



The Influence of ESG (Environmental, Social, Governance) and Organizational Culture on Sustainable School Management in Elementary Schools

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Environmental, Social, and Governance; ESG; Organizational Culture; Sustainable School Management; Elementary Schools; Educational Governance

Abstract:

Educational governance increasingly prioritizes sustainable school management, particularly because elementary schools must integrate environmental responsibility, stakeholder participation, transparency, accountability, and continuous improvement into their management practices. This study aims to examine the individual and simultaneous effects of Environmental, Social, and Governance (ESG) and organizational culture on sustainable school management in elementary schools. The study uses a quantitative approach with an ex post facto and correlational design. The research involves 156 elementary school teachers in Singorojo District, Kendal Regency, Indonesia. The researchers chose the participants through proportional random sampling. They collect data using a Likert-scale questionnaire and analyze it using Pearson correlation, simple linear regression, multiple linear regression, t-tests, F-tests, and the coefficient of determination in SPSS version 25. The findings show that ESG has a positive and significant effect on sustainable school management, explaining 68.0% of its variance. Organizational culture also has a positive and significant effect, explaining 79.6% of the variance. Simultaneously, ESG and organizational culture explain 83.9% of the variance in sustainable school management, indicating that both variables are strong predictors. Organizational culture provides a stronger individual contribution, while the integration of ESG and organizational culture offers the strongest explanatory power. This study contributes to the literature by extending the ESG framework into elementary school management and demonstrating that sustainable school management requires both governance-oriented practices and a collaborative, innovative, and quality-oriented organizational culture.

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Introduction

Educational governance increasingly treats sustainable school management as a key issue because schools must improve academic quality and develop transparent, accountable, participatory, environmentally responsible, and adaptive management practices to achieve long-term change (Gento Palacios et al., 2022; Gericke, 2022; Timan et al., 2026). In elementary education, sustainability is not limited to the efficient use of physical resources; it also encompasses schools' ability to strengthen stakeholder participation, improve governance systems, encourage innovation, and ensure the continuity of educational quality. School-based management in the twenty-first century should move beyond administrative efficiency by integrating ecological awareness, social responsibility, and accountable

governance into school policies (Li, 2010; Timan et al., 2026; Zajda, 2024). Similarly, Basri et al. (2024), Brian Fisher (2017), and Sarantinos (2026) emphasize that educational management must be oriented toward sustainability to enable schools to respond to social change while maintaining institutional quality and resilience.

Sustainable school management is the process of managing school resources, policies, and programs, and fostering stakeholder participation to achieve educational quality while maintaining long-term institutional sustainability. This approach requires schools to implement transparency, accountability, participation, innovation, and continuous improvement in their management practices. Amka (2020) explains that sustainable school management involves a work process within the school community that applies the principles of autonomy, accountability, participation, and sustainability to improve educational quality. According to Mulyasa (2021:87), schools need sustainable school-based management to face the challenges of 21st-century education, as conventional management no longer accounts for the ecological and social impacts of every policy. Therefore, schools should not only evaluate learning outcomes but also use the evaluation results to improve learning processes, managerial practices, and institutional decision-making. Similarly, Sagala (2020:134) emphasizes that educational management transformation must support sustainability by integrating the values of environmental conservation, social justice, and good governance into all school management processes.

Sustainable School Management is a work process within the school community that applies the principles of autonomy, accountability, participation, and sustainability to achieve educational quality. Schools must carry out continuous evaluation and improvement. One increasingly relevant framework for sustainable school management is Environmental, Social, and Governance (ESG). Although ESG initially emerged in the corporate and investment sectors, its principles now extend to public institutions, including education, because ESG offers a measurable framework for evaluating organizational responsibility and sustainability. In the school context, the environmental dimension refers to environmentally friendly facilities, waste management, resource efficiency, and environmental awareness. The social dimension refers to stakeholder participation, inclusiveness, collaboration, and community involvement.

Meanwhile, the governance dimension encompasses transparency, accountability, ethical leadership, and data-driven decision-making. Sinulingga et al. (2024) state that ESG has a strong philosophical foundation, as it aligns with environmental protection, social justice, and ethical governance. (Amiri et al., 2026; Hendro & Pranogyo, 2023) also emphasize that ESG-based innovation is important for organizations seeking to operate responsibly and sustainably.

Previous studies have shown the relevance of ESG and sustainability principles in education. Leogrande and Costantiello (2023) found that ESG education influences how individuals consider economic, social, and environmental impacts in decision-making. Odintsova (2024) explains that sustainability education is not merely a process of transferring knowledge but also a means of shaping mindsets, lifestyles, and habits that support sustainability. Alenezi & Alanazi (2024) also highlight the importance of integrating ESG values into educational curricula to strengthen sustainability awareness. However, most ESG studies in education have focused on higher education, curriculum development, sustainability literacy, and institutional policy. Empirical studies that examine ESG as a predictor of sustainable school management, particularly in elementary schools, remain limited. Wardhana (2024: 28-35), in the context of the ESG framework for public-private partnerships in Indonesia, identified factors such as government policies and environmental regulations, management commitment to sustainable practices, stakeholder demands for

social and environmental accountability, and the availability of resources for implementing ESG programs.

In addition to ESG, organizational culture is an important factor in supporting sustainable school management. Organizational culture refers to shared values, norms, beliefs, communication patterns, and work habits that shape how school members behave and make decisions. In schools, organizational culture influences teachers' commitment, collaboration, innovation, stakeholder participation, and openness to change. A strong organizational culture can support sustainable management by fostering a positive work climate, strengthening shared responsibility, and encouraging school members to participate in quality improvement. Without a supportive organizational culture, sustainability policies may remain formal and administrative rather than becoming part of everyday school practices.

The relationship between ESG and organizational culture is important because both variables represent different but complementary dimensions of sustainable school management. ESG provides a managerial and governance framework that guides schools in implementing environmental responsibility, social participation, and transparent governance. Organizational culture, on the other hand, provides the internal foundation that determines whether school members can accept, practice, and sustain ESG principles. Thus, ESG may provide the structural direction for sustainability, while organizational culture strengthens the behavioral and relational conditions needed for its implementation. In the context of Islamic education, ESG principles are also relevant because they reflect environmental stewardship, social justice, trustworthiness, accountability, and ethical governance as important values in managing educational institutions.

The empirical context of this study is Singorojo District, Kendal Regency, where elementary schools have not yet optimized sustainability-oriented school management. Based on the Singorojo District Education Report, only a small proportion of elementary schools implement sustainable school management, adopt ESG practices, and foster an organizational culture that supports school quality improvement. Table 1 presents the initial conditions.

Table 1. Initial Conditions of Sustainable School Management, ESG, and Organizational Culture in Singorojo District

Aspect	Main Indicators	Achievement	Interpretation
Sustainable school management	Transparency, accountability, and management innovation	11%	Very limited implementation
Environmental, Social, and Governance	Environmental management, stakeholder participation, and transparent governance	20%	Limited ESG implementation
Organizational culture	Participation, learning innovation, and commitment to school quality improvement	40%	Moderately developed but not yet optimal

Table 1 shows that sustainability-oriented school management in Singorojo District remains limited. Only 11% of elementary schools apply sustainable school management practices related to transparency, accountability, and management innovation. ESG-related practices are found in only 20% of schools, indicating that environmental management, stakeholder participation, and transparent governance have not yet become common across schools. Organizational culture shows a relatively better condition, with 40% of schools demonstrating participation, innovation, and commitment to school quality improvement. However, this figure also indicates that most schools have not yet developed an organizational culture that fully supports sustainable management. These conditions

highlight the need to examine how ESG and organizational culture influence sustainable school management in elementary schools. To improve the implementation of sustainable school management, schools need a comprehensive strategy. This strategy includes strengthening principals' capacity through training and coaching, developing a standardized management information system, improving managerial supervision by Korwilcambiddik and school supervisors, empowering school committees and parental participation, promoting benchmarking among schools, and advocating policy and budget support from local governments. Mulyasa (2021), Sagala (2020), Barnawi and Arifin (2020), Kusumastuti (2019), Tilaar (2019), and Nasution (2020) emphasize that sustainable management based on transparency, accountability, and innovation plays a key role in creating adaptive and proactive school management that can anticipate challenges and ensure long-term improvement in the quality of education.

These conditions reveal both practical and theoretical problems. In practice, many elementary schools still face limitations in managerial capacity, stakeholder participation, data-driven governance, environmental responsibility, and innovation in school management. The implementation of sustainability-oriented management often faces several constraints, including limited understanding, weak institutional systems, and an organizational culture that does not fully support transparency, collaboration, and continuous improvement. Theoretically, previous studies discuss ESG, sustainability education, and organizational culture separately. However, researchers have paid limited empirical attention to how ESG and organizational culture simultaneously influence sustainable school management at the elementary school level. This gap becomes particularly important in rural and semi-rural educational contexts, where schools still face major challenges in achieving sustainability.

Therefore, this study aims to examine the individual and simultaneous effects of Environmental, Social, and Governance (ESG) and organizational culture on sustainable school management in elementary schools. Specifically, this study investigates: (1) the effect of ESG on sustainable school management; (2) the effect of organizational culture on sustainable school management; and (3) the simultaneous effect of ESG and organizational culture on sustainable school management. This study contributes to the literature in three ways. First, it extends the ESG framework into the context of elementary school management, an area that has received limited empirical attention. Second, it integrates ESG and organizational culture as complementary predictors of sustainable school management by combining structural governance and internal cultural perspectives. Third, it provides empirical evidence from elementary schools in a semi-rural Indonesian context, where sustainability-oriented school management remains underdeveloped.

Method

This study uses a quantitative approach with an ex post facto and correlational design. The study chooses this approach because it examines the statistical influence of Environmental, Social, and Governance (ESG) and organizational culture on sustainable school management. The ex post facto design fits the study because the researcher does not manipulate the independent variables but examines existing conditions based on teachers' perceptions. The correlational design identifies the strength and direction of the relationships among ESG, organizational culture, and sustainable school management.

The study takes place in elementary schools in Singorojo District, Kendal Regency, Indonesia. The population consists of 257 elementary school teachers. The sample includes 156 teachers, chosen using the Slovin formula and proportional random sampling. This

sampling technique ensures that teachers from different elementary schools in the research area are proportionally represented.

The researcher collects data using a structured questionnaire with Likert-scale items. The researcher develops the questionnaire based on the theoretical dimensions and indicators of each research variable. The ESG variable includes environmental responsibility, social participation, and governance practices. The organizational culture variable includes shared values, collaboration, innovation, participation, and commitment to school quality improvement. Meanwhile, sustainable school management includes transparency, accountability, participation, innovation, continuous improvement, and sustainability-oriented management practices. Table 1 presents the structure of the research variables and instruments.

Table 1. Research Variables and Instrument Indicators

Variable	Main Indicators	Initial Items	Valid Items
Environmental, Social, and Governance	Environmental responsibility, stakeholder participation, transparency, accountability, and data-based governance	36	31
Organizational Culture	Shared values, collaboration, innovation, participation, commitment to quality improvement, and supportive school climate	36	32
Sustainable School Management	Transparency, accountability, participation, innovation, continuous improvement, and sustainability-oriented school management	36	31

Before the main data collection, the researcher tested the questionnaire for validity and reliability. The validity test ensured that each item measured the intended construct, while the reliability test assessed the instrument's internal consistency. The initial instrument contained 36 items for each variable: ESG, organizational culture, and sustainable school management. After the validity and reliability tests, the researcher retained 31 items for ESG, 32 items for organizational culture, and 31 items for sustainable school management.

The researcher analyzes the data using SPSS version 25. The analysis begins with descriptive statistics to describe the general tendency of each variable. Before hypothesis testing, the researcher conducts prerequisite tests, including tests for normality, linearity, multicollinearity, and heteroscedasticity. These tests ensure that the data meet the assumptions for regression analysis.

The researcher conducts hypothesis testing using Pearson correlation, simple linear regression, and multiple linear regression. Pearson correlation examines the relationships among ESG, organizational culture, and sustainable school management. Simple linear regression examines the individual influence of ESG and organizational culture on sustainable school management. Multiple linear regression examines the simultaneous influence of ESG and organizational culture on sustainable school management.

The researcher uses the t-test to assess the partial effect of each independent variable. In contrast, the F-test through the ANOVA table assesses the simultaneous effect of the independent variables. The coefficient of determination indicates the proportion of variance in sustainable school management explained by ESG and organizational culture.

Results

1. Correlation among ESG, Organizational Culture, and Sustainable School Management

The researcher conducts the correlation test to determine the relationship among ESG, organizational culture, and sustainable school management. Table 4 presents the results.

Table 4. Correlation Matrix among ESG, Organizational Culture, and Sustainable School Management Correlations

		Enviromental, Social dan Governance	Organizational Culture	Sustainable School Management
Enveromental, Social dan Governance	Pearson Correlation	1	.778**	.825**
	Sig. (2-tailed)		.000	.000
	N	156	156	156
Organizational Culture	Pearson Correlation	.778**	1	.892**
	Sig. (2-tailed)	.000		.000
	N	156	156	156
Sustainable School Management	Pearson Correlation	.825**	.892**	1
	Sig. (2-tailed)	.000	.000	
	N	156	156	156

Based on Table 4, ESG had a positive and significant correlation with sustainable school management, with a Pearson correlation value of 0.825. Organizational culture also had a positive and significant correlation with sustainable school management, with a Pearson correlation value of 0.892. In addition, ESG showed a positive and significant correlation with organizational culture (Pearson correlation = 0.778). All correlations were significant at the 0.01 level, indicating that the variables were positively and significantly related. These results show that both ESG and organizational culture are strongly related to sustainable school management.

2. The Influence of ESG on Sustainable School Management

The researcher conducts the first regression analysis to examine the influence of ESG on sustainable school management. Table 5 presents the results.

Table 5. Model Summary of ESG on Sustainable School Management Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.825 ^a	.680	.678	5.547

Based on Table 5, the R value reaches 0.825, indicating a very strong relationship between ESG and sustainable school management. The R-squared value is 0.680, indicating that ESG explains 68.0% of the variance in sustainable school management. Other variables outside this study explain the remaining 32.0%. Table 6 presents the regression coefficient results.

Table 6. Regression Coefficients of ESG on Sustainable School Management

		Coefficients ^a		Standardized Coefficients Beta	t	Sig.
Model		Unstandardized Coefficients B	Std. Error			
1	(Constant)	.667	4.990		.134	.894
	Enviromental, Social dan Governance	.991	.055	.825	18.087	.000

Based on Table 6, the regression equation obtained was: $\hat{Y} = 0.667 + 0.991X_1$. The ESG regression coefficient was 0.991, indicating that a one-unit increase in ESG was associated with a 0.991 increase in sustainable school management. The t value was 18.087, with a significance value of 0.000. Since the significance value was lower than 0.05, ESG had a positive and significant influence on sustainable school management.

3. The Influence of Organizational Culture on Sustainable School Management

The researcher conducts the second regression analysis to examine the influence of organizational culture on sustainable school management. Table 7 presents the results.

Table 7. Model Summary of Organizational Culture on Sustainable School Management

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.892 ^a	.796	.795	4.426

Based on Table 7, the R value reaches 0.892, indicating a very strong relationship between organizational culture and sustainable school management. The R-squared value is 0.796, indicating that organizational culture explains 79.6% of the variance in sustainable school management. Other variables outside this study explain the remaining 20.4%. Table 8 presents the regression coefficient results.

Table 8. Regression Coefficients of Organizational Culture on Sustainable School Management

		Unstandardized Coefficients		Standardized Coefficients Beta	T	Sig.
Model		B	Std. Error			
1	(Constant)	5.023	3.451		1.456	.148
	Organizational Culture	.900	.037	.892	24.527	.000

Based on Table 8, the regression equation obtained was: $\hat{Y} = 5.023 + 0.900X_2$. The organizational culture regression coefficient was 0.900, indicating that each one-unit increase in organizational culture was associated with a 0.900 increase in sustainable school management. The t value was 24.527, with a significance value of 0.000. Since the significance value was lower than 0.05, organizational culture had a positive and significant influence on sustainable school management.

4. The Simultaneous Influence of ESG and Organizational Culture on Sustainable School Management

The researcher conducts the third regression analysis to examine the simultaneous influence of ESG and organizational culture on sustainable school management. Table 9 presents the results.

Table 9. Model Summary of ESG and Organizational Culture on Sustainable School Management
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.916 ^a	.839	.837	3.944

Based on Table 9, the R value reaches 0.916, indicating a very strong simultaneous relationship among ESG, organizational culture, and sustainable school management. The R-squared value is 0.839, indicating that ESG and organizational culture together explain 83.9% of the variance in sustainable school management. Other variables outside this study explain the remaining 16.1%.

Table 10. ANOVA of ESG and Organizational Culture on Sustainable School Management

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12423.092	2	6211.546	399.398	.000 ^b
	Residual	2379.498	153	15.552		
	Total	14802.590	155			

Based on the ANOVA test, the F value was 399.398 with a significance value of 0.000. Since the significance value was lower than 0.05, ESG and organizational culture simultaneously had a positive and significant influence on sustainable school management. This finding indicates that the regression model was statistically viable and that both independent variables jointly explained sustainable school management.

Table 11. Multiple Regression Coefficients of ESG and Organizational Culture on Sustainable School Management
Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
		B	Std. Error			
1	(Constant)	6.735	3.582		1.881	.062
	Enviromental, Social dan Governance	.397	.062	.330	6.402	.000
	Organizational Culture	.641	.052	.635	12.315	.000

Based on Table 11, the multiple regression equation obtained was: $\hat{Y} = 6.735 + 0.397X_1 + 0.641X_2$. The ESG coefficient was 0.397, indicating that each one-unit increase in ESG was associated with a 0.397 increase in sustainable school management, assuming organizational culture remained constant. Meanwhile, the organizational culture coefficient was 0.641, indicating that each one-unit increase in organizational culture was associated with a 0.641 increase in sustainable school management, assuming ESG remained constant.

The t-test results showed that ESG had a significant effect on sustainable school management, with a t value of 6.402 and a significance value of 0.000. Organizational culture also had a significant effect on sustainable school management, with a t-value of 12.315 and a significance value of 0.000. Since both significance values were lower than 0.05, ESG and organizational culture partially had significant effects on sustainable school management in the multiple regression model. Therefore, ESG and organizational culture simultaneously had a positive and significant influence on sustainable school management.

The findings indicate that ESG and organizational culture have positive and significant effects on sustainable school management. Individually, ESG explains 68.0% of the variance in sustainable school management, while organizational culture explains 79.6%. Simultaneously, ESG and organizational culture explain 83.9% of the variance, with an F value of 399.398 and a significance value of 0.000. These results confirm that organizational culture has a stronger individual contribution than ESG, while integrating ESG and organizational culture yields the strongest explanatory power for sustainable school management.

Discussion

1. ESG and Sustainable School Management

The findings of this study indicate that Environmental, Social, and Governance (ESG) has a positive and significant effect on sustainable school management. The correlation coefficient between ESG and sustainable school management was 0.825, while the coefficient of determination showed that ESG explained 68.0% of the variance in sustainable school management. The regression equation, $\hat{Y} = 0.667 + 0.991X_1$, further indicates that an increase in ESG practices in sustainable school management is associated with an increase in \hat{Y} . These findings confirm that ESG is not only relevant in the corporate sector but also serves as an important framework for strengthening school governance and sustainability.

This result suggests that schools with stronger ESG practices tend to have better sustainable management. In the school context, the environmental dimension encourages schools to manage facilities, waste, natural resources, and environmental awareness more responsibly. The social dimension strengthens stakeholder participation, collaboration with parents and communities, inclusiveness, and social responsibility. Meanwhile, the governance dimension supports transparency, accountability, ethical leadership, and data-based decision-making. These three dimensions are closely related to sustainable school management because they help schools develop management systems that are not only administratively effective but also socially and environmentally responsible.

This finding supports Sinulingga et al. (2024), who argue that ESG aligns with environmental protection, social justice, and ethical governance. It is also consistent with Hendro & Pranogyo (2023), who emphasize that ESG-based innovation is important for organizations that seek to operate responsibly and sustainably. In the educational context, Alenezi & Alanazi (2024) and Khofi (2024) explain that ESG integration requires curriculum integration, research and innovation, institutional operations, community engagement, leadership and governance, and assessment and reporting. Although their study focuses on higher education, these components are relevant to elementary schools because sustainable school management requires responsible operations, stakeholder involvement, transparent governance, and systematic evaluation.

The findings also support Verhelst et al. (2023), who emphasize that Education for Sustainable Development depends not only on curriculum content but also on the characteristics of effective school organizations. This means that schools need organizational

systems that promote a shared vision, participatory leadership, stakeholder involvement, and continuous improvement to achieve sustainability. Therefore, ESG serves as a managerial framework that helps schools translate sustainability values into concrete governance practices. In this study, the significant effect of ESG confirms that schools can strengthen sustainable school management by integrating environmental responsibility, social participation, and good governance.

2. Organizational Culture and Sustainable School Management

The findings also show that organizational culture has a positive and significant effect on sustainable school management. The correlation coefficient between organizational culture and sustainable school management was 0.892, and the coefficient of determination showed that organizational culture explained 79.6% of the variance in sustainable school management. The regression equation, $\hat{Y} = 5.023 + 0.900X_2$, indicates that a stronger organizational culture is associated with stronger sustainable school management. Compared with ESG, organizational culture demonstrated a higher individual contribution to sustainable school management.

This finding indicates that internal values, shared norms, collaboration, innovation, and commitment among school members strongly influence sustainable school management. A school may have sustainability policies, but it cannot implement these policies effectively without a supportive organizational culture. In this regard, organizational culture serves as an internal foundation that shapes teachers' commitment, school members' participation, communication patterns, openness to change, and collective responsibility for quality improvement. When the school culture supports collaboration and innovation, sustainable management becomes part of daily school practices rather than merely a formal administrative agenda. This finding suggests the need for more targeted efforts to transform organizational culture towards sustainability. The results of the dimension test indicate that the perspectives dimension has an extraction value of only 0.385, suggesting that the views and norms held by school members are not yet strongly aligned with sustainable management. Strengthening an organizational culture that supports sustainability requires the principal's leadership, who consistently integrates ESG values into all aspects of school culture, from visible artifacts to implicit assumptions (Winoto, 2020).

This result aligns with Torres (2022), who argues that social, political, and educational factors shape school organizational culture. Therefore, organizational culture in schools relates not only to shared routines but also to leadership, power relations, institutional values, and the way school members interpret change. This perspective helps explain why organizational culture in this study showed a stronger individual contribution than ESG. Sustainable school management requires not only structural policies but also a school culture that supports participation, trust, innovation, and shared responsibility.

The finding also aligns with Widodo et al. (2024), who found that principal leadership, organizational culture, and school governance play important roles in improving teacher task performance and school effectiveness. Their study indicates that organizational culture can act as a mediating force that links leadership and governance to educational performance. In the context of this study, organizational culture strengthens sustainable school management because it creates the behavioral conditions that schools need to apply ESG and sustainability-oriented policies consistently. Therefore, schools should make organizational culture a strategic priority in sustainable school management, especially at the elementary school level, where collaboration among principals, teachers, parents, and communities plays a central role.

3. The Combined Role of ESG and Organizational Culture in Sustainable School Management

The simultaneous regression analysis shows that ESG and organizational culture jointly have a positive and significant effect on sustainable school management. The model summary indicated an R value of 0.916 and an R Square value of 0.839, meaning that ESG and organizational culture together explained 83.9% of the variance in sustainable school management. The ANOVA test also showed an F value of 399.398 with a significance value of 0.000, confirming that the regression model was statistically significant and feasible.

The multiple regression equation, $\hat{Y} = 6.735 + 0.397X_1 + 0.641X_2$, indicates that both ESG and organizational culture contribute positively to sustainable school management when examined simultaneously. The t-test results showed that ESG had a significant partial effect, with a t value of 6.402 and a significance value of 0.000, while organizational culture also had a significant partial effect, with a t value of 12.315 and a significance value of 0.000. These results indicate that both variables remain important predictors in the multiple regression model, although organizational culture has a stronger standardized coefficient than ESG.

This finding demonstrates that ESG and organizational culture are complementary. ESG provides the structural and managerial framework for sustainable school management through environmental responsibility, social participation, and transparent governance. Organizational culture provides the internal behavioral foundation that enables school members to accept, practice, and sustain ESG principles. In other words, ESG provides direction for sustainable school management, while organizational culture ensures that sustainability values are embedded in the school's daily practices. Therefore, the integration of ESG and organizational culture offers a stronger basis for developing sustainable school management than relying on either factor alone. The integration of ESG principles with organizational culture creates a robust foundation for sustainable school management. ESG provides strategic direction, while organizational culture ensures that school members understand, accept, and consistently practice these principles. Schools can enhance sustainability by fostering leadership, engaging stakeholders, and embedding ESG into their cultural fabric (Chandra et al., 2025; Delegach et al., 2026; Leal D'Avila & De Montreuil Carmona, 2026).

The combined contribution of 83.9% also indicates that sustainable school management requires both governance reform and cultural transformation. Schools need transparent policies, accountable resource management, stakeholder participation, and data-based decision-making. At the same time, they also need a collaborative, innovative, and quality-oriented culture. Without ESG, school sustainability may lack a clear governance framework. Without a strong organizational culture, ESG may remain a formal policy that school members do not fully practice in everyday school life. Thus, schools should develop sustainable school management by simultaneously strengthening institutional systems and organizational values.

4. Islamic Educational Perspective on ESG and Sustainable School Management

This study also interprets the findings from an Islamic educational perspective. Islamic education views school management not merely as an administrative process but also as a moral responsibility to uphold trust, justice, balance, and the public good. The principles of Environmental, Social, and Governance closely align with Islamic values because environmental responsibility reflects the obligation to preserve creation, social participation reflects cooperation and justice, and governance reflects trustworthiness, accountability, and ethical leadership.

From this perspective, the environmental dimension of ESG aligns with the Islamic view that humans serve as stewards of the earth. Schools need to develop awareness and practices that protect the environment, manage resources wisely, and cultivate responsible behavior among students and school members. Al-Damkhi (2021) explains that Islamic environmental ethics emphasize moral responsibility, moderation, and the protection of natural resources. Similarly, Bsoul et al. (2022) argue that Islamic teachings contain strong principles of environmental sustainability, especially stewardship, balance, responsibility, and justice. In elementary education, these values play an important role because schools can introduce environmental responsibility early through school culture, daily habits, and learning activities (Amiri et al., 2026; Khofi, 2024).

The social dimension of ESG is also consistent with Islamic educational values that emphasize cooperation, justice, care, and community welfare. Sustainable school management requires the active involvement of teachers, principals, students, parents, school committees, and the community. This participation reflects the idea that education is a collective responsibility. When schools build inclusive participation and social responsibility, they not only improve management quality but also strengthen the moral and social function of education. In this sense, sustainable school management is a means of developing educational institutions that are socially responsive and oriented toward shared benefit.

The governance dimension of ESG is closely related to the values of amanah, accountability, honesty, and fairness. Transparent budgeting, data-based decision-making, ethical leadership, and accountable school programs reflect the moral responsibility of educational institutions. School leaders are not only responsible for administrative performance but also for ensuring that school policies are implemented fairly, transparently, and responsibly. (Abdelzaher & Abdelzaher, 2021) Introduce the concept of Eco-Islam and show that Islamic values can strengthen environmental ethics and responsible organizational behavior. Therefore, sustainable school management is not only measured by organizational effectiveness but also by the extent to which school governance reflects ethical and moral responsibility.

The significant role of organizational culture in this study also strengthens the Islamic educational perspective. A positive organizational culture that promotes collaboration, innovation, commitment, and shared responsibility aligns with Islamic values of collective good and continuous improvement. Therefore, the integration of ESG and organizational culture can be seen as a strategic approach to building schools that are not only sustainable in managerial terms but also grounded in ethical and spiritual values. This perspective is particularly relevant for Islamic educational discourse because it connects sustainability, governance, and school culture with moral responsibility in education.

5. Theoretical and Practical Implications

Theoretically, this study contributes to the expansion of ESG literature into the field of elementary school management. Previous discussions of ESG in education have often focused on higher education, curriculum development, sustainability literacy, or institutional policy. This study provides empirical evidence that ESG can function as a predictor of sustainable school management in elementary schools. It also extends the discussion by integrating ESG with organizational culture, showing that both structural governance and internal cultural factors shape sustainability-oriented school management.

Practically, the findings suggest that schools and education authorities need to strengthen ESG-based school governance and organizational culture simultaneously. At the school level, principals need to promote transparent budgeting, data-based planning, environmental responsibility, stakeholder participation, and accountability in school

programs. Teachers and school staff also need to be involved in building collaborative practices, fostering innovation, and cultivating a shared commitment to school improvement. At the policy level, education offices can use these findings to design principal training, school supervision, and sustainability-oriented management programs.

For elementary schools in semi-rural contexts, these findings are particularly important. The implementation of sustainable school management cannot depend only on administrative compliance or physical infrastructure. It also requires leadership commitment, stakeholder trust, community participation, and a school culture that supports innovation and continuous improvement. Therefore, strengthening sustainable school management should be carried out through integrated strategies that combine ESG-based governance, organizational culture development, Islamic ethical values, and capacity building for school leaders and teachers.

6. Limitations and Future Research

This study has several limitations. First, this study focuses only on elementary schools in Singorojo District, Kendal Regency, so the findings may not fully represent elementary schools in other regions with different social, cultural, and institutional characteristics. Second, the researcher gathers data through teacher-perception-based questionnaires, which may not fully capture actual ESG and sustainable school management practices. Third, *ex post facto* and correlational designs can explain statistical relationships and predictive effects. However, these designs cannot fully explain the underlying processes through which ESG and organizational culture shape sustainable school management.

Future research should use a mixed-methods design by combining surveys, interviews, observations, and document analysis. This approach can provide a deeper understanding of how schools apply ESG principles and organizational culture in daily management practices. Future studies may also expand the research context to other districts, provinces, or types of schools to compare sustainability practices across educational settings. In addition, further research may examine other variables, such as principal leadership, digital governance, community participation, teacher agency, Islamic school leadership, and school innovation capacity, that may also influence sustainable school management.

Conclusion

This study concludes that Environmental, Social, and Governance (ESG) and organizational culture have positive and significant effects on sustainable school management in elementary schools. ESG contributes to sustainable school management by strengthening environmental responsibility, stakeholder participation, transparency, accountability, and data-based governance. Meanwhile, organizational culture fosters stronger individual contributions by supporting collaboration, innovation, shared commitment, and continuous improvement within the school community. The findings show that ESG explains 68.0% of the variance in sustainable school management, while organizational culture explains 79.6%, indicating that both variables are important predictors of sustainability-oriented school management.

Simultaneously, ESG and organizational culture explain 83.9% of the variance in sustainable school management, confirming that it requires both strong governance structures and a supportive organizational culture. ESG provides the structural framework for sustainability, while organizational culture ensures that sustainability values are internalized and practiced consistently in daily school management. These findings imply that elementary schools and education authorities need to strengthen ESG-based policies,

participatory governance, transparent decision-making, and a collaborative school culture to support long-term educational quality and institutional sustainability.

References

- Abdelzaher, D. M., & Abdelzaher, A. (2021). Beyond Environmental Regulations: Exploring the Potential of “Eco-Islam” in Boosting Environmental Ethics Within SMEs in Arab Markets. *Journal of Business Ethics*, 145(2), 357–371. <https://doi.org/10.1007/s10551-015-2833-8>
- Al-Damkhi, A. M. (2021). Environmental ethics in Islam: Principles, violations, and future perspectives. *International Journal of Environmental Studies*, 65(1), 11–31. <https://doi.org/10.1080/00207230701859724>
- Alenezi, M., & Alanazi, F. (2024). Integrating environmental social and governance values into higher education curriculum. *International Journal of Evaluation and Research in Education (IJERE)*, 13(5), 3493. <https://doi.org/10.11591/ijere.v13i5.29440>
- Amiri, A., Geravandi, S., & Rostami, F. (2026). Extending School Gardening Programs in Elementary Education: A Phenomenological Study of Experiential Learning. *Journal of Elementary Education Research and Practice*, 2(1), 1–14. <https://doi.org/10.70376/kj5mbe88>
- Barnawi, & Arifin, M. 2020. *Manajemen Strategis Pendidikan: Teori dan Praktik*. Yogyakarta: Ar-Ruzz Media.
- Basri, H., Nurhayuni, Hasri, S., & Sohiron. (2024). Modern Education Management: Challenges, Strategies Towards a Future of Continuing Education. *Munaddhomah: Jurnal Manajemen Pendidikan Islam*, 5(3), 260–269. <https://doi.org/10.31538/munaddhomah.v5i3.875>
- Brian Fisher, P. (2017). Resilience Thinking in Higher Education: Institutional Resilience as a Sustainability Goal. In W. Leal Filho, M. Mifsud, C. Shiel, & R. Pretorius (Eds.), *Handbook of Theory and Practice of Sustainable Development in Higher Education* (pp. 209–222). Springer International Publishing. https://doi.org/10.1007/978-3-319-47895-1_13
- Bsoul, L., Omer, A., Kucukalic, L., & Archbold, R. H. (2022). Islam’s Perspective on Environmental Sustainability: A Conceptual Analysis. *Social Sciences*, 11(6), 228. <https://doi.org/10.3390/socsci11060228>
- Chandra, W., Purba, J. T., & Hariandja, E. S. (2025). Drivers of Strategic Insights for Institutions Sustainability through the Operation of Dynamic Capabilities: Evidence from Private Schools in Jakarta. *Journal of Educational and Social Research*, 15(4), 317. <https://doi.org/10.36941/jesr-2025-0140>
- Delegach, M., Katz-Navon, T., & Vashdi, D. R. (2026). Cultural Pathways to Sustainability: How Organizational Cultures Shape Firms’ ESG Performance. *Corporate Social Responsibility and Environmental Management*, csr.70615. <https://doi.org/10.1002/csr.70615>
- Gento Palacios, S., González Fernández, R., & López Gómez, E. (2022). Dirección de centros educativos y ampliación de autonomía con rendición de cuentas. El rol mediador del liderazgo pedagógico. *Revista Española de Pedagogía*, 80(281), 193–209. <https://doi.org/10.22550/REP80-1-2022-07>
- Gericke, N. (2022). Implementation of Education for Sustainable Development Through a Whole School Approach. In G. Karaarslan-Semiz (Ed.), *Education for Sustainable Development in Primary and Secondary Schools* (pp. 153–166). Springer International Publishing. https://doi.org/10.1007/978-3-031-09112-4_11

- Hendro, J., & Pranogyo, A. B. (2023). Inovasi Berkelanjutan: ESG Initiatives Untuk Masa Depan Yang Bertanggung Jawab. *Jurnal Ilmu Sosial, Manajemen, Akuntansi Dan Bisnis*, 4(4), 135–147. <https://doi.org/10.47747/jismab.v4i4.1445>
- Khofi, M. B. (2024). The Green School Concept in Elementary Schools as an Effort to Form Sustainable Behavior and Environmental Awareness. *Al-Adzka: Jurnal Ilmiah Pendidikan Guru Madrasah Ibtidaiyah*, 14(2), 206–225. <https://doi.org/10.18592/aladzkapgmi.v14i2.14412>
- Kusumastuti, D. 2019. *Manajemen Pendidikan Berkelanjutan: Teori dan Praktik*. Jakarta: Kencana.
- Leal D'Avila, A. E. S., & De Montreuil Carmona, L. J. (2026). Empowering ESG practices and eco-innovation due to responsible leadership and organizational culture. *Journal of Global Responsibility*, 1–23. <https://doi.org/10.1108/JGR-01-2025-0025>
- Leogrande, A., & Costantiello, A. 2023. The impact of government expenditure on education in the ESG models at world level. *HAL Open Science*. <https://hal.science/hal-04088789v1>
- Li, J. (2010). Suggestions for the Implementation of School-Based Management. *2010 International Conference on E-Product E-Service and E-Entertainment*, 1–4. <https://doi.org/10.1109/ICEEE.2010.5660226>
- Mulyasa, E. 2021. *Manajemen Berbasis Sekolah: Konsep, Strategi, dan Implementasi*. Bandung: Remaja Rosdakarya.
- Barlian, U. C. (2022). Implementasi Kurikulum dalam Meningkatkan Mutu Pendidikan. *JOEL: Journal of Educational and Language Research*. 1(12), 2105-2118.
- Nasution, S. 2020. *Manajemen Sekolah Berbasis Keberlanjutan*. Jakarta: Bumi Aksara.
- Odintsova, T. (2024). ESG Competences And Skills In Lifelong Education For Sustainability. *Environment. Technology. Resources. Proceedings of the International Scientific and Practical Conference*, 2, 453–459. <https://doi.org/10.17770/etr2024vol2.8091>
- Sagala, S. 2020. *Manajemen Strategik dalam Peningkatan Mutu Pendidikan*. Bandung: Alfabeta.
- Sarantinos, V. (2026). The Role of Leadership in Enabling Education for Sustainable Development: Current State, Challenges and a Way Forward. In V. Kandpal, W. Leal Filho, K. Frizzo, N. Aguilar-Rivera, & T. Choudhury (Eds.), *Green Horizons: Advancing Climate Solutions Through Green Finance, Circular Economy, and ESG* (pp. 513–524). Springer Nature Switzerland. https://doi.org/10.1007/978-3-032-03484-7_27
- Timan, A., Maisyaroh, Adha, M. A., Lesmana, I., Valdez, A. V., & Banowati, A. S. (2026). Green Digital School Management as Technology-Driven Strategies for Achieving Sustainable and Eco-Friendly School Governance. In A. Iglesias, J. Shin, N. Bhatt, & A. Joshi (Eds.), *Information Systems for Intelligent Systems* (Vol. 1757, pp. 277–286). Springer Nature Switzerland. https://doi.org/10.1007/978-3-032-13203-1_26
- Torres, L. L. (2022). School Organizational Culture and Leadership: Theoretical Trends and New Analytical Proposals. *Education Sciences*, 12(4), 254. <https://doi.org/10.3390/educsci12040254>
- Verhelst, D., Vanhoof, J., & Van Petegem, P. (2023). School effectiveness for education for sustainable development (ESD): What characterizes an ESD-effective school organization? *Educational Management Administration & Leadership*, 51(2), 502–525. <https://doi.org/10.1177/1741143220985196>
- Wardhana, Y. M. A. 2024. Environmental social governance (ESG) framework for public private partnership (PPP) in Indonesia. *Journal of Civil Engineering*, 39(1), 28-35. <https://doi.org/10.12962/j20861206.v39i1.xxxxx>

- Widodo, W., Damanik, J., Bastian, A., Chandrawaty, C., & Sariyo, H. (2024). How Cultural Intelligence-Based Principal Leadership Affects Teacher Task Performance: The Mediating Role of Organizational Culture and School Governance. *Journal of Intercultural Communication*, 172–185. <https://doi.org/10.36923/jicc.v24i2.292>
- Winoto, S. 2020. *Manajemen Berbasis Sekolah: Konsep, Strategi, dan Implementasi*. Jakarta: PT RajaGrafindo Persada.
- Zajda, J. (2024). Globalisation and Models of Leadership in Schools. In J. Zajda & P. Hallam (Eds.), *Globalisation and Leadership in Schools* (Vol. 42, pp. 1–17). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-53223-8_1