

The Quality of Education as Reviewed from the Influence of Academic Supervision and the School Environment

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Abstract: This study examines the individual and combined effects of academic supervision and school environment on education quality in public elementary schools across Mesuji District, addressing three key objectives: (1) assessing academic supervision's impact, (2) evaluating school environment's influence, and (3) measuring their synergistic contribution. Employing a quantitative causal design, we surveyed 122 teachers from 10 systematically sampled public elementary schools (representing 44% of the district's 277 teachers across 25 schools). Data collection combined validated questionnaires ($\alpha=0.87$) with institutional documentation, analyzed through Pearson correlation and hierarchical multiple regression ($p<0.05$). Findings reveal significant positive influences: academic supervision independently accounted for 32% variance in education quality ($\beta=0.47$, $p<0.01$), while school environment explained 28% ($\beta=0.42$, $p<0.01$). Their combined effect explained 67% of quality variance ($R^2=0.67$, $F=58.34$, $p<0.001$), demonstrating synergistic enhancement beyond individual factors. This study introduces an integrated quality predictor model that: (1) quantifies the multiplier effect of combining supervision and environmental factors, and (2) establishes threshold values for effective supervision in resource-constrained settings - a previously unmeasured dimension in developing educational contexts. Three actionable strategies emerge: Implementing fortnightly supervision cycles with classroom observation protocols Optimizing physical environments through noise-reduction and learning space redesign Developing school climate improvement teams to monitor psychosocial factors. The research makes dual contributions by: (1) advancing theoretical understanding of environmental-supervisory interactions in educational ecosystems, and (2) providing an evidence-based framework for simultaneous quality improvement interventions in comparable rural school systems.

Keywords: Academic Supervision, Quality of Education, School Environment

A. Introduction

The quality of education is a central issue in the development of a nation. The quality of education in Indonesia remains a major challenge. Although various improvement efforts have been made, the results achieved are not evenly distributed. The gap in

education quality between regions and between schools remains quite significant (Ardi Rafsanjani & Rozaq, 2024). Efforts to improve the quality of education will always be a topic of discussion in education management. Improving the quality of education is an endeavor that must be pursued continuously to achieve the hope of quality and relevant education (Hoare & Goad, 2022). In response, we know that education is a key component in measuring a nation's development, as it plays a crucial role in shaping the nation's character. Education is a crucial factor in determining a country's development (Chankseliani et al., 2021). This is further supported by Komariah & Nihayah (2023), which states that education is a process for creating individuals with faith, piety, personality, intelligence, health, and responsibility. Therefore, education must apply appropriate principles in practice.

Article 4 of Law No. 14 of 2005 concerning Teachers and Lecturers states that to improve the quality of national education and effectively carry out their functions, teachers are required to meet certain requirements, one of which is competence. In the educational process, teachers play a crucial and strategic role in guiding students toward maturity, growth, and independence, often referred to as the spearhead of education. The quality of education is determined by internal and external factors, such as the quality of academic supervision and the condition of the school environment (Halawa & Mulyanti, 2023). Academic supervision is the process of providing assistance to teachers in improving the quality of learning, while the school environment encompasses various physical, social, and cultural aspects that influence the teaching and learning process. Furthermore, Barker (2024) also states that education is an important factor that determines the nation's character. This means that improving the quality of education must be done immediately and cannot be delayed. The success of a nation's development depends on the quality of its human resources (Saleh et al., 2020). This can only be achieved through good education.

In Indonesia, education quality standards are established in a national standardization system known as the National Education Standards (SNP). The scope of national education standards is stipulated in Government Regulation Number 19 of 2005 concerning National Education Standards, Chapter II, Article 2, which states that the scope of National Education Standards includes (a) content standards, (b) process standards, (c) graduate competency standards, (d) educator and education personnel standards, (e) infrastructure standards, (f) management standards, (g) financing standards, and (h) assessment standards (Asrama, 2021).

Educational quality refers to the quality and standards of education provided within an education system. It is fully recognized that human resources have a significant influence and are considered the primary key to improving educational quality. No matter how advanced technology, information development, or adequate facilities and infrastructure are, without reliable human resources, the goal of improving educational quality will be difficult to achieve. In other words, the material resources component of education cannot be effective without the human resources component

(Sangsurya et al., 2021). This encompasses various aspects that determine how well education achieves its stated goals, both in terms of process and outcomes. However, in reality, the quality of education in Indonesia is very low (Kawuryan et al., 2021). The problem of low educational quality also occurs in Mesuji District, particularly at the elementary school level. Based on our data, of the 25 elementary schools in Mesuji District, only one (4%) has received an A accreditation. Thirteen schools (52%) have received a B accreditation, while the remaining eight schools (32%) have received a C accreditation.

This proportion indicates that the overall quality of education in Mesuji District remains relatively low. This low quality of education can be caused by various interrelated factors. One factor that deserves attention is the less-than-optimal implementation of accreditation feedback by the assessor team. Although accreditation and feedback have been conducted several times, they appear to have had no significant impact on improving educational quality, particularly in schools with low accreditation scores. This indicates that follow-up on accreditation results still needs to be strengthened to drive tangible improvements in educational quality in the region. In response to the issue of low educational quality in Indonesia, particularly in the Mesuji sub-district, we aim to examine the underlying causes in more depth. In addition to educational quality issues, the influence of academic supervision and the school environment on educational quality is crucial, given that both play a significant role in improving educational quality.

Other contributing factors include suboptimal academic supervision and school environmental conditions that do not fully support the learning process. This study aims to identify the extent to which academic supervision and the school environment contribute to the gap in educational quality and the factors that influence it. Academic supervision, conducted by supervisors and principals, aims to provide guidance and evaluation of teacher performance to improve competency and teaching quality (Imamah & Churrahman, 2022). The effectiveness of this supervision often depends on the frequency, method, and quality of feedback provided by supervisors (Chircop Coleiro et al., 2023). Furthermore, a conducive school environment, both physically, such as the availability of facilities, and non-physically, such as social support and organizational climate, can influence the teaching and learning process, resulting in improved educational quality (Wijaya & Selamat, 2024). By examining the interaction between academic supervision and the school environment, this study hopes to demonstrate the extent to which both contribute to educational quality and offer recommendations for improving the quality of learning in schools. This research was conducted in public elementary schools in Mesuji District. Based on the researchers' observations at several public elementary schools in Mesuji District, several indicators were found indicating inadequate teacher discipline and administrative completeness. This was evident in the learning process, such as teachers not preparing lesson plans (RPP) when delivering lessons to students.

The researchers' observations also revealed several indicators indicating a lack of teacher motivation in teaching, which has resulted in decreased teacher productivity and performance. It can be concluded that the teacher lacks high work motivation. This can impact the quality of education at the school. This is due to a lack of harmony in the relationship between the teacher and the principal, as well as between the teacher and other teachers. This creates a non-conducive school environment, as evidenced by the behavior of senior teachers nearing retirement who are reluctant to attend class and often rely on younger teachers, citing their age. Preliminary research also revealed the principal exhibiting favoritism toward teachers, ranging from assigning assignments and warnings to unethical delivery. If a teacher has high work motivation, they will carry out their duties to the best of their ability. The aforementioned issues related to teacher administrative completeness and work motivation are caused by teachers' lack of knowledge or skills in IT. Consequently, teachers are not maximizing the use of digital media available at the school, such as laptops, Chromebooks, projectors, and so on. In addition, the implementation of academic supervision by the principal has not been running optimally, so that the supervisory function to control the work of teachers has not been carried out; in other words, the academic supervision carried out by the principals of public elementary schools in Mesuji District has not been implemented optimally.

Based on data obtained through observation, it was discovered that the overall teacher performance assessment (PKG) results in public elementary schools in Mesuji District, using the Teacher Performance Supervision and Assessment Instrument, averaged above 78. This indicates that principals are not objective in their assessments; thus, supervision has not impacted the quality of education. The principal's lack of objective implementation of academic supervision affects teacher discipline, resulting in a lack of enthusiasm for their teaching duties (Hou, 2023). Effective principal supervision provides strong motivation for teachers to work willingly and without coercion, ultimately improving their performance (Sumapal, 2023).

This improved teacher performance is expected to improve student achievement, which in turn improves the quality of the school's graduates. A conducive school environment is crucial to supporting the learning process (Xu et al., 2022). A comfortable, safe, and clean environment can increase student motivation (Harefa et al., 2024). Furthermore, support from the principal, colleagues, and parents can also positively impact teacher performance and student achievement. Based on the above, the researcher needs to conduct quantitative research on the results of the initial observations. Therefore, based on what has been described, the researcher will conduct a study entitled "Educational Quality as Reviewed from the Perspective of Academic Supervision and the School Environment."

B. Methods

The research was conducted at public elementary schools in Mesuji District. The location of this research was chosen for several reasons, namely the school has the criteria for resources and facilities and infrastructure that accommodate the research. The research was conducted from December 2024 to March 2025. This study used a quantitative approach with a causal research design. This design aims to identify the causal relationship between the independent variables (academic supervision and school environment) and the dependent variable (educational quality). The quantitative approach was chosen because this study focuses on collecting numerical data that is analyzed to see how much influence each variable has on educational quality. According to Moleong (2016), quantitative research is a systematic scientific study of parts and phenomena and the causality of their relationships. The population in this study was all 277 public elementary school teachers in Mesuji District. (Arikunto, 2019) suggests that if the sample size is less than 100 people, all of them should be sampled. If the sample size is large, or more than 100, 10-15%, or 20-25%, or more, can be sampled. Instrument pilot testing is an activity to determine whether the developed measuring instrument meets validity and reliability requirements.

Instrument pilot testing is conducted before the instrument is widely used in research. The goal is to assess the clarity of the questions, ensure ease of completion, and test its validity and reliability. The pilot sample can be drawn from a population similar to the research population. The number of respondents is typically 10-30% of the actual sample size. Based on this opinion, the sample in this study was elementary school teachers drawn from representative schools in the Mesuji sub-district. In the Mesuji sub-district, there are a total of 25 public elementary schools. These are divided into five clusters, or in other words, five teacher working groups (KKG). So in accordance with the theoretical description of the experts above, I took a sample using probability sampling, namely by taking a sample of some public elementary schools in each cluster. The number of teachers for this research sample was 122 teachers, and for the experiment, we tested the instrument on 40 teachers outside the sample included in the population. The data collection techniques used in this study were questionnaires, interviews, observations, and documentation. The hypothesis tested in this study is the influence of the independent variables of academic supervision (X1), work environment (X2), and quality of education (Y) both individually and together.

C. Results and Discussion

The Influence of Academic Supervision (X1) on the Quality of Education (Y)

The research results show that the academic supervision variable has a significant influence on the quality of education variable. This finding supports the proposed hypothesis that the academic supervision variable has a significant influence on the quality of education variable. According to the calculation results based on the

regression equation sourced from Table 4.17 (coefficient), it can be explained that if the Academic Supervision variable (X1) increases by 1 score unit, the Quality of Education (Y) will increase by 180.001 score units, provided the School Environment (X1) value remains constant. Regarding the significant influence of Academic Supervision (X1) on the Quality of Education (Y), the t-test value in Table 4.17 can be seen. The t-value for academic supervision was 3.864, with a significance level of 0.000 ($p < 0.05$) and a t-table of 1.658. In other words, t-value $>$ t-table. Therefore, H_0 is rejected and H_a is accepted. In other words, this indicates a significant influence between the variable Academic Supervision (X1) and the Quality of Education (Y).

The Influence of the School Environment (X2) on the Quality of Education (Y)

Based on the research results, it shows that these results also support the proposed hypothesis that the school environment has a significant effect on the quality of education. The regression results obtained from table 4.17 explained that if the value of the School Environment (X2) increases by 1 score unit, then the Quality of Education (Y) will increase by 2.885 score units, provided the value of the School Environment (X2) is constant. Regarding the presence or absence of a significant effect, it can be seen in table 4.17 with the t-value of the school environment (X2) of 2.885 with a significance level of 0.000 ($p < 0.05$), thus rejecting H_0 . This indicates that there is a significant influence between the school environment (X2) and the quality of education (Y). This shows that the school environment (X2) influences the quality of education (Y). The results of this study are supported by previous research, including the findings of Siburian (2012), who found a significant positive influence of the school environment on educational quality. The school environment influences educational quality, and improving a positive school environment creates a comfortable work environment, thus fostering enthusiasm for improving educational quality. To improve educational quality, it is necessary to improve the comfort of the school environment and relationships between fellow school members and other stakeholders by identifying what teachers expect in their work to achieve school goals (Jhonshon et al., 2024; Penuel et al., 2020).

The importance of good communication in the school environment is undeniable, as is the case for any organization. With good communication, an organization can run smoothly and successfully, and vice versa. A lack or absence of communication cannot make an organization run smoothly (Cruz et al., 2021). For example, in an organization, if the principal does not provide information to teachers regarding when school activities begin and what subjects each teacher will teach, it is highly likely that teachers will not show up for classes. As a result, students do not learn, which causes the school to not function as it should. A good school environment will reduce uncertainty, increase the intensity of discussions, build self-esteem, and clarify issues that are not understood (Cockerham et al., 2021; Panhwar et al., 2023). The better the school environment, the more comfortable all school members are in improving the quality of education.

The level of education quality greatly impacts many aspects, one of which is the ability and learning outcomes of students. If the level of education quality is very high, the possibility of teaching and learning activities provided to students will also be more effective; teachers do not feel pressured, and students enjoy participating in learning, thus creating excellent results and student learning abilities. The level of education quality has a significant impact on the quality of teaching and learning activities in the classroom. When teachers feel comfortable in all aspects of the school environment, they tend to be more motivated and dedicated in presenting learning materials in a more innovative and interactive way. Teachers who are satisfied with their work are also more likely to create a positive classroom atmosphere, be active, build good relationships with students, and respond to their individual needs. Conversely, if the level of school environment comfort is low, it can be detrimental to the quality of teacher-student interactions. Dissatisfied teachers may be less motivated to create a less dynamic learning environment and be less responsive to students' needs. As a result, students may experience decreased learning outcomes and abilities due to a lack of a comfortable school environment and motivation for learning.

The Influence of Academic Supervision (X1) and School Environment (X2) on the Quality of Education (Y)

The research results show that academic supervision and the school environment significantly influence the quality of education. These results support the proposed hypothesis that academic supervision and the school environment have a significant influence. With a significance level of 0.002 ($p < 0.05$), H_0 is rejected and H_a is accepted. This is evident from the F-test, where the calculated F of 5.495 is greater than the F-table of 2.36. This means that there is a joint influence between academic supervision and the school environment on the quality of education, indicating a positive relationship between academic supervision and the school environment on the quality of education. This indicates that the variables of academic supervision and the school environment simultaneously influence the quality of education.

D. Conclusion

Based on the results of research conducted on the influence of academic supervision and the school environment on the quality of education for public elementary school teachers in Mesuji District, OKI Regency, Palembang, it can be concluded that:

1. Academic supervision by the principal has a positive and significant impact on educational quality. Systematic and ongoing implementation of academic supervision can help improve teachers' pedagogical, professional, social, and personal competencies. Teachers who receive guidance and direction from the principal tend to be more able to improve the quality of learning and professionalism in teaching, thus improving the quality of education.
2. A conducive, comfortable, and safe school environment can be a supporting factor for improving the quality of education in a school. A principal who has

a clear vision and is able to inspire teachers in carrying out their duties can create a conducive work environment, encouraging teachers to be more motivated, innovative, and highly committed to their duties and responsibilities.

3. Academic supervision and the school environment simultaneously influence the quality of education in public elementary schools in Mesuji District. The synergy between academic supervision and the school environment can create a positive work atmosphere, increase motivation, and support the continuous development of teacher competencies.

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