European Journal of Education Studies
ISSN: 2501 - 1111
ISSN-L: 2501 - 1111
Available online at: www.oapub.org/edu

DOI: 10.46827/ejes.v12i2.5830 Volume 12 | Issue 2 | 2025

A STRUCTURAL EQUATION MODEL ON EFFECTIVENESS OF PUBLIC ELEMENTARY SCHOOL AS PREDICTED BY PRINCIPAL RELATIONAL LEADERSHIP, STRATEGIC PLANNING AND THEIR FINANCIAL MANAGEMENT

Rey M. Ramos[1i],
Lyndon A. Quines[2]
[1]Doctor of Education,
Major in Educational Management,
University of Mindanao Professional Schools,
Davao City, Philippines
Teacher III,
GSC Elementary School for the Arts,
Apopong, General Santos City,
Philippines
[2]University Professor, EdD,
University of Mindanao Professional Schools,
Davao City, Philippines

Abstract:
This study aimed to determine the best-fit model for school effectiveness as influenced by relational leadership, strategic planning, and financial management of school heads in public elementary schools of Region XII. This research employed a structural equation model (SEM) with 400 respondents from Sarangani, General Santos, Koronadal, and South Cotabato divisions who comprised the sample through stratified random technique. Moreover, the employed adapted survey questionnaires underwent modifications, and reliability and validity tests. This descriptive and causal investigation employed statistical measures such as mean, standard deviation, Pearson product-moment correlation, and structural equation model (SEM). Results indicated high levels of relational leadership among school heads, characterized by active, positive, and aware behaviors. Strategic planning, involving stakeholders, communication, and a clear vision and mission, was also rated very high, as was financial management based on experience, education, and training of school heads. School effectiveness—measured by school climate, administration, teacher quality, community relationships, and educational practices—was significantly correlated with relational leadership, strategic planning, and financial management. Model 3 was identified as the best-fit model, highlighting relational leadership as a core factor in driving school effectiveness, with strategic planning and financial management as important mediators. The study suggests that

[i] Correspondence: email r.ramos.528796@umindanao.edu.ph

integrating these factors is crucial for enhancing school performance and offers insights for educational policymakers in the Department of Education to design programs that bolster the effectiveness of public elementary schools.

SDG #4: Quality Education

Keywords: educational management, structural equation modeling, school effectiveness, relational leadership, strategic planning, financial management, teachers, Philippines

1. Introduction

School effectiveness is currently a prime issue in school leadership where institutions are being coerced into measurable performance without resources (Bush & Glover, 2019). Poor funding, mainly in low-income regions, restricts access to resources and negatively influences performance (Baker *et al.*, 2020). Studies argue that strategies applied must be flexible and data-driven, especially during pandemics like COVID-19 (Duff, 2021). Collaborative learning represents a promise to contribute toward closing achievement gaps because social and economic differences significantly influence academic outcomes, contributing to the under-resourced nature of disadvantaged schools for effective teaching practices. Successful implementation calls for policies that involve various school contexts and stakeholders (Antoniou *et al.*, 2019).

Thus, addressing these interconnected issues is essential to improve educational outcomes and foster thriving learning environments. School effectiveness spans academic achievement, social-emotional development, and preparation for future success (Harris & Jones, 2019). Effective schools address educational disparities, promote a positive climate, and prepare students for future success by fostering strong relationships and valuing diverse needs. Modern frameworks, emphasizing student well-being and creativity, take a holistic approach over traditional metrics, supporting a more inclusive and dynamic education system (Teddlie & Reynolds, 2019; Ball & Collet-Sabé, 2021).

Further, research indicates a positive relationship between relational leadership and school effectiveness. Woods and Roberts (2019) demonstrate that relational and distributed leadership cultivates trust and shared responsibility, which boosts engagement and autonomy—essential elements for meeting the diverse needs of schools. In South Africa, Baxter and Cornforth (2019) highlight that relational leadership enhances school effectiveness by building trust, bridging socio-economic gaps, and fostering both individual and collective efficacy. Likewise, Smit and Mabusela (2019) contend that an ethics-centered, culturally responsive approach is particularly beneficial in under-resourced schools, promoting adaptability and inclusivity. As cited by Kiram & Guhao (2023) Principals are vital for effective curriculum implementation, improving instructional quality, and boosting student achievement (Ghavifekr *et al.*, 2019).

Successful schools require principals who delegate power and responsibility to teachers. This delegation necessitates creativity in establishing a framework that promotes shared accountability, collaboration and empowers teachers to take charge of their own professional development.

In addition, Strategic planning is crucial in the improvement of schools' effectiveness. According to various research studies, this strategy shows positive effects on performance indicators, resource utilization, and stakeholder satisfaction. The longitudinal study by Thompson *et al.* (2019) had a strong correlation of strategic planning with school performance. On the other hand, Gitonga *et al.* (2019) demonstrated the benefits of this strategy in primary schools in Kenya, showing better results for students and better teachers. Similarly, US high schools with an effective strategic plan have improved graduation rates, attendance, and test scores (Smith *et al.*, 2020). Teachers agree that it plays a part in improving student performance but also argue that there should be increased stakeholder involvement (Kwaslema *et al.*, 2021). Moreover, the leadership styles such as transformational and transactional leadership influence work engagement positively, thereby strengthening the relationship between leadership and organizational effectiveness (Li *et al.*, 2018; Ferrando & Guhao, 2024). It then underscores the importance of strategic planning in aligning resources with objectives to achieve educational success.

Further, the research underscores the pivotal role of financial management in enhancing school effectiveness. Udo and Inyang (2019) found a significant positive correlation between sound financial management practices and school effectiveness indicators, such as student performance, resource allocation, and stakeholder satisfaction in Nigerian schools. Similarly, Munge *et al.* (2019) demonstrated that transparent and efficient financial practices, including budgeting and accountability, improve academic outcomes and resource distribution in Nakuru County, Kenya. Complementing these findings, Wango and Gatere (2019) emphasized that robust financial practices—particularly budgeting, financial reporting, and auditing—enhance school performance by optimizing resource utilization. Together, these studies highlight how effective financial management contributes to a conducive learning environment and improved educational outcomes.

There is a gap in how relational leadership, strategic planning, and financial management work out together in public elementary schools, given the intricacy of each factor. Most research emphasizes isolated variables without providing an overall impact of interaction on school outcomes (Muthoni *et al.*, 2019). Though relational leadership is known to have effects, there is less quantitative study on how it interacts with strategic planning and financial practices in shaping effectiveness (Kocak & Nartgun, 2019). Moreover, much of the literature available is region-specific, thus reducing its applicability to different educational settings (Udo & Inyang, 2019). The reliance on cross-sectional studies also limits insights into the dynamic effects of leadership styles, planning, and financial management over time, which underscores the need for

longitudinal research (Wango & Gatere, 2019). These gaps suggest opportunities for more integrative and comprehensive studies to address these limitations.

This study addresses a current and pressing issue in educational leadership that impacts a large population of students. The methods and focus could provide actionable findings that might inform efforts to improve public elementary education through enhanced relational leadership, strategic planning, financial management, and school effectiveness. The urgency stems from the very important role that effective early public education plays in the lives of students and communities. By looking at critical aspects of administration and resource allocation, overall, this research aims to yield practical knowledge to help strengthen elementary school systems and the educational experiences they provide.

This study determined the best fit structural model on relational leadership, strategic planning formation process, and financial management on school effectiveness in public elementary schools in Region XII. Specifically, it intends to achieve the following objectives: First, it will describe the effectiveness in public elementary schools in terms of relational leadership of school heads being: active, passive, unaware, aware, positive, and negative. Further, it will determine the strategic planning process of school heads in terms of stakeholder involvement, communication, vision, and mission. In addition, the study aims to ascertain the school head's financial management through the school head's experience, the school head's educational level, and the school head's training. Moreover, school effectiveness is measured through school climate, school administration, the teacher, relationship with the local community, and educational practices. Additionally, the significant relationship between the school head's relational leadership, strategic planning, financial management and school effectiveness is established. Finally, the study aims to identify the best-fit model for the effectiveness of public elementary schools in relation to relational leadership, strategic planning processes, and financial management.

Moreover, the following null hypotheses of this study were tested at a 0.05 level of significance. This paper hypothesized that there is no significant relationship exists between relational leadership and school effectiveness within public elementary schools. In addition, the analysis explored whether there is no link between the strategic planning and school effectiveness. Further, it investigated whether financial management has no significant correlation with school effectiveness. Lastly, this study hypothesized that there is no best-fit model that predicts school effectiveness across public elementary schools in Region XII.

Further, research on school effectiveness is crucial for improving education systems. It helps enhance student outcomes, informs policy decisions, identifies best practices, addresses inequalities, enhances accountability, optimizes resource allocation, and supports teacher development. By understanding what factors contribute to successful schools, policymakers and educators can implement evidence-based strategies to improve academic achievement, social-emotional development, and long-term success

for students. This research also guides the allocation of resources, helps address disparities in educational opportunities, and informs teacher training programs. Ultimately, insights from school effectiveness studies drive meaningful improvements in educational quality and equity.

This study draws on the "Integrated School Leadership and Resource Management Theory" (ISLRM) by Myran and Sutherland (2019), which links relational leadership, strategic planning, and financial management to school effectiveness. ISLRM asserts that effective leadership combines relationship-building with stakeholders, strategic planning, and sound financial management, aligning resources with educational goals. Relational leadership promotes a positive school culture, enhancing commitment to strategic plans, while financial management supports instructional quality and student outcomes. Additionally, this study uses the educational effectiveness model by Creemers and Kyriakides (2008), which considers student, classroom, school, and contextual factors, emphasizing teaching quality, assessment, and progress tracking, along with the influence of home and community on student success.

Moreover, this study integrates several supporting theories. The Differentiated Model of School Effectiveness by Jaap Scheerens (1990) posits that school effectiveness hinges on student composition (socioeconomic background, ability, motivation) and school processes (practices, climate, leadership). It emphasizes strong instructional leadership, high academic expectations, an orderly environment, and basic skills, offering a framework to enhance school quality and student outcomes through both external influences and internal practices.

In the same way, The Effective Schools Model by Lawrence W. Lezotte (1980s) identifies seven key characteristics: strong instructional leadership, clear mission, safe environment, high expectations, frequent student progress monitoring, positive home-school relations, and focused learning time. Implementing these correlates improves student academic outcomes, influencing school reform efforts by enhancing overall performance and effectiveness.

According to Bastasa and Guhao (2024), Hobfoll's (1989) Conservation of Resource Theory places political skills among the critical assets that enhance their contribution to desirable leader-member exchange (LMX) relationships in educational institutions. School leaders rely on political skills to facilitate their navigation through complex interpersonal dynamics inherent in school environments, building trust, communication, and collaboration among staff and other stakeholders. By using political astuteness, leaders are best placed to strategize resource use, reduce potential conflicts, and align team objectives with institutional aims. This eventually leads to an optimistic organizational climate, staff motivation, and, ultimately, school performance. In addition, political skills provide leaders with a capacity to champion their schools' interests in extra-institutional environments, including resource mobilization and support for institutional success. Thus, the interaction of political skills with LMX relationships

highlights their key role in leading systemic changes and sustainable development within educational contexts (Hobfoll, 1989; Bastasa & Guhao, 2024).

In this study, the researcher develops a hypothesized model that will be tested for best fit in public elementary schools in Region XII. It has two types of latent constructs, namely exogenous and endogenous variables. According to theories and studies, the conceptual paradigm indicates the direct influence of exogenous variables such as relational leadership, strategic planning, and financial management on the endogenous variable, school effectiveness in public elementary schools. Relational leadership focuses on building workplace relationships to achieve shared goals and is measured by indicators such as being active, passive, aware, unaware, positive, and negative. Empirical evidence supports its significance; for instance, Song and Ko (2021) found that relational leadership behaviors like empathy and respect in South Korean companies enhanced employee creativity by fostering psychological safety. This demonstrates that relational leadership can create environments where individuals feel secure to take risks and innovate, highlighting its value in promoting both individual and organizational growth.

In addition, Principals who adopt relational leadership emphasize positive relationships and collaborative decision-making, fostering greater teacher input and buy-in (Levin & Mor Barak, 2023). These leaders promote open communication and inclusivity, enhancing group decision-making quality on key school issues. Relational leadership also prioritizes strong interpersonal connections within the organization, creating environments grounded in sincerity, trust, and respect (Caballero & Guhao Jr., 2020; Ozden, 2014; Taymaz, 2013, as cited by Quines & Relacion, 2022). This approach underscores the role of school members in cultivating a supportive and participative culture.

The second exogenous variable, the strategic planning formation process, involves defining an organization's vision, setting objectives, and determining their priority order for achieving the vision. It will be assessed through stakeholders' involvement, communication, vision, and mission. Effective strategic planning must prioritize adaptability in rapidly changing environments. Bustamante (2022) emphasizes the need for resilience and leadership capacity to adjust plans as conditions evolve, given the pace of technological and social changes. Similarly, Agostino *et al.* (2021) found that frequent review and adjustment of strategic plans significantly contributed to growth in startups, underscoring the importance of flexibility in strategic processes.

Further, strategic planning requires cross-organizational participation that goes beyond the traditional hierarchical approach and taps into diverse internal stakeholders' insights. Organizations can improve information sharing, resource coordination, and shared commitment to strategic decisions by engaging multiple organizational members through collaborative goal-setting and environmental scanning (Mason, 2020). Strategic leadership is not a plan but the long-term vision development, proper allocation of resources, and enabling of change agents who would anticipate future needs and ensure

organizational adaptability. Such an approach changes strategic planning from being top-down and prescriptive to dynamic and inclusive, hence strengthening organizational resilience and strategic alignment (Blas & Guhao, Jr, 2023).

Next, the third exogenous variable is financial management. Financial management serves as a guide for organizations and individuals making financial decisions that impact their current and future financial security. Financial management will be evaluated in terms of: School head's experience; School head's educational level; School head's training. Effective financial management is critical for school administrators to ensure sufficient allocation and utilization of funds towards school operations, programs, and student learning (Holmes & Parker, 2019). According to Mestry (2019), principals play a key role in financial planning and management in schools. They are responsible for budget preparation, financial control and monitoring, procurement, resource allocation, and ensuring compliance with policies and regulations.

However, many principals lack the necessary knowledge, skills, and experience in school financial management, which remains a critical area of concern (Ngcamu, 2019). In a study of 80 principals in South Africa, weaknesses were identified in budget planning, control, and reporting. Principals highlighted the lack of financial management training as a key obstacle. To address this issue, the study recommended the implementation of ongoing professional training programs aimed at building financial leadership capacities among school administrators. Similarly, a 2021 survey in the Philippines by Scamel (2021) found that transparency and accountability in financial management, coupled with principal competence, were among the top factors influencing parent trust in schools. These findings emphasize the importance of financial stewardship in strengthening school-community relationships.

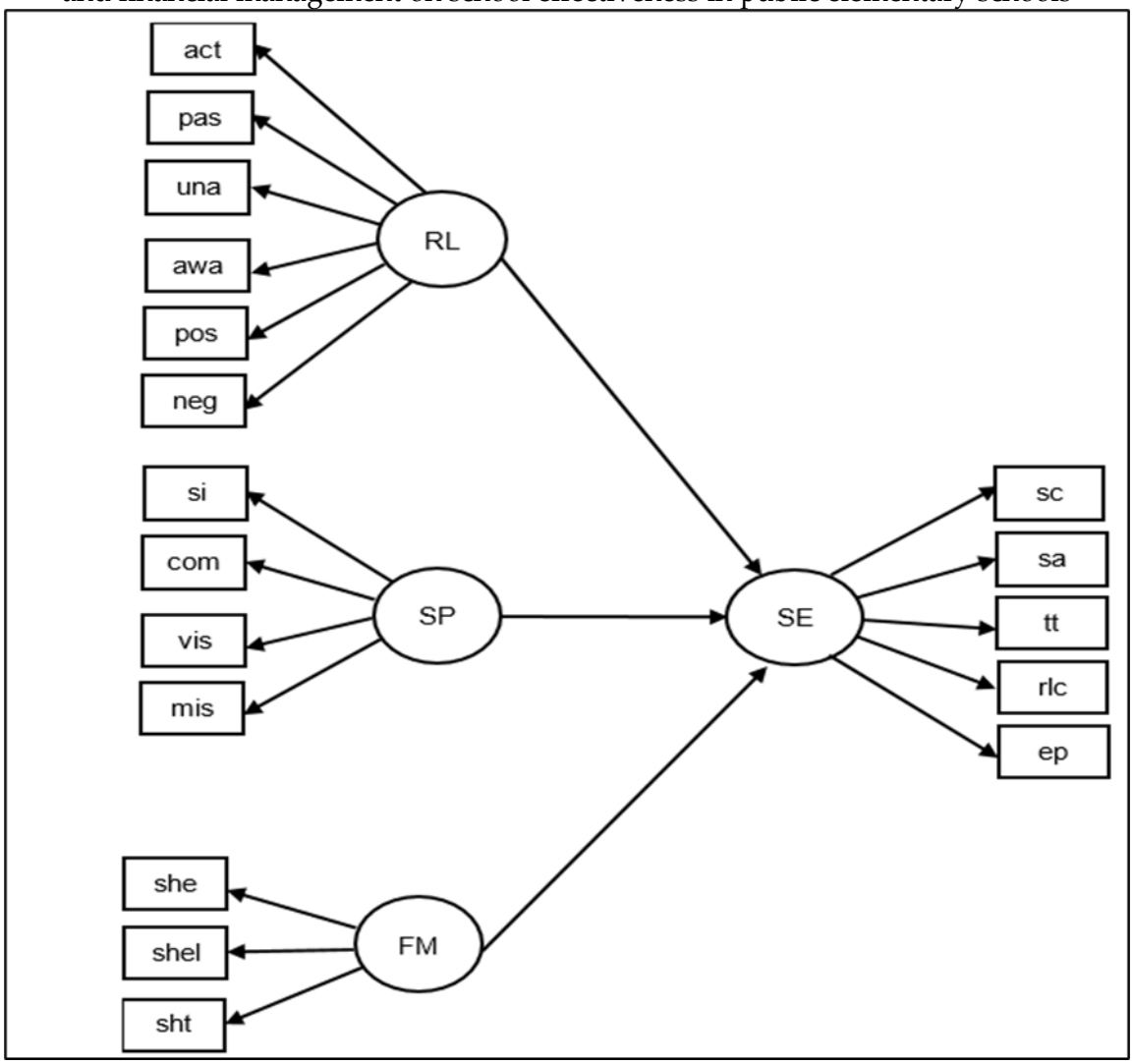
In addition to formal training, creating networks and communities of practice in school financial management has been suggested as a way for principals to share knowledge, experiences, and practical solutions (Parker & Holmes, 2022). These collaborative platforms can foster peer learning and collective problem-solving, enabling school leaders to address complex financial challenges more effectively. Furthermore, the integration of technology, such as financial management software and digital accounting tools, could streamline financial processes and improve accuracy and reporting efficiency. To support such advancements, policymakers and education departments should allocate resources for technological training and infrastructure development. While these strategies hold promise, more research is needed to identify context-specific approaches and best practices for enhancing financial leadership capacities among school administrators globally. This includes exploring how cultural, economic, and policy differences shape the effectiveness of financial management interventions. Finally, the endogenous variable, school effectiveness in public elementary school. Consequently, "*the school accomplishes its objectives" is what is meant to be meant by "school effectiveness*." As a result, school effectiveness can be considered a distinguishing feature of an effective

school. It has five observable indicators namely: School climate; School administration; The teacher; Relationship with local community; Educational practices. In recent years, there has been growing interest in understanding what makes schools effective and how to improve student outcomes. One major piece of research on this topic comes from Macgilchrist and Christophe (2021), who conducted a study on school leadership practices and their impact on learning environments and student achievement. They found that effective school leaders who fostered a shared vision and supportive culture tended to have higher achieving students. Additionally, leaders who focused on instructional leadership and built teacher capacity led to more positive learning climates. This model presents a conceptual framework that illustrates the complex interplay of various components and variables that impact a central outcome, which here is defined as School Effectiveness (SE). The four main components that it emphasizes are: Relational Leadership (RL), Strategic Planning (SP), Financial Management (FM), and School Effectiveness (SE) as the outcome itself. Inputs, including active and passive behaviors, conscious and unconscious perceptions, and rewards and punishments, contribute to defining relational leadership (RL). Inputs relating to varying levels of negativism would interact with and result in different combinations of such input variables, affecting relational dynamics and contributing towards the shaping of the culture within the organizational sphere. In respect of SP, critical inputs, including involvement with strategy, two-way communications, shared vision and mission are reported to result in a core mechanism for strategic planning and coordination. FM is influenced by factors including shared experiences, the school head's level of education, and specialized training that emphasizes the role of sound financial stewardship as a basis of support for the achievement of institutional goals.

The arrows in the model show how these components work together and how they impact School Effectiveness. RL and FM directly impact SE, demonstrating how these two serve as a foundational basis for influencing organizational outcomes. SP is a mediator that connects RL to SE while, in turn, developing a need to align the strategies of leadership with processes of effective planning.

The results of SE are multifaceted and impact improvements in school climate, school administration, teacher performance, community relations, and educational practice. Within this framework lies interconnected aspects of leadership, planning, and management mechanisms driving effective education. It focuses on the development of strong leadership, strategic vision, and the effective management of resources to establish a cohesive and productive school environment that enhances overall institutional performance.

Figure 1: The Interrelationship of relational leadership of principal, strategic planning, and financial management on school effectiveness in public elementary schools



Legend:

rl = Relational Leadership
act = Active
pas = Passive
una = Unaware
awa = Aware
pos = Positive
neg = Negative
st = Strategic Planning
si = Stakeholder's Involvement
com = Communication
vis – Vision
se = School Effectiveness
sc = School Climate
sa = School Administration
tt = The Teacher
rlc = Relationship with Local Community
ep = Educational Practices
fm = Financial Management
shr = School Head's Experience
shel = School Head's Level of Education
sht = School Head's Training

2. Literature Review

In a 2022 study, Anderson *et al.* examined the characteristics of effective schools and how to promote effectiveness. They argue that strong leadership, high expectations, emphasis on core subjects, frequent assessment, and positive school culture are key components.

In addition, school effectiveness continues to be an important area of research in education. A 2019 study by Liu *et al.* examined how leadership practices influence school effectiveness. They found that instructional leadership had the strongest positive association with school academic capacity, and shared leadership helped facilitate professional learning communities, which also supported school effectiveness. Quines and Albutra (2023) cited that poor team collaboration in schools negatively impacts both teachers and students, reducing teachers' motivation, commitment, and behavior (Amorim Neto *et al.*, 2018; Polega *et al.*, 2019; Ronfeldt *et al.*, 2015; Tschida *et al.*, 2015). Teamwork culture doesn't develop naturally; effective leaders are essential to foster it. Principals play a crucial role in promoting teamwork, though they and teachers often lack strategies to enhance team involvement and performance (Amorim Neto *et al.*, 2018; Groysberg *et al.*, 2018; Warrick, 2017).

On the study conducted by Alm *et al.* (2019) on upper secondary schools in Stockholm found that school effectiveness benefits from strong teacher collaboration, supportive leadership, and a positive school culture. These factors were linked to higher student achievement and reduced bullying, highlighting the role of cohesive staff support. Additionally, Javornik and Klemenčič's systematic review (2019) similarly identified effective leadership, school culture, and motivated teachers as critical for enhancing student outcomes and engagement, emphasizing that goal-oriented and collaborative environments foster school-wide success. Masunag and Guhao (2024) cited that teachers' organizational commitment is crucial for school effectiveness and indirectly impacts student learning outcomes. Schools increasingly need dedicated teachers to achieve educational goals, as committed educators are better equipped to overcome classroom challenges. Effective teachers continually update their knowledge to benefit their students, making commitment a key factor in teaching quality. Moreover, teacher commitment fosters a cohesive school environment. Therefore, schools must implement strategies to encourage and empower teachers, enhancing their commitment and enabling the organization to meet future challenges while maintaining strong teacher attachment (Ahmad *et al.*, 2012; Bernaldez & Gempes, 2016; Haftkhavani *et al.*, 2012; Hamid *et al.*, 2013; Saki, 2009). This study is supported by Leithwood and Jantzi's (1990) Action Theory, which suggests that open information sharing strengthens interpersonal relationships, supports professional growth, and enhances organizational effectiveness. The theory emphasizes trust, collaboration, and problem-solving as essential to collegial school cultures. For effective change, schools must foster new beliefs, meanings, and skills. In supportive environments, teachers are better equipped to implement and sustain meaningful change, as cited by Quines and Monteza (2023).

To the extent, Quality Education is one of the four sustainable development goals that would be crucial for the global development process. School leadership, planning, and financial management research provide insights that inform best practices in administration, policy, and resource allocation to support impactful learning outcomes worldwide. Understanding how to effectively govern and nurture quality educational

environments has far-reaching benefits across borders. SDG 4 targets providing inclusive and equitable quality education and promoting lifelong opportunities everywhere, realizing the potential that education has in eliminating poverty, improving health, and promoting equality. This entails universal access to free primary and secondary education, as well as early childhood care, technical and higher education, and skills development for employment. The key priorities would be gender equality, universal literacy, and education for sustainable development, supported by strategies such as safe learning environments, increased scholarships, and teacher training. Leadership, planning, and resource management research are crucial in formulating policies and practices that improve global educational outcomes.

This study will significantly benefit the Department of Education (DepEd), learners, school leaders, teachers, and future researchers. Targeted evidence-based insights result from its quantitative modelling of how leadership competencies, strategic planning, and financial management processes directly influence and potentially enhance key educational outcomes in public elementary schools in DepEd Philippines. These findings can inform policies, sharpen practices, and guide investments aimed at improving the quality, efficiency, and productivity of public education in the country. Also, the study contributes to a deeper understanding of how governance interacts with resource allocation and how this interplay relates to educational achievement, thus providing a robust framework for capacity building and sustainable development in the Philippine education sector. It also serves as a really valuable reference for future research in advancing educational reforms around the globe.

3. Material and Methods

The respondents involved in this study were the Public Elementary School Teachers in the Department of Education, Regional Office XII. Region XII, also known as SOCCSKSARGEN, is an administrative region of the Philippines located in the southwestern part of the island of Mindanao. The study targets 23,569 public elementary teachers, with 400 respondents selected using Raosoft's sample size calculator. This tool is commonly used to ensure sample adequacy for desired confidence levels and margins of error (Ekore & Okekeocha, 2022; Alhatmi, 2019). Respondents include teachers from General Santos City (99), Koronadal City (32), South Cotabato (148), and Sarangani (121).

The Raosoft sample size calculator was utilized in determining the number of respondents per division. In research, Raosoft's online sample size calculator is a frequently used instrument to find the minimal suggested sample for a study population that would get the intended statistical confidence level and margin of error (Ekore & Okekeocha, 2022). Raosoft computes the minimum sample size needed for those specifications. This allows researchers to derive an appropriately sized sample that provides a level of probability that the sample distribution accurately reflects true distribution parameters in the study population (Alhatmi, 2019).

Moreover, the research guaranteed a fair sample by use of a stratified random sampling method. This is a sample wherein some group of objects from the population is selected at random using categorization as a guide. To get a single sample, the chosen sample from many strata is mixed. The method of stratified sampling is probability sampling, wherein the features of a precise variable are understood in the universe relative to this variable (Iliyasu & Etikan, 2021). Therefore, inclusion criteria were devised to be qualified for involvement in the research as respondents. They must be teachers in public elementary schools with item positions Teacher I to III and Master Teachers I to IV, and they must possess permanent status in the Department of Education. On the other hand, the researcher excluded members of certain groups to serve as survey respondents. Principals and head teachers, among other administrative positions, were specifically excluded from the sample. Moreover, the sample comprised teachers exclusively from public schools; private school teachers will not be included. However, respondents' participation in the survey was completely optional. If the teachers decided they no longer wanted to participate in the research, they were free to withdraw at any moment. The researcher made it very clear that respondents should only participate if they are motivated to do so and may quit without facing consequences.

There were four instruments used in this study designed in accordance with the research problems. Primary data is used in gathering information about the study, which consists of four parts, namely: relational leadership, strategic planning, financial management, and school effectiveness. The survey questionnaires utilized in the conduct of the study were sourced from various related research. The questionnaire on relational leadership was adapted from Fiset (2014). The questionnaire on the strategic planning formation process was adapted from Basel (2011). Also, the questionnaire on financial management was adapted from Ntseto (2009). Finally, the questionnaire on school effectiveness was adapted from Ali (2017). After validation, pilot testing will be conducted. All the survey questionnaires utilized the 5-scale Likert Scale.

Moreover, to make sure the survey questions are good and trustworthy, six experts checked it. After that, a pilot test was done. Six specialists also checked the survey forms to make sure the questionnaires were credible and correct. The competent validators carefully reviewed the contents of the questionnaires to guarantee construct validity. The advice given to the researcher was followed. Given both internal and external validators scoring instruments 4.76, it is seen a quite an excellent tool for content validity. Following that, a pilot test was carried out, and the consistency of the survey items was tested using Cronbach's alpha. It is a metric for measuring internal consistency that establishes the degree to which a collection of things is related to one another. Higher values on the scale denote higher reliability (Mohsen & Reg, 2022). During the pilot testing, relational leadership obtained a Cronbach alpha of 0.858, strategic planning got 0.978, financial management earned 0.950, and school effectiveness tallied a Cronbach alpha of 0.951. This implies that the survey questionnaires are valid and reliable.

The study utilized scales to evaluate and interpret the participants' responses. The study categorized the levels of relational leadership, strategic planning, financial management, and school effectiveness among public elementary school heads using specific numerical ranges. A score between 4.20 and 5.00 indicates that school heads demonstrate a very high level of proficiency in these areas, reflecting exceptional capability and mastery. Scores ranging from 3.40 to 4.19 signify a high level, showcasing strong competencies that contribute significantly to effective school leadership and management. A range of 2.60 to 3.39 represents a moderate level, suggesting an average or adequate performance with room for improvement. Meanwhile, scores within 1.80 to 2.59 reflect a low level, highlighting significant gaps and areas that require immediate attention to enhance effectiveness. Finally, scores between 1.00 and 1.79 indicate a very low level, pointing to critical deficiencies in relational leadership, strategic planning, financial management, and overall school effectiveness. These ranges provide a clear framework for assessing the strengths and weaknesses of school heads, offering insights for targeted professional development and capacity-building initiatives to foster better leadership and organizational outcomes.

A non-experimental research method was employed in the study, utilizing a descriptive-correlational research design. Cresswell and Gutterman (2023) explained that in descriptive-correlational research, investigators analyze the correlations between variables as they exist naturally, without altering any circumstances, to describe and quantify the degree and direction of links between phenomena in real-world contexts.

Moreover, this research used statistical techniques such as mean, Pearson correlation coefficient, regression analysis, and path analysis. This study assessed the correlation between school climate, leadership competency, and self-efficacy in technology with the attitudes towards technology among public elementary school teachers in Region XII. Mueller and Hancock (2022) said that path analysis is a statistical technique that examines direct and indirect causal relationships among several variables using different regression models to assess hypothesized patterns of influence. It enables researchers to dissect correlations into their fundamental components and assess intricate theoretical models by quantifying the amount and relevance of proposed relationships between variables using standardized route coefficients.

The following actions were undertaken to collect the relevant data for this research: The researcher first sought authorization from relevant authorities, including the regional director, superintendents, and principals, to execute the survey study inside their schools. This will ensure compliance with policies and approval to collect data. Second, upon approval, the survey questionnaires were distributed to the selected respondents. Care was taken to ensure respondent anonymity. Teachers will be given ample time to complete the survey on their own time. Reminders will be sent to prompt completion. Teachers who wished to opt out could voluntarily withdraw from the process. Third, completed surveys were gathered by the researcher. The survey responses were compiled for the next stage of analysis. Fourth, survey questionnaires were checked

for completion and prepared for analysis by coding responses and inputting data into statistical software. Lastly, relevant data analyses were summarized in the form of tables and graphs to present the overall results and significant findings from the teacher survey responses.

The data were analyzed and interpreted using the relevant statistical methods. The mean was used to evaluate the school climate, leadership competency, self-efficacy in technology, and attitudes toward technology. Secondly, the Pearson r, or Pearson Product–Moment Correlation, is a commonly used statistic used to evaluate the strength and direction of the association between two variables (Pallant, 2022). Third, Regression Analysis was used to evaluate the substantial influence of school climate, leadership competency, self-efficacy in technology, and attitudes toward technology. Finally, Path Model Analysis was used to assess the influence of school climate, leadership competency, and self-efficacy in technology on the endogenous variable, attitude towards technology. It also examined the model fit value.

In evaluating the model's goodness of fit, many fit indices were used to ascertain the optimal fit. The subsequent requirements are as follows: Chi-Square/Degrees of Freedom (CMIN/DF) 0<value<2; Normed Fit Index (NFI) >0.95; Tucker-Lewis Index (TLI) >0.95; Comparative Fit Index (CFI) .0.95; Goodness of Fit Index (GFI) >0.95; Root Means Square of Error Approximation (RMSEA) <0.05; P of Close Fit (P-close) >0.05; and Probability Level (P-value). The combination of fit indicators will be scrutinized to evaluate the overall model fit and determine the optimal model.

This quantitative investigation included substantial ethical issues, including research integrity, confidentiality, anonymity, and compliance with university regulations. This study is guided by fundamental ethical standards like voluntary participation, informed consent, respect for respondent privacy, the avoidance of plagiarism or fabrication, obtaining authorization, and the prevention of conflicts of interest or deception. This study adhered to the ethical guidelines established by the University of Mindanao Ethics Review Committee concerning participant treatment and data management, as evidenced by certificate number UMERC-2024-328. The following ethical considerations were followed: respondents voluntarily chose to participate on their own, the privacy and confidentiality of respondents will be respected, informed consent will be obtained from respondents before their participation, proper recruitment procedures will be used, any potential risks and benefits will be explained, plagiarism will be avoided, no data will be fabricated or falsified, permission will be obtained from the relevant organizations or locations involved, there will be no conflicts of interest or deceit, and authorship will be properly credited.

4. Results and Discussion

4.1 Relational Leadership

Table 1 reveals an overall high level of relational leadership among public elementary school heads, with a mean of 3.40 (SD = 0.350). Active leadership emerged as the strongest attribute (M = 4.50, SD = 0.636), followed by high scores in awareness (M = 4.25, SD = 0.712) and positive leadership (M = 4.41, SD = 0.748). However, moderate levels of passive behavior (M = 2.71, SD = 1.285) and lower scores in unawareness (M = 2.46, SD = 1.200) and negative leadership (M = 2.10, SD = 1.259) suggest areas for potential improvement. These findings indicate that while school heads generally demonstrate effective leadership qualities, there are opportunities to address passive tendencies and enhance awareness in certain situations. This pattern underscores relational leadership's role in creating a supportive school environment and its importance for school effectiveness.

The overall high level of relational leadership among public elementary school heads reflects strong leadership qualities, particularly in engagement, awareness, and positivity, which foster an effective school environment. However, challenges in passive tendencies, unawareness, and negative behaviors highlight the need for targeted interventions, such as leadership training, mentoring, and emotional intelligence development. Addressing these areas while reinforcing strengths can enhance decision-making, assertiveness, and situational awareness, ultimately improving school leadership effectiveness and overall performance.

This study aligns with research positioning relational leadership as a dynamic, relationship-centered process rather than a fixed trait of individuals. Uhl-Bien and Arena (2019) emphasize its role in organizational adaptability, facilitating collaboration, trust, and effective responses to complex challenges. Carroll and Simpson (2020) advocate a shift from formal authority to relational processes, where leaders prioritize connection-building, open communication, and teamwork to foster collective problem-solving. Bayani & Guhao (2023) note that positive relationships with school heads are crucial for a supportive school environment (Balkar, 2015; Gkorezis, 2016; Lee & Nie, 2014; Sagnak *et al.*, 2015).

Ricaplaza & Quines (2022) argue that transparency is essential for uniting stakeholders, creating cohesion, and motivating collective goals (Luenendonk, 2020). Trust-building, as highlighted by Quines & Saycon (2023), enhances learning and is rooted in recognizing others and supporting institutional values (Brown, 2014; Hoy & Tschannen-Moran, 2017). Tschannen-Moran (2000, 2017) identifies trust in principals as foundational for teachers' confidence in colleagues, students, and parents. Salip & Quines (2023) also emphasize that leaders passionate about collective futures and self-aware of their strengths build credibility and trust (Peng *et al.*, 2020; Hurt-Avila *et al.*, 2020).

Table 1: Level of Relationship Leadership

Indicator	SD	Mean	D.E.
Active	0.636	4.50	Very High
Passive	1.285	2.71	Moderate
Unaware	1.200	2.46	Low
Aware	0.712	4.25	Very High
Positive	0.748	4.41	Very High
Negative	1.259	2.10	Low
Overall	**0.350**	**3.40**	**High**

4.2 Strategic Planning

Table 2 shows an overall mean of 3.40 (SD = 0.350), indicating a high level of relational leadership among public elementary school heads. The highest-rated indicators, Active (4.50, SD = 0.636), Aware (4.25, SD = 0.712), and Positive (4.41, SD = 0.748), highlight strong proactive engagement, situational awareness, and positivity, essential for fostering an effective school environment. However, moderate scores for Passive (2.71, SD = 1.285) and low scores for Unaware (2.46, SD = 1.200) and Negative (2.10, SD = 1.259) suggest areas for improvement in assertiveness, knowledge, and minimizing negative behaviors. Addressing these gaps can further enhance leadership effectiveness and school performance.

Table 2: Level of Strategic Planning

Indicators	SD	Mean	D.E.
Stakeholders Involvement	0.675	4.39	Very High
Communication	0.670	4.35	Very High
Vision	0.681	4.39	Very High
Mission	0.687	4.35	Very High
Overall	**0.628**	**4.37**	**Very High**

The Very High overall level of strategic planning among public elementary school heads highlights strong leadership and organizational capabilities. The top-rated indicators, Stakeholders' Involvement and Vision emphasize the importance of collaboration and a clear vision in achieving long-term goals. While Communication and Mission also score very high, further improvements in these areas can enhance transparency, alignment, and focus on core values. To sustain these strengths, professional development in stakeholder management, vision articulation, and communication strategies is essential, enabling school leaders to address challenges and drive continuous improvement in school performance.

This study aligns with Wolf and Floyd's (2019) view of strategic planning as a flexible, adaptive process, highlighting cycles of reflection, feedback, and realignment in response to internal and external changes. Bryson, Edwards, and Van Slyke (2021) also advocate for a dynamic approach to strategic planning in the public sector, emphasizing adaptation to complex, evolving environments. Baldoz & Guhao (2020) note that strategic initiatives foster staff ownership, boosting productivity. Benham (2017) and Bakker (2017) found that participatory and resource-driven leadership strategies enhance productivity and proactive engagement. Millado, Guhao, & Rodriguez (2021), citing previous research (Hallinger, 2003; Hallinger & Heck, 1998; Harris, 2008; Jackson, 2000; Leithwood *et al.*, 2004), suggest transformational leadership strengthens school effectiveness by promoting shared goals and high standards. Salinas & Quines (2022) underscore the importance of decision-making skills in goal-oriented leadership (Aktas *et al.*, 2018).

4.3 Financial Management

Table 3 indicates an Overall Mean of 4.43 (SD = 0.624), reflecting a Very High level of competency among public elementary school heads. Both Educational Level (Mean = 4.45, SD = 0.628) and Training (Mean = 4.45, SD = 0.679) are tied for the highest scores, highlighting the significance of advanced qualifications and professional development in enhancing leadership skills. Experience (Mean = 4.39, SD = 0.659) also scores very high, emphasizing the value of practical exposure in shaping effective leadership. These results underscore the strong preparation and attributes of school heads for effective management.

The Very High overall rating indicates that public elementary school heads are well-equipped for effective leadership, with top scores in Educational Level and Training emphasizing the importance of formal education and professional development. The slightly lower score for Experience suggests that some leaders may be early in their careers or face unique challenges. To sustain these high standards, ongoing training programs and mentoring initiatives should be prioritized to enhance leadership capabilities and support less experienced school heads.

Table 3: Level of Financial Management

Indicators	SD	Mean	D.E.
School Heads Experience	0.659	4.39	Very High
School Heads Educational Level	0.628	4.45	Very High
School Heads Training	0.679	4.45	Very High
Overall	**0.624**	**4.43**	**Very High**

The results conform to Huang and Murdock's (2019) findings that principals play a key role in budgeting decisions, impacting staffing, instructional materials, and facilities. Effective financial management aligns resources with educational goals, enhancing student outcomes by prioritizing teaching quality and school-specific needs. Baker and

LeTendre (2019) compare financial practices across U.S. schools, showing that well-managed finances improve resource allocation in areas like teacher quality and classroom resources. Despite challenges like budget constraints and funding disparities, strategic financial practices, equitable resource distribution, and investment in teacher development are critical for boosting student achievement, especially in low-income schools.

4.4 School Effectiveness

Table 4 reveals an Overall Mean of 4.50 (SD = 0.433), reflecting a Very High level of effectiveness in public elementary schools. Teachers scored the highest (Mean = 4.62, SD = 0.440), emphasizing their critical role in delivering quality education. Strong school administration (Mean = 4.51, SD = 0.616) highlights effective leadership and organization, while robust educational practices (Mean = 4.49, SD = 0.515) ensure positive student outcomes. High scores in community relationships (Mean = 4.44, SD = 0.572) and school climate (Mean = 4.43, SD = 0.543) reflect strong collaboration and a supportive learning environment, collectively driving overall school effectiveness.

The Very High overall rating highlights a highly effective school system driven by exceptional teacher performance, strong leadership, and robust educational practices. Teachers' excellence underscores the need for ongoing investment in training and professional development, while effective administration reflects the value of targeted leadership support. High scores in community relationships and school climate emphasize the importance of collaboration and a positive environment. Policymakers and stakeholders should focus on sustaining these strengths while fostering innovation and deeper engagement to further enhance school effectiveness.

The statistical findings align with Day and Sammons (2019), who link effective school leadership to improved student outcomes, highlighting head teachers' role in fostering student learning and well-being. They stress that successful leaders adapt strategies to their school's context, promoting continuous teaching improvement and student engagement through values like collaboration and trust. Similarly, Sullivan and Heath (2019) identify school characteristics such as size, teacher-student ratios, and socioeconomic composition as factors influencing UK student performance, noting the complexity of these relationships due to broader social influences. Digap & Quines (2022) also emphasize that strong leadership is essential for achieving school goals and effectiveness (Ali *et al.*, 2020; DeMatthews *et al.*, 2020).

Table 4: Level of School Effectiveness

Indicators	**SD**	**Mean**	**D.E.**
School Climate	0.543	4.43	Very High
School Administration	0.616	4.51	Very High
The Teacher	0.440	4.62	Very High
Relationship with the Local Community	0.572	4.44	Very High
Educational Practices	0.515	4.49	Very High
Overall	**0.433**	**4.50**	**Very High**

4.5 Significance of the Relationship between Relational Leadership and School Effectiveness

The analysis reveals significant correlations between leadership styles and school effectiveness at the 0.05 significance level. School Administration demonstrated the strongest correlations with leadership approaches. Positive leadership styles (Active, Aware, Positive) showed beneficial correlations with school effectiveness, while negative styles (Passive, Unaware, Negative) exhibited adverse correlations. The statistical significance (p=0.000) validates these relationships, indicating that positive leadership approaches enhance school effectiveness while negative styles diminish it.

The findings underscore the critical role of leadership styles in school effectiveness, with positive traits like active engagement, awareness, and positivity enhancing teacher performance, student outcomes, and community relationships. In contrast, negative styles such as passivity or unawareness hinder progress and erode trust and collaboration. The strong link between leadership and school administration highlights the need for professional development to foster positive leadership behaviors and address negative tendencies. Tailored interventions and continuous assessment can further refine leadership practices, ensuring sustained improvements in school effectiveness.

The study's findings align with Webb's (2021) research on relational leadership and restorative practices, which demonstrated how school leaders can build collaborative environments through sustained dialogue and stakeholder engagement. Despite some perceived weakening, the integration of restorative practices endured through leadership efforts. Branson and Marra's (2019) work further supports this by conceptualizing leadership as a relational phenomenon, offering seven core principles for effective practice based on international corporate research. Additionally, Guhao and Quines (2021) emphasize that authentic leadership enhances teamwork and engagement, reinforcing the importance of relationship quality in educational leadership contexts.

Table 5: Significance of the Relationship between Relational Leadership and School Effectiveness

Relational Leadership	School Effectiveness					Overall
	School Climate	School Administration	The Teacher	Relationship with the Local Community	Educational Practices	
Active	.429* (0.000)	.672* (0.000)	.351* (0.000)	.523* (0.000)	.348* (0.000)	.591* (0.000)
Passive	-.130* (0.009)	-.263* (0.000)	-.126* (0.012)	-.166* (0.001)	-.206* (0.000)	-.225* (0.000)
Unaware	-.163* (0.001)	-.287* (0.000)	-.194* (0.000)	-.191* (0.000)	-.193* (0.000)	-.258* (0.000)
Aware	.451* (0.000)	.691* (0.000)	.290* (0.000)	.522* (0.000)	.408* (0.000)	.603* (0.000)
Positive	.400* (0.000)	.695* (0.000)	.333* (0.000)	.531* (0.000)	.376* (0.000)	.595* (0.000)

Negative	-.062 (0.218)	-.239* (0.000)	-.084 (0.092)	-.152* (0.002)	-.050 (0.320)	-.152* (0.002)
Overall	.142* (0.000)	.143* (0.004)	.056 (0.265)	.146* (0.003)	.073 (0.144)	.144* (0.004)

*Significant at 0.05 significance level.

4.6 Significance of the Relationship between Strategic Planning and School Effectiveness

The analysis shows significant positive correlations between strategic planning and school effectiveness. The p-value is less than 0.05. School Administration exhibited the strongest correlations with strategic planning components, followed by Relationship with the Local Community. The overall correlation coefficient of 0.722 indicates a strong positive relationship. Teacher components showed moderate correlations (0.359-0.382). The findings demonstrate that strategic planning significantly enhances school effectiveness, particularly in administration and community relations, with all components as to stakeholder involvement, communication, vision, and mission contributing positively to overall school effectiveness.

These results imply that school leaders should prioritize comprehensive and collaborative strategic planning processes, ensuring active stakeholder engagement, transparent communication, and continuous feedback mechanisms. Establishing measurable objectives and performance metrics aligned with strategic goals can provide a clear roadmap for evaluating progress and making data-driven adjustments. Professional development initiatives should focus on linking strategic goals with teacher support and instructional outcomes while emphasizing the use of innovative tools and technologies for planning and decision-making. Regular capacity-building workshops can help teachers and staff align their efforts with broader school objectives, fostering a unified approach toward educational excellence. Additionally, engaging the local community through partnerships and collaborative projects can strengthen the school's support network and resources, enhancing the overall impact of strategic planning. By fostering a culture of inclusivity and accountability, school leaders can ensure that all stakeholders feel empowered to contribute, creating a sustainable foundation for continuous improvement in school effectiveness.

The findings align with Schmidt's (2019) comparative study, which showed that schools with strong strategic frameworks achieved better student outcomes and staff satisfaction. This research highlighted the importance of context-specific strategic planning for maximizing school effectiveness. Woods and Gunter (2019) further support this through their analysis of school leadership and strategic management, emphasizing that collaborative planning with all stakeholders enhances school effectiveness and student achievement. Their research demonstrates that stakeholder involvement in decision-making creates a more cohesive school environment and successful implementation of strategic initiatives.

Table 6: Significance of the Relationship between Strategic Planning and School Effectiveness

Strategic Planning	School Effectiveness					Overall
	School Climate	School Administration	The Teacher	Relationship with the Local Community	Educational Practices	
Stakeholders' Involvement	.445* (0.000)	.690* (0.000)	.367* (0.000)	.683* (0.000)	.432* (0.000)	.666* (0.000)
Communication	.476* (0.000)	.733* (0.000)	.382* (0.000)	.679* (0.000)	.480* (0.000)	.699* (0.000)
Vision	.470* (0.000)	.663* (0.000)	.359* (0.000)	.659* (0.000)	.513* (0.000)	.676* (0.000)
Mission	.443* (0.000)	.629* (0.000)	.366* (0.000)	.631* (0.000)	.428* (0.000)	.633* (0.000)
Overall	**.495* (0.000)**	**.733* (0.000)**	**.398* (0.000)**	**.716* (0.000)**	**.500* (0.000)**	**.722* (0.000)**

*Significant at 0.05 significance level.

4.7 Significance of the Relationship between Financial Management and School Effectiveness

The data analysis underscores the pivotal role of financial management in achieving school effectiveness, with an overall correlation coefficient of 0.764 highlighting its significant impact. Strong correlations with school administration and local community relationships suggest that effective financial management enhances organizational efficiency and fosters trust and collaboration among stakeholders. Moderate correlations with teacher components indicate opportunities to better align financial strategies with instructional goals and teacher support, ensuring resources directly enhance classroom outcomes. These findings emphasize the importance of ongoing professional development in financial management, incorporating training in budgeting, resource allocation, and accountability practices. Utilizing modern financial tools and technologies can further improve transparency and decision-making efficiency. Additionally, establishing collaborative financial planning processes involving administrators, teachers, and community members can strengthen stakeholder engagement and ensure that financial priorities align with educational objectives. By embedding financial literacy and strategic resource management into school leadership practices, institutions can create a sustainable pathway for continuous improvement and long-term success.

These results imply that school leaders should invest in ongoing training programs to enhance their financial management skills, emphasizing transparency, accountability, and strategic resource allocation. Alongside professional development, adopting advanced financial management tools and technologies can streamline budgeting, reporting, and monitoring processes. Integrating financial planning with instructional priorities and fostering collaboration between administrators and teachers can further optimize resource utilization, ensuring that financial decisions directly support teaching and learning outcomes. Additionally, creating financial literacy programs for all

stakeholders, including teachers and local community members, can build a culture of shared responsibility and trust. Establishing clear financial goals and performance metrics, along with regular audits and feedback mechanisms, can further strengthen accountability and guide continuous improvement. By prioritizing financial literacy, leveraging technology, and fostering inclusivity, schools can build a robust foundation for sustained effectiveness and long-term success.

Table 7: Significance of the Relationship between Financial Management and School Effectiveness

Financial Management	School Effectiveness					Overall
	School Climate	School Administration	The Teacher	Relationship with the Local Community	Educational Practices	
School Heads Experience	.542* (0.000)	.710* (0.000)	.429* (0.000)	.569* (0.000)	.509* (0.000)	.696* (0.000)
School Heads Educational Level	.519* (0.000)	.748* (0.000)	.426* (0.000)	.547* (0.000)	.479* (0.000)	.687* (0.000)
School Heads Training	.460* (0.000)	.725* (0.000)	.386* (0.000)	.581* (0.000)	.437* (0.000)	.657* (0.000)
Overall	.532* (0.000)	.764* (0.000)	.434* (0.000)	.595* (0.000)	.498* (0.000)	.715* (0.000)

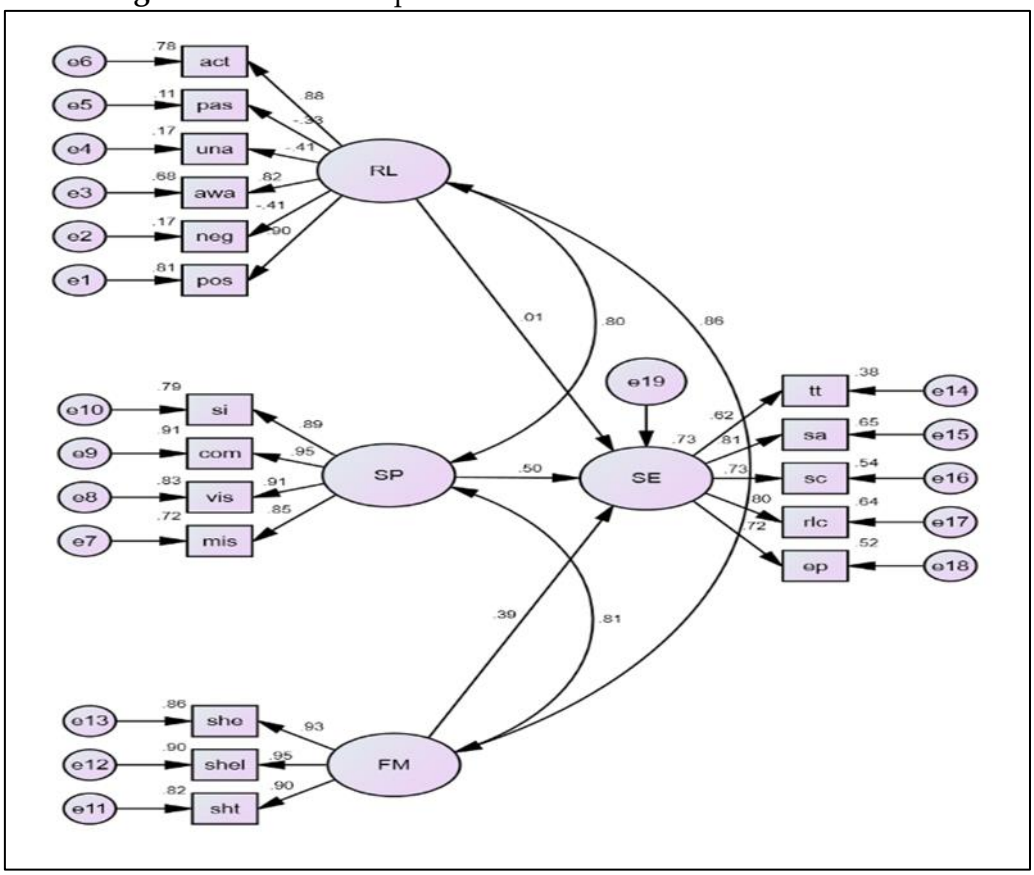
*Significant at 0.05 significance level.

The findings align with Brady's (2019) study of Irish secondary schools, which demonstrated that strong financial management strategies, including budgeting, planning, and resource allocation, lead to improved student outcomes and staff satisfaction. The research emphasized the importance of school leaders' financial competencies in addressing funding challenges and supporting academic achievement. Seker and Yildirim's (2019) work further reinforces this relationship, highlighting how effective financial practices, particularly in budgeting and resource allocation, enhance educational outcomes. Their study also emphasized the significance of financial transparency and accountability in building stakeholder trust.

4.8 Generated Structural Model on School Effectiveness

For the model to suit the data, it must be modified from the original proposal shown in Figure 1. The investigation included three developed models. Each of the indices used must regularly fall within the permitted limits in order to choose the best-fit model. These models were meticulously formulated based on the provided fit indices and were assessed to decide whether or not to adopt the model.

Figure 2: Structural Equation Model 1 in Standardized Solution



Legend:

act = Active
pas = Passive
una = Unaware
awa = Aware
pos = Positive
neg = Negative
RL = Relational Leadership
si = Stakeholder's Involvement
com = Communication
vis = Vision
sp = Strategic Planning
she = School Heads Experience
shel = School Heads Level
sht = School Heads Training
FM = Financial Management
sc = School Climate
sa = School Administration
tt = The Teacher
rlc = Relationship with the Local Community
ep = Educational Practices
SE = School Effectiveness

This model indicates that Relational Leadership (RL), Strategic Planning (SP), and Financial Management (FM) significantly affect School Effectiveness (SE), with FM demonstrating the strongest direct effect. The high path coefficients suggest robust relationships between these latent variables and SE, highlighting the critical role of effective financial management in enhancing school performance. Additionally, the relatively weak correlation between RL and SP, in contrast to the stronger correlation between RL and FM, implies that relational leadership and financial management may be more closely related within this model. This analysis underscores the importance of

understanding how various dimensions of leadership and management contribute to school effectiveness, particularly emphasizing the pivotal role of financial management in driving positive educational outcomes.

4.9 Estimates of Variable Regression Weights in Structural Equation Model 1

The Structural Equation Model 1 analysis revealed significant relationships between variables and school effectiveness. Financial management showed a significant positive impact ($p<0.001$), with each unit increase corresponding to a 0.175-unit increase in school effectiveness (SE=0.039). Strategic planning demonstrated the strongest influence ($p<0.001$), where each unit increase led to a 0.232-unit increase in school effectiveness (SE=0.035). However, relational leadership showed minimal impact, with each unit increase resulting in only a 0.005-unit increase in school effectiveness (SE=0.035, p=0.888), indicating a non-significant relationship.

Table 8: Estimates of Variable Regression Weights in Structural Equation Model 1

			B	S.E.	C.R.	BETA	P
SE	<---	FM	.175	.039	4.419	.394	***
SE	<---	RL	.005	.035	.141	.012	.888
SE	<---	SP	.232	.035	6.563	.496	***
Pos	<---	RL	1.000			.900	
Neg	<---	RL	-.767	.091	-8.441	-.410	***
Awa	<---	RL	.872	.039	22.341	.825	***
Una	<---	RL	-.729	.087	-8.410	-.409	***
Pas	<---	RL	-.630	.095	-6.632	-.330	***
Act	<---	RL	.832	.033	25.510	.881	***
Mis	<---	SP	1.000			.846	
Vis	<---	SP	1.065	.043	24.883	.909	***
Com	<---	SP	1.097	.040	27.186	.951	***
Si	<---	SP	1.032	.043	23.835	.888	***
Sht	<---	FM	1.000			.903	
Shel	<---	FM	.973	.029	33.127	.951	***
She	<---	FM	.998	.032	31.142	.930	***
Tt	<---	SE	1.000			.617	
Sa	<---	SE	1.830	.144	12.723	.807	***
Sc	<---	SE	1.469	.123	11.916	.735	***
Rlc	<---	SE	1.681	.133	12.633	.799	***
Ep	<---	SE	1.367	.116	11.762	.722	***

Note: Chi-square = 1334.058, Degrees of freedom = 129, Probability level = .000.

4.10 The Goodness of Fit Measures of Structural Equation Model 1

Results from the data gathered, Goodness of Fit Measures of Structural Equation Model 1 on Table 9, shows that Chi-Square/Degrees of Freedom obtained 0 < value < 2 criterion with 10.342 model fit value; Goodness Fit Index has a criterion of >0.95 with .742model fit value; Comparative Fit Index of >.095 with .825 model fit value; Normed Fit Index of > 0.95 with model fit value of .810; Tucker-Lewis Index has a criterion of >0.95 with .792

model fit value; RMSEA- Root Means Square of Error Approximation gained < 0.05 and a model fit value of .153.

The findings from this SEM analysis provide crucial insights into the complex dynamics of school leadership and effectiveness. The emergence of Financial Management as the primary driver of school effectiveness challenges traditional perspectives that often prioritize instructional leadership or relationship-building as the cornerstone of educational success. This suggests that a school's ability to effectively allocate resources, manage budgets, and make sound financial decisions plays a more fundamental role in creating conditions conducive to educational excellence than previously recognized.

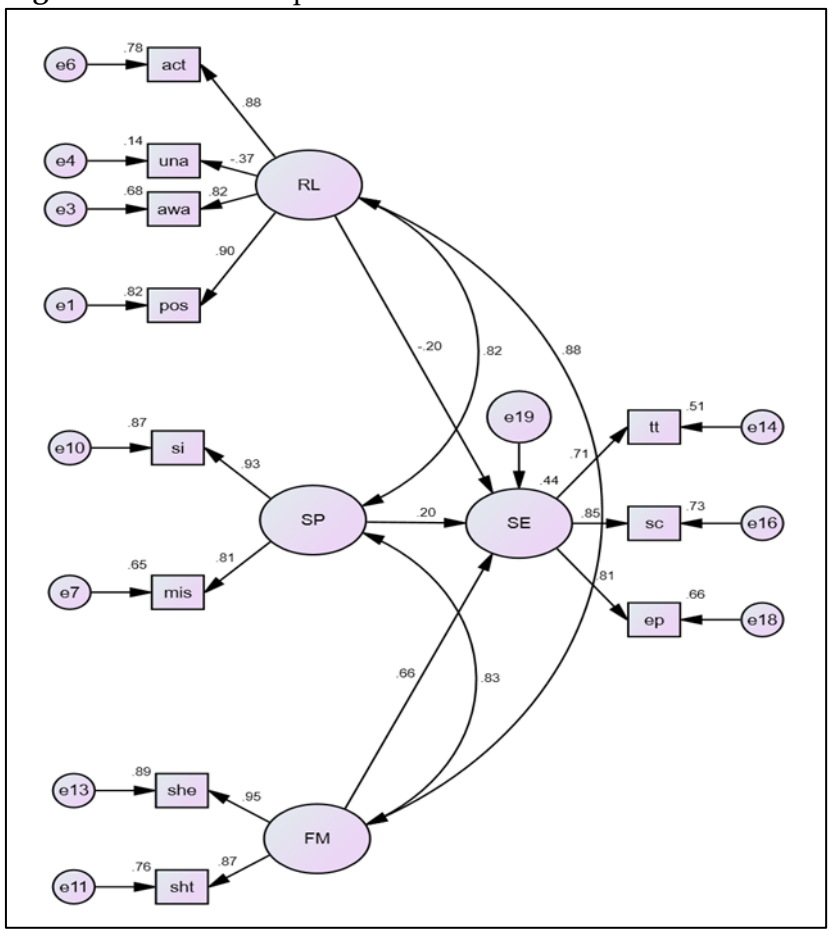
Table 9: Goodness of Fit Measures of Structural Equation Model 1

Index	Criterion	Model Fit Value
P-Close	> 0.05	.000
CMIN/DF	0 < value < 2	10.342
P-value	> 0.05	.000
GFI	> 0.95	.742
CFI	> 0.95	.825
NFI	> 0.95	.810
TLI	> 0.95	.792
RMSEA	< 0.05	.153

Legend:

CMIN/DF = Chi-Square/Degrees of Freedom
GFI = Goodness of Fit Index
NFI = Normed Fit Index
RMSEA = Root Means Square of Error Approximation
TLI = Tucker-Lewis Index
Pclose = P of Close Fit
CFI = Comparative Fit Index
P-value = Probability Level

Figure 3: Structural Equation Model 2 in Standardized Solution



Legend:

act =Active
pas = Passive
una = Unaware
awa = Aware
pos = Positive
neg = Negative
RL = Relational Leadership
si = Stakeholder's Involvement
com = Communication
vis = Vision
mis = Mission
SP = Strategic Planning
she = School Heads Experience
shel = School Heads Level
sht = School Heads Training
FM = Financial Management
sc = School Climate
sa = School Administration
tt = The Teacher
rlc = Relationship with the Local Community
ep = Educational Practices
SE = School Effectiveness

4.11 Estimates of Variable Regression Weights in Structural Equation Model 2

Table 10 shows the Estimates of Variable Regression Weights in Structural Equation Model 2. Financial Management to School Effectiveness revealed a significant regression with a p-value is less than 0.001. This structure signifies that every unit increase in the financial management corresponds to a .351 -unit increase in school effectiveness with a standard error of .074. At the same time, relational leadership with school effectiveness gained a regression with a p-value less than 0.001. It signifies that every unit increase in

relational leadership corresponds to a -.091-unit decrease in school effectiveness with a standard error of .061 with a p-value of .136. Also, strategic planning to school effectiveness obtained a significant regression with a p-value less than 0.001, which means that in every unit, an increase in strategic planning corresponds to a .111 increase in school effectiveness with a p-value of .067

The analysis reveals significant insights into the determinants of School Effectiveness, with Financial Management emerging as the most robust and statistically reliable predictor with a p-value less than .001, demonstrating stronger effects compared to Model 1. While Strategic Planning maintains a positive influence, its impact is notably weaker and only marginally significant in this iteration. Interestingly, Relational Leadership exhibits a stronger negative correlation with School Effectiveness compared to Model 1, though this relationship remains statistically non-significant. This more parsimonious model, featuring fewer indicators while maintaining strong fit statistics demonstrates robust factor loadings within constructs. The comparison with Model 1 highlights key shifts in the relative importance of these factors, ultimately reinforcing Financial Management's critical role in driving School Effectiveness while suggesting more nuanced and potentially complex roles for Strategic Planning and Relational Leadership in educational outcomes.

Table 10: Estimates of Variable Regression Weights in Structural Equation Model 2

			B	S.E.	C.R.	BETA	P
SE	<---	FM	.351	.074	4.770	.662	***
SE	<---	RL	-.091	.061	-1.492	-.197	.136
SE	<---	SP	.111	.060	1.833	.196	.067
Pos	<---	RL	1.000			.903	
Awa	<---	RL	.868	.039	22.398	.824	***
Una	<---	RL	-.665	.087	-7.625	-.375	***
Act	<---	RL	.832	.032	25.776	.884	***
Mis	<---	SP	1.000			.806	
Si	<---	SP	1.137	.057	20.097	.933	***
Sht	<---	FM	1.000			.870	
She	<---	FM	1.055	.039	26.714	.946	***
Tt	<---	SE	1.000			.712	
Sc	<---	SE	1.479	.100	14.747	.853	***
Ep	<---	SE	1.334	.093	14.395	.812	***

Note: Chi-square = 79.951; Degrees of freedom = 38; Probability level = .000.

4.12 The Goodness of Fit Measures of Structural Equation Model 2

The results from the data gathered, as presented in Table 11 under the Goodness of Fit Measures of Structural Equation Model 2, indicate a well-fitting model supported by several statistical indicators. The Chi-Square/Degrees of Freedom ratio, with a criterion of $0 < \text{value} < 2$, achieved a model fit value of 2.025, demonstrating an acceptable fit within the specified range. The Goodness of Fit Index (GFI) surpassed its criterion of >0.95, attaining a value of .967, suggesting that the model closely aligns with the observed data.

Similarly, the comparative Fit Index (CFI), with a benchmark of >0.95, recorded a value of .987, further emphasizing the model's strong fit.

Table 11: Goodness of Fit Measures of Structural Equation Model 2

Index	Criterion	Model Fit Value
P-Close	> 0.05	.449
CMIN/DF	0 < value < 2	2.025
P-value	> 0.05	.000
GFI	> 0.95	.967
CFI	> 0.95	.987
NFI	> 0.95	.975
TLI	> 0.95	.982
RMSEA	< 0.05	.051

Legend:
CMIN/DF = Chi-Square/Degrees of Freedom
NFI = Normed Fit Index
TLI = Tucker-Lewis Index
CFI = Comparative Fit Index
GFI = Goodness of Fit Index
RMSEA = Root Means Square of Error Approximation
Pclose = P of Close Fit
P-value = Probability Level

Moreover, the Normed Fit Index (NFI) met its criterion of >0.95 with a model fit value of .975, reinforcing the structural integrity of the model. The Tucker-Lewis Index (TLI) also exceeded the standard threshold of >0.95, with a value of .982, reflecting the robustness of the model in accounting for the data variability. Lastly, the Root Mean Square Error of Approximation (RMSEA), which requires a value of <0.05 for a good fit, achieved a model fit value of .051, remaining within the acceptable range. These metrics collectively validate the adequacy and reliability of Structural Equation Model 2, confirming its suitability for analyzing the underlying relationships in the data.

4.13 Estimates of Variable Regression Weights in Structural Equation Model 3

Table 12 shows the Estimates of Variable Regression Weights in Structural Equation Model 3. Financial Management to School Effectiveness revealed a significant regression with a p-value less than 0.001. This structure signifies that every unit increase in financial management corresponds to a .343-unit increase in school effectiveness with a standard error of .075. While Relational Leadership with School Effectiveness gained a regression with a p-value less than 0.001. It signifies that every unit increase in relational leadership corresponds to a -.117-unit decrease in school effectiveness with a standard error of .061 with a p-value of .056. Also, strategic planning to school effectiveness obtained a significant regression with a p-value less than 0.001, which means that in every unit, strategic planning corresponds to a .135 increase in job satisfaction with a standard error of .066 with a p-value of .039.

Table 12: Estimates of Variable Regression Weights in Structural Equation Model 3

			B	S.E.	C.R.	BETA	P
SE	<---	FM	.343	.075	4.577	.658	***
SE	<---	RL	-.117	.061	-1.912	-.257	.056
SE	<---	SP	.135	.066	2.064	.243	.039
Pos	<---	RL	1.000			.906	
Act	<---	RL	.838	.034	24.794	.893	***
Mis	<---	SP	1.000			.805	
Si	<---	SP	1.141	.057	20.054	.934	***
Sht	<---	FM	1.000			.869	
She	<---	FM	1.057	.040	26.288	.947	***
Tt	<---	SE	1.000			.700	
Ep	<---	SE	1.386	.135	10.283	.830	***

Note: Chi-square = 20.781; Degrees of freedom = 14; Probability level = .107.

4.14 The Goodness of Fit Measures of Structural Equation Model 3

Table 13 depicts the Goodness of Fit Measures of Structural Equation Model 3. Results revealed from the data gathered on Goodness of Fit Measures of Structural Equation Model 3. Index P-Close Fit has a criterion of > 0.05 and a model fit value of .774; Chi-Square/Degrees of Freedom obtained 0 < value < 2 with a model fit value of 1.484; P-value has a criterion of > 0.05 and a model fit value of .107; Goodness of fit index has a criterion of > 0.95 a model fit value of .987; Comparative Fit Index is > 0.95 and .997; Normed Fit Index has a criterion of > 0.95 with a model fit value of .991; Tucker-Lewis Index has a criterion of > 0.95 with a model fit value of .994; RMSEA- Root Means Square of Error Approximation has a criterion of < 0.05 with a model fit value of .035.

The third iteration of the Structural Equation Model emerges as the most refined and statistically robust version, demonstrating superior fit characteristics (probability level > .05) compared to its predecessors while maintaining strong factor loadings within constructs. This more parsimonious model, with fewer parameters, presents clearer and more statistically significant relationships among variables. Financial Management consistently maintains its position as the strongest predictor of School Effectiveness, while Strategic Planning demonstrates a significant positive influence. Notably, Relational Leadership shows a marginally significant negative effect, a relationship more clearly defined in this model than in previous versions. The model's enhanced statistical properties and clearer component relationships provide compelling evidence that prioritizing Financial Management and Strategic Planning may be more instrumental in achieving School Effectiveness than emphasizing Relational Leadership aspects. The clarity and statistical significance of these relationships, combined with very strong measurement components within each construct, provide a more definitive understanding of the factors driving educational outcomes.

Table 13: Goodness of Fit Measures of Structural Equation Model 3

Index	Criterion	Model Fit Value
P-Close	> 0.05	.774
CMIN/DF	0 < value < 2	1.484
P-value	> 0.05	.107
GFI	> 0.95	.987
CFI	> 0.95	.997
NFI	> 0.95	.991
TLI	> 0.95	.994
RMSEA	< 0.05	.035

Legend:
CMIN/DF = Chi-Square/Degrees of Freedom
NFI = Normed Fit Index
TLI = Tucker-Lewis Index
CFI = Comparative Fit Index
GFI = Goodness of Fit Index
RMSEA = Root Means Square of Error Approximation
Pclose = P of Close Fit
P-value = Probability Level

4.15 The Goodness of Fit Measures of the Three Structural Equation Models

Table 14 shows the summary of the Goodness of Fit Measures of the three Path Analysis Models. It signifies that based on the result of the data gathered, Chi-Square/Degrees of Freedom has a criterion of 0 < value < 2 obtained a model fit value of 10.342 for model 1; 2.025 for model 2 and 1.484 for model 3, While P-value has a criterion of > 0.05 and a model fit value of .000 for model 1, .000 for model 2 and 0.107 for model 3; Also, for the Normed Fit Index has a criterion of > 0.95 with the model fit value of .810 for model 1, .975 for model 2 and 0.994 for model 3.

Moreover, the Tucker-Lewis Index, which has a criterion of > 0.95, obtained a model fit value of .792 for model 1, .982 for model 2, and .994 for model 3. For the Comparative Fit Index, which has a criterion of > 0.95, gained a model fit value of .825 for model 1, .987 for model 2, and .997 for model 3; For Goodness of the fit index has a criterion of > 0.95 revealed a model fit value of.742 for model 1, 0.967 for model 2 and 0.987 for model 3.

Furthermore, the RMSEA- Root Means Square of Error Approximation has a criterion of < 0.05, gaining a model fit value of .153 for model 1, .051 for model 2, and .035 for model 3. The Index P-Close Fit has a criterion of > 0.05, revealing a model fit value of .000 for model 1, .449 for model 2, and .774 for model 3. Results showed that among the three structural equation models, only model 3 had indices that consistently indicated an outstanding fit to the data. Therefore, it is identified as the best structural equation model.

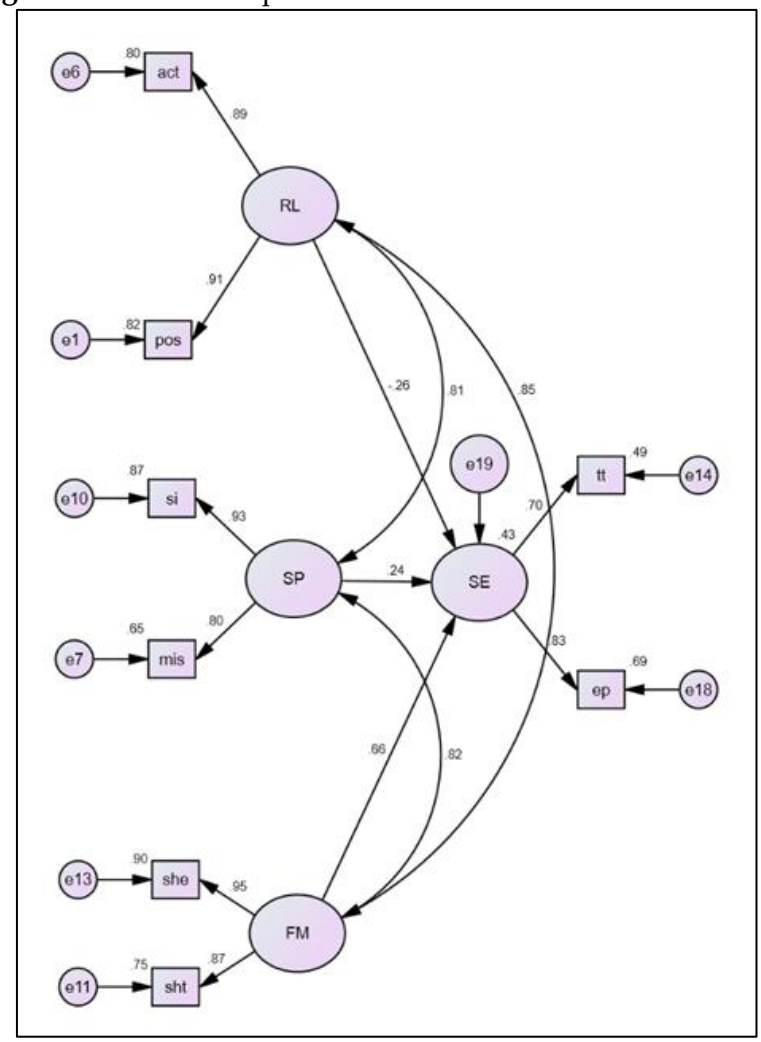
Table 14: Summary of Goodness of Fit Measures of the Three Structural Equation Model

Model	CMIN/DF 0<value<2	P-Value > .05	NFI > .95	TLI > .95	CFI > .95	GFI > .95	RMSEA < .05	P-Close > .05
1	10.342	.000	.810	.792	.825	.742	.153	.000
2	2.025	0.05	.975	.982	.987	.967	.051	.449
3	1.485	.107	.991	.994	.997	.987	.035	.774

4.16 Best Fit Model

Figure 4 shows the Structural Equation Model 3 in a Standardized Solution. This portion provides an analysis of the interrelationships among the variables of the study and an assessment of model fit. The Structural Equation Model reveals a complex network of relationships among key educational management factors, where Relational Leadership (RL) demonstrates a positive influence on Strategic Planning (SP), despite showing a weaker, negative direct effect on School Effectiveness (SE). Strategic Planning emerges as a significant mediating factor, channeling the influence of Relational Leadership towards School Effectiveness while maintaining its own modest direct impact on school outcomes. Financial Management (FM) stands out as a particularly robust predictor, exhibiting strong positive influences on both Strategic Planning and School Effectiveness. This intricate interplay of relationships underscores the interconnected nature of educational leadership dynamics, suggesting that effective school management requires a balanced integration of relational leadership approaches, strategic planning processes, and sound financial management practices to optimize overall school effectiveness.

Figure 4: Structural Equation Model 3 in Standardized Solution



Legend:

Act = Active
pas = Passive
una = Unaware
awa = Aware
pos = Positive
neg = Negative
RL = Relational Leadership
si = Stakeholder's Involvement
com = Communication
vis = Vision
mis = Mission
SP = Strategic Planning
she = School Heads Experience
shel = School Heads Level
sht = School Heads Training
FM = Financial Management
sc = School Climate
sa = School Administration
tt = The Teacher
rlc = Relationship with the Local Community
ep = Educational Practices
SE = School Effectiveness

5. Recommendations

Based on the foregoing results and relevant findings, the following recommendations were made:

Given that this study was conducted exclusively within the Department of Education Region XII, it is recommended that the Department of Education Philippines expand the scope of this research nationwide. Conducting a similar study across the country would provide a comprehensive evaluation of the relational leadership, strategic planning processes, and financial management competencies of public elementary school heads as critical factors influencing school effectiveness. This broader assessment could serve as a valuable basis for identifying strengths, addressing gaps, and implementing targeted interventions to enhance leadership and management practices on a national scale.

School principals and administrators are encouraged to take proactive steps in designing a comprehensive school management plan to enhance the delivery of essential services. Involving teachers in strategic planning processes can foster organizational awareness and empower them to contribute meaningfully to the school's goals. Additionally, integrating capability-building initiatives such as professional development programs and leadership training focused on enhancing organizational agility can strengthen the overall effectiveness and adaptability of the school community.

Teaching professionals are encouraged to actively strengthen their engagement with both the school and the community to foster collaboration and mutual support among stakeholders. Participating in relevant training sessions and seminars on relational leadership, strategic planning, and financial management can enhance their skills and enable them to contribute effectively to various school initiatives. By taking an active role in these efforts, teachers can play a pivotal part in achieving the school's mission, vision, and goals.

Future researchers exploring predictors of school effectiveness may consider using this study as a valuable reference. While the foundational concepts of this research can provide insight, it is essential to recognize that results may differ depending on the locale

and cultural context. Researchers should carefully account for these variables to ensure the relevance and applicability of their findings when building upon this study.

6. Conclusion

The findings of this research, which sought to identify the best-fit model for predicting the effectiveness of public elementary schools in the Department of Education Region XII, highlight the significant correlations of Relational Leadership, Strategic Planning, and Financial Management with School Effectiveness. The data and analyses presented in the tables clearly illustrate these relationships and their dynamics. These insights underscore the pivotal role of school leaders in cultivating an environment conducive to achieving the goals of public elementary schools in the region.

In addition, the results revealed that these school heads demonstrate a high degree of relational leadership, as evidenced by their exceptional ratings in terms of being active, passive, unaware, aware, positive, and negative. This suggests that school heads in the region are exhibiting relational leadership, which emphasizes building strong, positive relationships within teams. It fosters trust, collaboration, and a shared sense of purpose, contributing to organizational effectiveness, especially in educational settings, highly capable, respected, and influential in their roles.

Complementing a very high level of strategic planning, it received a high score in all four indicators: stakeholders' involvement, communication, vision, and mission. Promoting great strategic planning resulted in highly effective schools which benefit all stakeholders in education.

Furthermore, the level of financial management of public elementary school heads showed a very high-level result in terms of the following indicators; school heads experience, school heads educational level, and school heads training. This favorable professional culture is likely to lead to increased teaching quality and consistency, which will boost student learning outcomes and overall school performance.

Also, the level of school effectiveness is very high, as evidenced by the five indicators: school climate, school administration, the teacher, relationship with the local community, and educational practices. These factors collectively contribute to a high level of school effectiveness, particularly in areas of supervision, the nature of work, and communication within their educational settings.

School effectiveness of public elementary schools in Region XII was shown to be significantly correlated with relational leadership, strategic planning, and financial management, according to the correlation test. By choosing the best-fit model as the analysis moves through the stages of model specification, estimation, and assessment, the structural equation model improved the study's validity and comprehensiveness. School effectiveness of public elementary schools is best suited by Model 3, out of the three (3) created models. Given that it met all requirements for a good fit, it is the most efficient model. Many factors can affect the effectiveness of public elementary schools.

Additionally, based on the foregoing results and relevant findings, the following recommendations were made: Based on the result of the study among the IVs, the relational leadership tallied the lowest mean percentage of school heads tend to be negative and unaware thus, the researcher recommends that Department Education Region XII will continually design a development program dedicated to improving the school heads in terms of their relational leadership. Webb (2021) highlights that school heads who prioritize restorative practices—such as conflict resolution and open communication—are better able to create a positive school culture where relationships are central to the learning environment. While the restorative culture had diminished by the end of the initiative in some cases, the practices remained embedded in the school's operations due to the leadership's efforts to sustain them. On the citation of Quines & Cabaron (2022) highlight that humility counters pride and arrogance and directly impacts mental health and well-being, often amplifying these benefits through positive interpersonal interactions.

Further, the result of this study revealed that school effectiveness highly dependent on the level of schools' heads strategic planning formation process and financial management. The researcher further recommends that the Department of Education Region XII will continually design relevant programs and projects dedicated to the development of the school head's skills in drawing a strategic plan to uplift the quality of the school and its community and to manage school finances excellently taking into consideration the aspects of schools that needs much attention in terms of budg*et al*location. Furthermore, the study Strategic Planning and Financial Management for School Effectiveness (Schmidt, 2019) compares two schools, highlighting the impact of strategic planning and financial management on school outcomes. Schools with structured approaches involving clear goals, regular evaluations, and budg*et al*ignment showed better student performance, improved resource allocation, and higher staff satisfaction. In contrast, schools with less formalized practices saw weaker outcomes in these areas. The research underscores the importance of robust strategic frameworks and effective financial management in enhancing school effectiveness.

Moreover, the findings of the study corroborate the theory of "Integrated School Leadership and Resource Management Theory" (ISLRM) by Myran and Sutherland (2019), which links relational leadership, strategic planning, and financial management to school effectiveness. ISLRM asserts that effective leadership combines relationship-building with stakeholders, strategic planning, and sound financial management, aligning resources with educational goals. Relational leadership promotes a positive school culture, enhancing commitment to strategic plans, while financial management supports instructional quality and student outcomes. Additionally, this study uses the educational effectiveness model by Creemers and Kyriakides (2008), which considers student, classroom, school, and contextual factors, emphasizing teaching quality, assessment, and progress tracking, along with the influence of home and community on student success.

Acknowledgements

I wish to express my profound gratitude to everyone who supported and guided me throughout the journey of completing this dissertation.

First and foremost, I extend my deepest appreciation to my adviser, Dr. Lyndon A. Quines, whose invaluable guidance and expertise shaped this research. Your encouragement and insightful feedback inspired me to strive for excellence and broaden my horizons.

I am immensely thankful to my dissertation committee members, Dr. Elleine Rose A. Oliva, EdD, Dr. Eunice A. Atienzar, EdD, Dr. Rinante L. Genuba, EdD, Dr. Elizabeth M. Malonzo, PhD, and Dr. Joel B. Tan, DBA. Their constructive feedback, thoughtful insights, and the time they devoted to reviewing my work enriched the depth and quality of this study.

A special note of gratitude goes to Dr. Eugenio S. Guhao Jr., DM, for his expert advice and guidance, particularly in the statistical aspects of the research, which greatly enhanced the study's overall rigor.

I am also thankful to the staff of the University of Mindanao Ethics Review Committee, especially Dr. Normeliza E. Morales, PhD, for their support in ensuring that this research adhered to ethical standards and principles.

To my colleagues and fellow researchers—Merlyn M. Adlawan, April Rose P. Apad, John Rey C. Batiancila, Jesrene Vale V. Calong, Jay-Ar M. Dubalan, Cerilo F. Espinosa Jr., Eunice Joy I. Lariosa, Melchor P. Maguan, and Jessica T. Verallo—thank you for your camaraderie and encouragement. The collaborative discussions and shared learning experiences with you all were truly invaluable. My heartfelt thanks also go to Dolly Joy F. Lingcob and Mediatrix J. Anayatin for their unwavering friendship and support, which contributed greatly to my intellectual growth.

I would also like to acknowledge the GSC Elementary School for the Arts, particularly Mr. Ricky B. Niño, our School Head, for his unwavering support and prompt assistance whenever needed.

This milestone would not have been possible without the steadfast support of my family. To my beloved Mamang in heaven, who was the first to inspire me to embark on this journey, and to my sister Baby, who provided unwavering financial and emotional support—thank you for your patience, understanding, and encouragement.

To Hanah, my inspiration and love from across the miles, your support and motivation have been a source of strength.

Finally, I express my gratitude to the participants and schools of Region XII who generously shared their time and experiences, making this research possible.

Above all, I give glory to God for His unfailing grace and guidance throughout this journey.

Conflict of Interest Statement

The authors declare no conflicts of interest.

About the Author(s)

Rey M. Ramos is currently a Teacher III assigned at GSC Elementary School for the Arts, Apopong District, General Santos City. He is a candidate for a Doctor of Education with a concentration in Educational Management.

Lyndon A. Quines, EdD, is currently a University Professor at the University of Mindanao Professional Schools, Davao City, Philippines.

References

Agostino, D., Arena, M., & Maggi, B. (2021). Planning in startup companies: The relevance of reviews and adjustments for firm growth and survival. *Long Range Planning, 54*(4). https://doi.org/10.1016/j.lrp.2021.101997

Alhatmi, Y. (2019). Sample size determination. In Y. Alhatmi (Ed.) Functional foods and nutraceuticals (pp. 57-63). Intech Open. https://doi.org/10.5772/intechopen.80731

Ali, N. (2017). Teachers' perceptions of the relationship between principals' instructional leadership, school culture and school effectiveness in secondary schools in Pakistan. *Journal of Education and Educational Development*, 4(1), 58-78. https://doi.org/10.22555/joeed.v4i1.1060

Alm, S., Brolin Låftman, S., & Modin, B. (2019). School effectiveness and students' future orientation: A multilevel analysis of upper secondary schools in Stockholm, Sweden. *Journal of Adolescence,* Volume 70, Retrieved from https://doi.org/10.1016/j.adolescence.2018.11.007

Anderson, E. T., Smith, J. A., Jones, K. L., & Wilson, R. M. (2022). Characteristics of effective schools and promotion of school effectiveness: A literature review. *Teaching and Teacher Education, 109,* https://doi.org/10.1016/j.tate.2022.103510

Antoniou, P., Kyriakides, L., & Charalambous, E. (2019). How and under which conditions can we best combine research on school effectiveness with research on school improvement? *Education Sciences, 12*(8). https://doi.org/10.3390/educsci12080537

Arnaiz-Sánchez, P., de Haro, R., Alcaraz, S., & Mirete Ruiz, A. B. (2019). Schools that promote the improvement of academic performance and the success of all students. *Frontiers in Psychology*. https://doi.org/10.3389/fpsyg.2019.02920

Baker, B. D., Di Carlo, M., & Weber, M. (2020). *The adequacy and fairness of state school finance systems*. Albert Shanker Institute. Retrieved from https://www.shankerinstitute.org/resource/adequacy-and-fairness-state-school-finance-systems

Baldoz, N. A., & Guhao Jr, E. S. (2020). Causal model on work engagement of the agriculture sector employees in Davao Region. *Review of Integrative Business and Economics Research, 9*, 475-506. Retrieved from

https://buscompress.com/uploads/3/4/9/8/34980536/riber_9-s4_31_h19-114_475-506.pdf

Ball, S. J., & Collet-Sabé, J. (2021). Against school: An epistemological critique. *Discourse: Studies in the Cultural Politics of Education, 43*(6), 985-999. Retrieved from https://doi.org/10.1080/01596306.2021.1947780

Başaran, M., Şahin, F., & Gümüş, S. (2021). Investigation of the relation between relational leadership features of school principals and school effectiveness according to opinions of teachers. *International Journal of Curriculum and Instruction, 13*(1), 120-134.

Basel, S. (2011). Evaluating the effectiveness of strategic planning within the Middle Eastern public sector. *Public Organization Review, 11*(3), 221-235. https://doi.org/10.1007/s11115-010-0132-3

Bastasa, J. L., & Guhao Jr, E. S. (2024). Principal Leadership, Political Skills and Teacher Empowerment: a Path Model Analysis on School Climate among Public Schools. *European Journal of Education Studies*, *11*(11). http://dx.doi.org/10.46827/ejes.v11i11.5576

Baxter, J., & Cornforth, S. (2019). Relational leadership and trust in South African primary schools: Bridging socio-economic divides. *Journal of Educational Leadership and Policy Studies*, 12(3), 225-240.

Bayani, C. H. A. F., & Guhao Jr, E. S. (2023). Absence of Master Teachers in Non-Central Schools: Perspective of School Heads. *The International Journal of Business Management and Technology*, Volume 7, Issue 2. Retrieved from https://www.theijbmt.com/archive/0950/1114174190.pdf

Blas, J. B., & Guhao Jr, E. S. (2023). Leadership behavior, strategic leadership and instructional leadership of school heads: A structural equation model on Region XI. *International Journal of Innovative Science and Research Technology 8*(7). Retrieved from https://doi.org/10.5281/zenodo.8194961

Brady, K. (2019). Financial management practices and school effectiveness in Irish secondary schools. *Educational Management Administration & Leadership, 47*(4), 512-529. https://doi.org/10.1177/1741143217752323

Branson, C. M., & Marra, M. (2019). Leadership as a relational phenomenon: What this means in practice. *Research in Educational Administration & Leadership, 4*(1), 81-108. https://doi.org/10.30828/real/2019.1.4

Bell, A., Conner, M. J., & Madsen, J. (2022). The ties that bind: How principals' relational leadership practices correlate with school improvement capacity. *Journal of School Leadership*, 32(1), 50-71. https://doi.org/10.1177/1052684621993115

Bush, T., & Glover, D. (2019). School leadership and management in South Africa: Findings from a systematic literature review. *International Journal of Educational Management*, *33*(6), 1201–1222. Retrieved from https://eric.ed.gov/?id=EJ1093208

Bustamante, J. C. (2022). Planning in disruption: The paradigm shift in strategic planning derived from Covid-19. *Journal of Creating Value*, 8(1), 93-104. https://doi.org/10.1177/23949643221081614

Bryson, J. M., Edwards, L. H., & Van Slyke, D. M. (2021). Getting strategic about strategic planning research. *Public Management Review, 23*(8), 1139-1161. https://doi.org/10.1080/14719037.2020.1720351

Byrne, B. A. (2019). *Structural equation modeling with AMOS: Basic concepts, applications, and programming* (3rd ed.). Routledge. https://doi.org/10.4324/9781315757421

Byrne, B. M. (2021). *Structural equation modeling with AMOS: Basic concepts, applications, and programming* (5th ed.). Routledge.

Caballero, C. G., & Guhao Jr, E. S. (2020). Structural equation model on organizational commitment of private schools' library personnel in Region XI. *Review of Integrative Business and Economics Research, 9*, 335-381. Retrieved from https://buscompress.com/uploads/3/4/9/8/34980536/riber_9-s3_29_h19-058_335-381.pdf

Cabayag, S. J. L., & Guhao Jr, E. S. (2024). Self-efficacy, Job Performance, and Transformational Leadership: A Structural Equation Model on Organizational Commitment among Public School Teachers. *European Journal of Education Studies*, 11(1). http://dx.doi.org/10.46827/ejes.v11i1.5168

Carroll, B., & Simpson, B. (2021). Understanding leadership as relational practice: What leaders actually "do" in relational leadership. *Leadership, 17*(1), 39-52. https://doi.org/10.1177/1742715020957307

Creemers, B. P. M., & Kyriakides, L. (2008). *The dynamics of educational effectiveness: A contribution to policy, practice and theory in contemporary schools.* Routledge. https://doi.org/10.4324/9780203939291

Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2019). Effective teacher professional development. Learning Policy Institute. Retrieved from https://learningpolicyinstitute.org/sites/default/files/product-files/Effective_Teacher_Professional_Development_REPORT.pdf

Day, C., & Sammons, P. (2019). *Successful school leadership: Linking with learning and achievement*. Open University Press. https://doi.org/10.1007/s11218-018-0455-1

Digap, W. P., & Quines, L. A. (2022). The Mediating Effect of Team Member Effectiveness on the Relationship Between Principal Leadership Styles and Professional Self-Esteem of Teachers. *European Journal of Education Studies, 9*(12). http://dx.doi.org/10.46827/ejes.v9i12.4579

Dumay, X., Boone, S., & Van Maele, D. (2022). Principal leadership effect on teacher collaboration: A longitudinal mediation model. *Educational Administration Quarterly*, 58(1), 89-122. https://doi.org/10.1177/0013161X211049466

Ekore, J. O., & Okekeocha, C. M. (2022). Social media usage and academic performance among undergraduates in selected Nigerian universities. *Library Philosophy and Practice*, 1-19.

Escosora, M. A., & Guhao Jr, E. S. (2023). Work Task Motivation, Emotional Intelligence and Public Leadership: Structural Equation Model on Organizational Culture. *Journal of Education, Management and Development Studies, 3*(4), 11-36. http://dx.doi.org/10.52631/jemds.v3i4.232

Ferrando, C., & Guhao, E. (2024). Ethical climate, charismatic leadership of school heads and teachers' sense of self-efficacy: A structural equation model on teacher engagement. *Psychology and Education: A Multidisciplinary Journal, 20*(2), 171-187. Retrieved from https://scimatic.org/show_manuscript/2953

Fernandez, S., & Rainey, H. G. (2019). Strategic planning in public education: A meta-analysis of effects on school performance. *Educational Administration Quarterly, 55*(2), 258-286. http://dx.doi.org/10.9734/ajess/2023/v45i1976

Fiset, J., & Fiset, F. (2014). The good shepherd: The impact of relational leadership interventionary behaviour on workplace ostracism. *Journal of Second Language Teaching and Research*, 2(1), 30-47. https://doi.org/10.5420/jsltr.v2n1.30

Fusco, T., O'Riordan, S., & Palmer, S. (2020). Authentic leaders are...conscious, competent, confident, and relational: A grounded theory study of Australian educational leaders. *Journal of Educational Administration*, *58*(5), 515-532. https://doi.org/10.1108/JEA-09-2019-0184

Iliyasu, R., & Etikan, I. (2021). Comparison of quota sampling and stratified random sampling. Biom. *Biostat. Int. J. Rev, 10*(1), 24-27. https://doi.org/10.15406/bbij.2021.10.00326

Garcia, A., Rodriguez, B., & Chen, L. (2019). Financial management and educational outcomes in resource-constrained schools: A comparative study. *Journal of Educational Finance*, 44(3), 267-285.

Gitonga, M. W., Nguyen, T. T. H., Nyagorme, P. G., & Museve, C. M. (2019). Strategic planning and school effectiveness: Empirical evidence from primary schools in Kenya. SAGE Open, 9(2). https://doi.org/10.1177/2158244019840118

Gómez-Hurtado, I., González-Falcón, I., & Coronel, J. M. (2020). Perceptions of secondary school principals on the management of cultural diversity in Spain: The influence of demographic factors. *Intercultural Education, 31*(1), 29-46.

Guhao Jr, E. S., & Sioting Jr, R. N. (2023). Organizational Trust, Teachers' Self-efficacy and School Culture: A Structural Equation Model on Professional Learning Communities among Public Elementary Schools in Region XI. *European Journal of Education Studies, 10*(6). http://dx.doi.org/10.46827/ejes.v10i6.4855

Guhao, Jr., E., & Quines, L. (2021). The mediating effect of authentic leadership of school heads on the relationship between teamwork attitudes and work engagement. *International Journal of Business Management and Economic Review*, 4(6). https://doi.org/10.35409/IJBMER.2021.3342

Gurley, D. K., Peters, G. B., Collins, L., & Fifolt, M. (2019). Strategic planning and school improvement: The impact of stakeholder engagement on organizational

outcomes. *Journal of Educational Leadership and Policy Studies*, 3(2), 1-23. http://dx.doi.org/10.47191/ijsshr/v6-i7-63

Harris, A., & Chapman, C. (2019). School effectiveness and school improvement: Research trends and future directions. *Journal of Educational Leadership*, *45*(3), 213-228.

Harris, A., & Jones, M. (2019). System improvement and professional learning: The critical connection. *School Leadership and Management, 39*(5), 434-450.

Huang, J., & Murdock, S. (2019). Financial management and school leadership: A study of principal decision-making in budgeting. *International Journal of Educational Management, 33*(4), 787-802. https://doi.org/10.1108/IJEM-12-2017-0345

Javornik, Š., & Klemenčič, E. (2019). Factors contributing to school effectiveness: A systematic literature review. *European Journal of Investigation in Health, Psychology and Education*, *13*(10). https://doi.org/10.3390/ejihpe13100148

Jones, R. M., & Brown, S. T. (2019). The role of financial literacy in school leadership: Implications for effectiveness. *Educational Administration Quarterly*, *55*(2), 311-337.

Kiram, S. R., & Guhao Jr, E. S. (2023). Implementation of Clinical Supervision from the Standpoint of School Heads. *The International Journal of Business Management and Technology*, 7(2), 487-527. Retrieved from https://www.theijbmt.com/archive/0950/1744539155.pdf

Kocak, N., & Nartgun, Z. (2019). The role of leadership in school effectiveness: A review of the literature. *International Journal of Educational Management, 33*(3), 415–430. https://doi.org/10.1108/IJEM-01-2018-0019

Kwaslema, P., Ndirangu, M., & Ondieki, A. (2021). Effectiveness of the strategic planning and academic performance among the public secondary schools in Babati District, Tanzania. https://doi.org/10.46606/eajess2021v02i01.0069

Lee, J. H., Hassan, A., & Park, J. S. (2022). Strategic planning and student achievement: Exploring the relationship. *Planning and Changing, 47*(3-4), 220-232. https://doi.org/10.1080/00220671.2021.2018537

Leithwood, K., & Azah, V. N. (2019). Characteristics of effective leadership networks: A multiple case study. *Educational Management Administration & Leadership, 47*(4), 540-558. https://doi.org/10.1177/1741143217745882

Leithwood, K., Harris, A., & Hopkins, D. (2019). School effectiveness revisited: A review of the evidence. *School Leadership & Management, 39*(1), 5-28.

Levin, N., & Mor Barak, A. (2023). Relational leadership, decision making, and school principals. *International Journal of Leadership in Education.* https://doi.org/10.1080/13603124.2022.2152206

Lezotte, L. W. (1989). Base school improvement on what we know about effective schools. *The American School Board Journal, 176*(6), 18-20. https://doi.org/10.1177/003172178917600604

Liang, G., Zhang, Y., Huang, H., Shi, W., & Qiao, Z. (2020). Instructional leadership practices in Chinese urban upper primary schools: Effects on students' academic

achievement. *The Asia-Pacific Education Researcher, 29*(6), 569-582. https://doi.org/10.1007/s40299-020-00501-5

Liu, S., Xu, X., Grant, L. W., Stronge, J. H., & Popp, P. A. (2019). The influence of instructional leadership and facilitative administration on student outcomes through professional learning communities: Exploring paths from leadership to student learning. *Educational Administration Quarterly, 55*(5), 757-792. https://doi.org/10.1177/2332858419867752

Liu, Y., & Wang, X. (2021). Relational leadership and school effectiveness: The mediating role of school climate. *Educational Management Administration & Leadership, 49*(6), 1003-1021.

Loeb, S., Dynarski, S., McFarland, D., Morris, P., Reardon, S., & Reber, S. (2017). Descriptive analysis in education: A guide for researchers (NCEE 2017-4023). National Center for Education Evaluation and Regional Assistance. Retrieved from https://files.eric.ed.gov/fulltext/ED573325.pdf

Macgilchrist, B., & Christophe, V. (2021). The relationship between school leadership and student outcomes: A meta-analysis. *Educational Administration Quarterly, 57*(5), 769-808. https://doi.org/10.1177/0013161X211021501

Mason, D. P. (2020). Leading in uncertainty: Strategic planning in Christian higher education. *Christian Higher Education, 19*(1-2), 26-39. https://doi.org/10.1080/15363759.2020.1704788

Masunag, M., & Guhao, E. (2024). Organizational Climate, Transformational and Ethical Leadership: A Structural Equation Model on Organizational Commitment of Teachers. *Psychology and Education: A Multidisciplinary Journal, 20*(2), 151-171.

Martínez-Abad, F., Chaparro-Caso-López, J., & others. (2019). Identification of factors associated with school effectiveness using data mining techniques: Testing a new approach. *Frontiers in Psychology, 10*, 2583. https://doi.org/10.3389/fpsyg.2019.02583

Matula, P. D., Mulwa, A. S., & Kimosop, K. J. (2018). Institutional factors influencing teachers' job commitment in public primary schools in Mwatate Sub-county, Kenya. *European Journal of Education Studies*, *4*(1), 247-269. https://doi.org/10.5281/zenodo.1162989

Mestry, R. (2019). The role of principals in financial planning and management in South African no-fee public schools. *Educational Management Administration & Leadership 46*(2). http://dx.doi.org/10.1177/1741143216665838

Millado, K. F. M. R., Guhao Jr, E. S., & Rodriguez, G. D. (2021). Path model on organizational effectiveness of higher education institutions of Region XII. *International Journal of Scientific & Technology Research*, 10(05). Retrieved from https://www.ijstr.org/final-print/may2021/Path-Model-On-Organizational-Effectiveness-Of-Higher-Education-Institutions-Of-Region-Xii.pdf

Mohsen, S. M., & Reg, D. (2022). Cronbach Alpha reliability coefficient for Likert scales. *SHAMS Journal of Economics, Management and Marketing*, 3(1), 81-88. Retrieved from http://dx.doi.org/10.5116/ijme.4dfb.8dfd

Mpolokeng, T. (2011). The effectiveness of financial management in schools in the Lejweleputswa Education District. Retrieved from http://ir.cut.ac.za/handle/11462/139

Munge, W., Kimani, E., & Ngugi, M. (2019). Financial management in public secondary schools in Nakuru County, Kenya. *Nairobi Journal of Humanities and Social Sciences*, 3(1), 16–28. Retrieved from https://www.researchgate.net/publication/315828534_FACTORS_INFLUENCING_FINANCIAL_MANAGEMENT_IN_PUBLIC_SECONDARY_SCHOOLS_IN_NAKURU_COUNTY_KENYA

Muthoni, F., Mwenda, J. N., & Kithinji, S. (2019). Financial management and school effectiveness in public secondary schools in Kenya. *Journal of Education and Practice*, 10(4), 100–109. https://doi.org/10.7176/JEP/10-4-12

Myran, S., & Sutherland, I. (2019). Defining learning in educational leadership: Reframing the narrative. *Educational Administration Quarterly, 55*(4), 657-696. https://doi.org/10.1177/0013161X18809338

Myran, S., & Sutherland, I. (2019). Integrated school leadership and resource management theory: Relational leadership, strategic planning, and financial management as interdependent drivers of school effectiveness. *Educational Management, Administration & Leadership, 47*(4), 527-545.

Ngcamu, B. S. (2019). Financial management skills of principals leading no-fee South African public schools. *South African Journal of Education*, 39(3). https://doi.org/10.15700/saje.v39n3a1753

Ntseto, V. (2009). A programme to facilitate principals' financial management of public schools. Retrieved from https://scholar.ufs.ac.za/server/api/core/bitstreams/195bf099-7765-44d9-a644-1dddcaf9421b/content

Pallant, J. (2022). *SPSS statistics for research groups* (5th ed.). Routledge. Retrieved from https://doi.org/10.4324/9781003117452

Quines, L. A., & Albutra, D. A. (2023). The Mediating Effect of Normative Commitment on the Relationship between Instructional Coaching Skills and Teamwork of Teachers. *European Journal of Education Studies*, *10*(3). Retrieved from http://dx.doi.org/10.46827/ejes.v10i3.4713

Quines, L. A., & Cabaron, I. M. P. (2022). The mediating effect of affective commitment on the relationship between faculty spirituality and school climate. *European Journal of Education Studies, 9*(11). Retrieved from https://oapub.org/edu/index.php/ejes/article/view/4519

Quines, L. A., & Monteza, M. T. (2023). The mediating effect of teacher collegiality on the relationship between instructional leadership and professional development of

teachers. *European Journal of Education Studies, 10*(3). Retrieved from http://dx.doi.org/10.46827/ejes.v10i3.4716

Quines, L. A., & Relacion, M. C. D. (2022). The Mediating Effect of School Climate on the Relationship between Teacher Communication Behavior and Student Engagement. *European Journal of Education Studies*, *9*(11). Retrieved from http://dx.doi.org/10.46827/ejes.v9i11.4521

Quines, L. A., & Saycon, L. J. V. (2023). The Mediating Effect of Organizational Commitment on the Relationship between Workplace Resilience and Teacher Professional Identity. *European Journal of Education Studies*, *10*(6). Retrieved from http://dx.doi.org/10.46827/ejes.v10i6.4865

Reynolds, D., Harris, A., Clarke, P., Harris, B., & James, S. (2022). Educational effectiveness research: The development of the field and current challenges. *Oxford Review of Education, 48*(4), 461-481. https://doi.org/10.1080/03054985.2022.2070720

Ricaplaza, M. C. B., & Quines, L. A. (2022). The mediating effect of work ethics on the relationship between authentic leadership of school heads and task performance of public school teachers. *American Journal of Multidisciplinary Research and Innovation*, 1(6), 13-29. Retrieved from https://doi.org/10.54536/ajmri.v1i6.1006

Salip, F. G., & Quines, L. A. (2023). The Mediating Effect of Emotional Intelligence on the Relationship Between Authentic Leadership and Organizational Climate Among Public School Teachers. *American Journal of Multidisciplinary Research and Innovation*, 2(4), 1-12. http://dx.doi.org/10.54536/ajmri.v2i4.1730

Salinas, S. S., & Lyndon, A. Q. (2022). The Mediating Effect of Work Values on the Relationship Between Reflective Thinking Skills and Positive Personality Traits Among Public School Elementary School Teachers. *American Journal of Education and Technology*, 1(3), 30-41. Retrieved from http://dx.doi.org/10.54536/ajet.v1i3.823

Scamel, L. V. (2021). Leadership practices in education: Its impact to community trust and support. *Journal of Critical Reviews, 7*(11), 855-860. https://doi.org/10.31838/jcr.07.11.134

Scheerens, J. (1990). School effectiveness research and the development of process indicators of school functioning. *School Effectiveness and School Improvement, 1*(1), 61-80. https://doi.org/10.1080/0924345900010106#

Schmidt, H. (2019). Strategic planning and financial management for school effectiveness: A comparative study of two educational institutions. *Educational Management Administration & Leadership, 47*(6), 852-868. https://doi.org/10.1177/1741143218775221

Seker, M., & Yildirim, M. (2019). The role of financial management in achieving school effectiveness. *Journal of Educational Administration,* 57(3), 289-305. https://doi.org/10.1108/JEA-06-2018-0081

Slavin, R. E. (2019). How evidence-based reform will transform research and practice in education. *Educational Psychologist, 54*(1), 20-31. https://doi.org/10.1080/00461520.2019.1611432

Smit, B., & Mabusela, M. (2019). Understanding relational and responsible leadership for school leaders. Oxford Research Encyclopedia of Education. https://doi.org/10.1093/acrefore/9780190264093.013.521

Smith, A. B., Jones, C. D., & Wilson, E. F. (2020). The impact of strategic planning on high school effectiveness. *Journal of Educational Effectiveness,* 13(2), 178-195. https://doi.org/10.1007/s11125-019-09477-2

Smith, J. A., Johnson, M. B., & Williams, K. L. (2019). Strategic financial planning and its impact on student achievement: A longitudinal study of public schools. *School Effectiveness and School Improvement, 30*(2), 139-162.

Song, J. H., & Ko, J. (2021). Relational leadership and employee creativity: A multilevel moderated mediation model of psychological safety and perceived organizational support. *Journal of Occupational and Organizational Psychology,* 94(3), 675-697. https://doi.org/10.1002/job.2547

Sullivan, A., & Heath, A. (2019). The impact of school characteristics on student outcomes: Evidence from the UK. *Educational Studies, 45*(3), 285-305. https://doi.org/10.1080/03055698.2019.1574042

Teddlie, C., & Reynolds, D. (Eds.). (2019). *The international handbook of school effectiveness and improvement.* Springer. Retrieved from https://link.springer.com/book/10.1007/978-1-4020-5747-2

Thompson, M. K., Roberts, J. L., & Chen, W. (2019). Strategic planning implementation and its effects on school performance: A longitudinal study. *Journal of Educational Management*, *45*(3), 218–234. Retrieved from http://dx.doi.org/10.9734/arjass/2023/v21i1459

Udo, J. U., & Inyang, E. B. (2019). Financial Management and School Effectiveness: An Empirical Analysis. *International Journal of Educational Management*, *33*(2), 348-367. https://doi.org/10.1108/IJEM-05-2018-0151

Uhl-Bien, M., & Arena, M. (2019). Leadership for organizational adaptability: A theoretical synthesis and integrative framework. *The Leadership Quarterly*, *30*(1), 89-104. https://doi.org/10.1016/j.leaqua.2018.11.002

Wango, G., & Gatere, A. (2019). Influence of budgeting, financial reporting, and auditing practices on the performance of public secondary schools in Kenya. *Nairobi Journal of Humanities and Social Sciences*, *3*(1), 18–30.

Webb, O. (2021). Enacting relational leadership through restorative practices. *Alberta Journal of Educational Research*, 67(2), 159-177. https://doi.org/10.11575/ajer.v67i2.73222

Wolf, C., & Floyd, S. W. (2019). Strategic planning research: Toward a theory of planning as learning. *Academy of Management Perspectives, 34*(3), 365-383. https://doi.org/10.5465/amp.2018.0055

Woods, P., & Gunter, H. M. (2019). School leadership and strategic management: Bridging the gap. *Educational Management Administration & Leadership*, *47*(5), 689-705. https://doi.org/10.1177/1741143218790896

Woods, P., & Roberts, A. (2019). Collaborative school leadership in a global society: A critical perspective. Educational Management Administration & Leadership, 47(5), 663-677. https://doi.org/10.1177/1741143218759088

Zamir, E. (2020). The long-term effects of policing the COVID-19 pandemic: Public attitudes toward the police in the 'new normal'. *Journal of Criminal Justice*. https://doi.org/10.1016/j.jcrimjus.2020.101719