved. Therefore, the finding underscores the importance of continuous capacity building for school principals in interpersonal communication, staff motivation, and conflict management to sustain effective leadership practices in Lagos State secondary schools.

It is noteworthy that the interpersonal skill is considered the most important skill among the identified skills in this study. This is evident in its impact on effectiveness of the leader as compared with cognitive and technical skills. The interpersonal skill has 14.21% while cognitive and technical skills had 13.7% and 13.6% respectively. The work of Pant and Barondi (2008) supports the result of this finding that the interpersonal skill is more important than technical skill. While the technical and cognitive skills required at different management levels vary, a common index that has the same importance at all levels is the interpersonal skill. Interpersonal skill is important at all levels of management because nothing can be achieved without working well with people.

Conclusion

This study examined the relationship between principals' cognitive, technical, and interpersonal skills and their leadership effectiveness in public senior secondary schools in Lagos State, Nigeria. Using the Pearson Product Moment Correlation (PPMC) analysis, the findings revealed that all three skill dimensions — cognitive, technical, and interpersonal — have a moderate, positive, and statistically significant relationship with leadership effectiveness. The implication of these findings is that effective school leadership is not determined by a single attribute but by the harmonious combination of intellectual ability, professional competence, and relational capacity. Principals who possess sound cognitive abilities are better positioned to make informed decisions; those with strong technical skills are more capable of managing administrative tasks and implementing educational policies effectively; and those with excellent interpersonal skills foster positive relationships, motivate teachers, and sustain a collaborative school climate. Overall, the study concludes that the development of effective leadership among school principals depends on a balanced integration of cognitive, technical, and interpersonal skills, validating the relevance of Katz's three-skill model of leadership within the context of Nigeria's educational system. The study therefore emphasizes the need for leadership preparation and professional development programmes that holistically strengthen these three core competencies to enhance school performance and educational quality in Lagos State and beyond.

Recommendations

Based on the findings of this study, the following recommendations are made:

1. Capacity Building in Leadership Skills: The Ministry of Education and the Teaching Service Commission (TESCOM) should design and implement continuous leadership training programmes that specifically target the development of principals' cognitive, technical, and interpersonal skills to improve leadership effectiveness.
2. Review of Appointment Criteria for Principals: The selection and appointment of school principals should go beyond years of service and academic qualifications to include assessments of leadership competencies, such as decision-making ability, technical proficiency, and interpersonal communication.
3. Integration of Leadership Development in Teacher Education: Leadership and management training modules emphasizing the three-skill dimensions should be incorporated into teacher education and professional development curricula, preparing teachers for future leadership responsibilities.
4. Mentorship and Peer Learning Networks: Experienced and high-performing principals should be encouraged to mentor upcoming school leaders through peer learning and professional communities, promoting practical sharing of knowledge and skill-based leadership practices.
5. Monitoring and Evaluation Framework: Education authorities should establish a systematic monitoring and evaluation mechanism to assess how leadership skill development impacts school effectiveness, student achievement, and staff morale over time.
6. Further Research: Future studies should explore the combined predictive power of cognitive, technical, and interpersonal skills on leadership effectiveness using advanced statistical methods such as regression or structural equation modeling. Similar studies could also be extended to private schools or tertiary institutions for comparative analysis.

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