

BOARD KNOWLEDGE AND SUSTAINABILITY REPORT QUALITY

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Abstract

This study aims to examine the effect of board knowledge on sustainability report quality. The research was conducted on cyclical consumer sector companies listed on the Indonesia Stock Exchange during the 2020–2024 period. The sample was selected using a non-probability sampling method with a purposive sampling technique, resulting in 75 observations. Data were collected through documentation methods and analyzed using multiple linear regression analysis with SPSS software. The findings indicate that the educational level and experience of the board of commissioners have a positive effect on sustainability report quality. These results are consistent with agency theory and resource-based theory, suggesting that board knowledge strengthens the monitoring function in ensuring the quality of corporate disclosures. Higher educational attainment and extensive experience among commissioners enhance their capacity to evaluate and provide recommendations regarding sustainability reporting practices. In contrast, the educational level and experience of the board of directors do not significantly affect the quality of corporate sustainability reports.

Keywords: Sustainability Report Quality; Board Knowledge; Agency Theory; Resource-Based Theory

INTRODUCTION

A sustainability report is a publication of information reflecting an organization's performance across economic, social, and environmental dimensions (GRI, 2020). According to Financial Services Authority Regulation Number 51/POJK.03/2017 concerning the Implementation of Sustainable Finance for Financial Services Institutions, Issuers, and Public Companies, a sustainability report is defined as a report disclosed to the public containing the economic, financial, social, and environmental performance of financial institutions, issuers, and public companies in conducting sustainable business activities. Accordingly, sustainability reporting can be viewed as a form of external information disclosure compiled through sustainability accounting systems that supports internal information needs and organizational performance measurement, thereby contributing to decision-making processes and improving corporate sustainability performance (Traxler et al., 2020).

Regulations governing sustainability reporting in Indonesia are stipulated under Financial Services Authority Regulation Number 51/POJK.03/2017 concerning the Implementation of Sustainable Finance for Financial Services Institutions, Issuers, and Public Companies. This regulation mandates financial institutions, issuers, and public companies to prepare sustainability reports (Article 10, Paragraph 1). Furthermore, Article 10, Paragraph 2 states that sustainability reports may be prepared separately

from annual reports or integrated as an inseparable part of annual reports. The existence of this regulation encourages companies to implement sustainable finance principles and enhance transparency regarding the economic, social, and environmental impacts of their business activities.

In recent years, sustainability reporting has become an important instrument for companies in disclosing their economic, social, and environmental responsibilities. Caron and Turcotte (2009) argue that sustainability reports serve as a vital tool for communicating corporate sustainability-related issues. Moreover, sustainability reports can be used to evaluate corporate value, opportunities, risks, and future prospects while reducing information asymmetry between agents and principals (Karl & Orwat, 1999). Therefore, companies need to pay close attention to the quality aspects of sustainability reports to ensure that transparent information effectively communicates sustainability-related issues and mitigates information asymmetry between principals and agents.

Manetti (2011) suggests that sustainability report quality is characterized by the provision of comprehensive information regarding both positive and negative organizational impacts on the environment, society, and economy, while adequately addressing stakeholder information needs and avoiding excessive disclosure. Sustainability report quality is also defined as information that outlines management directions, objectives, and concrete actions undertaken or planned to achieve sustainability goals (Azapagic, 2003). High-quality sustainability reports indicate that reporting serves purposes beyond merely fulfilling performance or legitimacy requirements and is not merely symbolic in nature.

Globally, sustainability reporting disclosures have increased significantly in recent years (KPMG, 2019). Nevertheless, this increase in quantity has not always been accompanied by improvements in quality. In Indonesia, sustainability reports have been criticized for their low readability and potential to mislead report users (Adhariani & Toit, 2020). Sebrina et al. (2023) found that the reliability of information contained in Indonesian sustainability reports remains relatively low.

Suhendah and Imelda (2012) explain that conflicts of interest and risk-sharing issues between principals and agents create information asymmetry, whereby agents possess broader access to company information than principals. Consequently, principals cannot fully ascertain whether agents act in their best interests (Eisenhardt, 1989). Gonedes (1980) argues that information disclosure regulations have the potential to reduce information asymmetry. Information disclosures, including sustainability reports, can therefore serve as mechanisms for mitigating information asymmetry between principals and agents (Karl & Orwat, 1999).

Resource-based theory posits that competitive advantage can be achieved through the allocation of strategic and unique resources toward organizational objectives, including the production of high-quality sustainability reports. Tangible resources, such as physical and financial assets, are valuable but relatively easy to imitate and substitute. In contrast, intangible resources—including knowledge, skills, reputation, experience, innovation, and organizational culture—are valuable, rare, difficult to imitate, and costly to develop (Barney, 1991). From a resource-based perspective, one strategic resource that can contribute to sustainability report quality

is the corporate board. Board members with extensive knowledge are better equipped to perform monitoring functions effectively, thereby enhancing transparency and reducing information asymmetry between owners and management (Amaliyah & Solikhah, 2019). Furthermore, Shahgholian (2017) argues that knowledgeable boards are more likely to possess environmental expertise, enabling them to support the development of environmental initiatives.

In this study, board knowledge is proxied by educational attainment and board experience. Nonaka and Takeuchi (1995) explain that explicit knowledge, such as theoretical understanding, scientific literature, and academic expertise, is primarily acquired through formal education. Similarly, Hambrick and Mason (1984) suggest that educational level is an appropriate proxy for measuring intellectual competence and knowledge. Board experience, particularly work experience, is selected because it provides board members with knowledge of diverse business models and strategies acquired throughout their professional careers. Nonaka and Takeuchi (1995) further emphasize that experience constitutes a core element in the creation and transformation of knowledge. Accordingly, this study employs educational attainment and work experience as proxies for board knowledge.

According to Financial Services Authority Regulation Number 33/POJK.04/2014, corporate boards consist of the board of directors and the board of commissioners. Article 1 Paragraph 2 defines the board of directors as the corporate body authorized and fully responsible for managing the company in accordance with its objectives and interests, as well as representing the company both inside and outside the court. Meanwhile, Article 1 Paragraph 3 defines the board of commissioners as the corporate body responsible for conducting general and specific supervision and providing advice to the board of directors. Given the differences in authority and responsibilities between these two governing bodies, this study separately examines the effects of educational level and experience of the board of directors and the board of commissioners on sustainability report quality.

Previous studies examining the effects of the educational level and experience of the board of directors and board of commissioners on sustainability report quality have been conducted across various countries. Umukoro et al. investigated companies in Nigeria, while Khan et al. examined firms in Pakistan, and Mehedi et al. focused on companies in Bangladesh. In Indonesia, numerous studies have also explored the influence of board educational level and experience on sustainability report quality. Studies by Suhardjanto and Permatasari (2010), Juwita and Honggowati (2022), and Tanputra et al. (2023) examined firms listed on the Indonesia Stock Exchange. Other studies focused on specific sectors, such as Fitriasari and Soewarno (2024), who investigated manufacturing companies listed on the Indonesia Stock Exchange, and Noor et al. (2024), who examined natural resource companies listed on the exchange.

The findings of prior studies investigating the influence of board educational level and experience on sustainability report quality remain inconclusive. Research conducted by Umukoro et al. (2019) and Swardani et al. (2021) found that the educational level of the board of commissioners positively affects sustainability report quality. However, studies by Gold et al. (2021) and Setiawan and Ridaryanto (2022) reported contrasting results, indicating that the educational level of board members

does not significantly influence sustainability reporting. Furthermore, Khan et al. (2019) found that educational diversity among board members negatively affects the quality of corporate social responsibility disclosures. Similarly, Suherman (2024) reported that educational diversity within the board negatively influences sustainability reporting disclosure.

Aniefor et al. (2021) examined, among other factors, the effect of board experience on environmental disclosure and found a positive relationship. Ekaputri and Eriandani (2022) reported similar findings, showing that the experience of the board of commissioners positively influences sustainability reporting quality. However, Amanamah (2024), in a study of firms listed in Ghana, Nigeria, and South Africa during the 2009–2021 period, reported contrasting evidence, indicating that board experience negatively affects voluntary corporate disclosure. Likewise, Qahtani and Elgharbawy (2019) found that board tenure diversity, which was associated with board experience, had no significant effect on greenhouse gas disclosure.

The board of directors and the board of commissioners jointly play strategic roles within the company's top management structure. The board of directors is directly responsible for corporate management and policy formulation, whereas the board of commissioners oversees management performance and provides strategic guidance to ensure that the company operates in compliance with applicable regulations, including those related to sustainability reporting. Accordingly, examining both boards simultaneously provides a more comprehensive perspective for assessing the contribution of board knowledge to sustainability report quality.

This study incorporates two control variables to limit the influence of external factors outside the primary model that may affect sustainability report quality. Control variables are variables that are held constant or controlled so that the relationship between independent and dependent variables is not influenced by unexamined external factors (Sugiyono, 2019, p. 71). The control variables employed in this study are firm size and profitability, as both have consistently been shown to influence sustainability report quality.

Firm size is measured using the natural logarithm of total assets to stabilize variance and reduce distributional skewness. From an agency theory perspective, firms with larger asset bases face greater operational complexity, thereby increasing the potential for information asymmetry between principals and agents. Within the framework of resource-based theory, total assets represent strategic resources owned by the firm. Greater resource ownership enables companies to allocate strategic resources toward the preparation of sustainability reports in a more systematic and structured manner (Barney, 1991). The availability of strategic resources supports the development of higher-quality reporting systems. Empirical evidence indicates that firm size positively affects sustainability report quality (Karaman et al., 2018; Tobing et al., 2019; Darmawan & Sudana, 2022).

Profitability is controlled for in this study to capture variations in financial performance across firms. Profitability is measured using return on assets (ROA), which reflects a company's ability to generate earnings from its total assets. Higher profitability increases the availability of internal funds that can be allocated to sustainability reporting activities, which often require additional expenditures for data

collection, verification, and report preparation. From the perspective of agency theory, the availability of financial resources encourages agents to provide more transparent information in order to reduce information asymmetry between principals and agents. Within the resource-based theory framework, profits represent financial resource capacity that supports the development of higher-quality reporting systems. Empirical studies have consistently shown that profitability positively influences sustainability report quality (Chandradinangga & Rita, 2020; Liana, 2019; Tobing et al., 2019).

This study offers a distinctive contribution compared with previous research by employing the 2018 Global Reporting Initiative (GRI) Standards to measure sustainability report quality. Most prior studies conducted in Indonesia have relied on GRI index-based content analysis, assigning a score of 0 for undisclosed items and 1 for disclosed items, as adopted by Lendengtariang and Bimo (2022), Premavari and Utami (2020), Chai and Suparman (2022), Sejati and Prastiwi (2015), Nugraha (2024), Fitriasari and Soewarno (2024), and Ananda et al. (2023). Similar to previous studies, this research utilizes GRI-based content analysis to assess sustainability report quality. However, it adopts the measurement approach developed by Jamil et al. (2021), which employs a six-point scale. This scale enables a more detailed and accurate evaluation of GRI disclosures by considering both the scope and nature of the information disclosed, whether qualitative or quantitative. By applying a more comprehensive and refined measurement approach, this study is expected to provide a more robust assessment of sustainability report quality and contribute to a deeper understanding of high-quality sustainability reporting.

RESEARCH METHOD

This study employed an associative quantitative approach to examine the effect of board knowledge on the quality of sustainability reporting among cyclical consumer sector companies listed on the Indonesia Stock Exchange (IDX) during the 2020–2024 period. The independent variables consist of the educational level and experience of the board of commissioners and the board of directors, while sustainability reporting quality serves as the dependent variable. In addition, firm size and profitability were included as control variables to enhance the robustness of the research model in explaining the relationships among the variables (Sugiyono, 2019).

Sustainability report quality is measured using the Sustainability Reporting Index (SRi), which is based on the Global Reporting Initiative (GRI) Standards and comprises 84 disclosure indicators covering economic, environmental, and social dimensions (GRI, 2020). The assessment is conducted through content analysis using a six-point scale adapted from Jamil et al. (2021), enabling a comprehensive evaluation of the depth and quality of information disclosed by companies, both qualitatively and quantitatively. Meanwhile, board educational level is measured based on the highest level of formal education attained, whereas board experience is proxied by the cumulative work experience of individual board members (Papadimitria et al., 2020; Amaliyah & Solikhah, 2019; Ningrum, 2024).

The study utilizes secondary data obtained from companies' annual reports and sustainability reports available through the official websites of the Indonesia Stock Exchange and the respective companies. Samples were selected using purposive

sampling based on the criterion that companies consistently published sustainability reports prepared in accordance with the GRI Standards throughout the observation period. Data analysis was conducted using the Statistical Package for the Social Sciences (SPSS), including descriptive statistics, classical assumption tests, and multiple linear regression analysis. Hypotheses were tested using t-tests, while model adequacy and explanatory power were evaluated through F-tests and the coefficient of determination (R^2) (Ghozali, 2018; Sugiyono, 2019).

RESULT AND DISCUSSION

Table 1. Descriptive Statistics

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Sustainability Report Quality (Y)	75	0.393	0.796	0.608	0.090
Educational Level of the Board of Commissioners (X1)	75	0.500	2.333	1.447	0.391
Experience of the Board of Commissioners (X2)	75	12.714	41.000	28.298	6.565
Educational Level of the Board of Directors (X3)	75	0.750	2.000	1.376	0.271
Experience of the Board of Directors (X4)	75	14.833	34.667	25.050	5.243
Firm Size (X5)	75	26.206	30.576	28.422	1.195
Profitability (X6)	75	-174.028	24.055	1.723	22.292

Source: Processed Data, 2026

Based on the descriptive statistical analysis of 75 observations, the quality of sustainability reporting, as measured by the Sustainability Reporting Index (SRI), has a mean value of 0.608 with a standard deviation of 0.090. This indicates that the quality of corporate sustainability reports is at a moderate level with relatively low data variability. The educational levels of the board of commissioners and the board of directors have mean values of 1.446 and 1.376, respectively, suggesting that the educational attainment of both corporate governance bodies generally falls within the bachelor's degree (undergraduate) category. Meanwhile, the average years of experience of the board of commissioners and the board of directors are 28.298 and 25.049, respectively, reflecting relatively adequate professional experience with a homogeneous distribution across the sample. Overall, these variables exhibit distributions that are generally close to normal with relatively low variation among companies.

Furthermore, firm size, measured by the natural logarithm of total assets, has a mean value of 28.421, indicating that the sampled firms are generally large in size with relatively low variability. In contrast, profitability, proxied by Return on Assets (ROA), has a mean value of 1.723 and a standard deviation of 22.291, indicating substantial variation in profitability across the sampled firms. The high variability in profitability is primarily attributable to several firms experiencing significant losses, resulting in extremely low ROA values. Overall, the descriptive statistics indicate that most of the research variables exhibit relatively homogeneous characteristics, except for profitability, which demonstrates considerable differences in financial performance among the sampled companies.

Classical Assumption Test Results

Classical assumption testing is an important stage conducted prior to regression analysis to ensure that the research model satisfies the BLUE (Best Linear Unbiased Estimator) criteria. The classical assumption tests performed in this study include normality, multicollinearity, heteroscedasticity, and autocorrelation tests.

1) Normality Test

Table 2. Normality Test Results

One-Sample Kolmogorov-Smirnov Test			
Unstandardized Residual			
N			75
Normal Parameters ^{a,b}	Mean		0,000
	Std. Deviation		0,082
	Absolute		0,056
Most Extreme Differences	Positive		0,052
	Negative		-0,056
Test Statistic			0,056
Asymp. Sig. (2-tailed)			0,200 ^{c,d}
Monte Carlo Sig. (2-tailed)	Sig.		0,963 ^e
	99% Confidence Interval	Lower Bound	0,958
		Upper Bound	0,968

Source: Processed Data, 2026.

The results of the normality test presented in Table 2 show a Monte Carlo Sig. (2-tailed) value of 0.963, which exceeds the significance threshold of 0.05. Therefore, it can be concluded that the research data are normally distributed.

2) Multicollinearity Test

Table 3. Multicollinearity Test Results

Variable	Collinearity Statistics		Interpretation	
	Tolerance	VIF		
Educational Level of the Board of Commissioners (X1)	0.750	1.334	Free	from
Experience of the Board of Commissioners (X2)	0.672	1.488	Free	from
Educational Level of the Board of Directors (X3)	0.622	1.608	Free	from
Experience of the Board of Directors (X4)	0.694	1.442	Free	from
Firm Size (X5)	0.688	1.453	Free	from
Profitability (X6)	0.957	1.045	Free	from

Source: Processed Data, 2026.

Based on the multicollinearity test results presented in Table 3, all variables have tolerance values greater than 0.10 and Variance Inflation Factor (VIF) values below 10. Accordingly, the regression model is free from multicollinearity issues, indicating the absence of substantial correlations among the independent variables.

3) Heteroscedasticity Test

Table 4. Heteroscedasticity Test Results

Model	Sig.	Description
Educational Level of the Board of Commissioners (X1)	0.060	No Heteroscedasticity
Experience of the Board of Commissioners (X2)	0.323	No Heteroscedasticity
Educational Level of the Board of Directors (X3)	0.353	No Heteroscedasticity
Experience of the Board of Directors (X4)	0.274	No Heteroscedasticity
Firm Size (X5)	0.992	No Heteroscedasticity
Profitability (X6)	0.725	No Heteroscedasticity

Source: Processed Data, 2026.

The heteroscedasticity test results in Table 4 indicate that the significance values of the residuals for all independent variables exceed 0.05. Therefore, it can be concluded that the regression model does not suffer from heteroscedasticity and that the residual variance is homoscedastic.

4) Autocorrelation Test

Table 5. Autocorrelation Test Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0,406 ^a	0,165	0,091	0,086	0,756

Source: Processed Data, 2026.

Based on the test results presented in Table 5, the Durbin–Watson statistic is 0.756, which falls within the acceptable range of $-2 < 0.756 < 2$, indicating acceptance of the null hypothesis. This result suggests that the multiple linear regression model does not suffer from autocorrelation problems. Therefore, the residuals are independent of one another, and the regression model satisfies the autocorrelation assumption required for reliable estimation and hypothesis testing.

Multiple Linear Regression Analysis Results

Table 6. Multiple Linear Regression Analysis Results

Model	Unstandardized Coefficients	Std. Error	Standardized Coefficients	t	Sig.
	B		Beta		
(Constant)	0.220	0.254	–	0.867	0.389
Educational Level of the Board of Commissioners (X1)	0.063	0.030	0.274	2.141	0.036

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
Experience of the Board of Commissioners (X ₂)	0.004	0.002	0.269	1.993 0.050
Educational Level of the Board of Directors (X ₃)	-0.003	0.047	-0.008	- 0.055 0.957
Experience of the Board of Directors (X ₄)	-0.001	0.002	-0.076	- 0.573 0.568
Firm Size (X ₅)	0.008	0.010	0.107	0.797 0.428
Profitability (X ₆)	-0.001	0.000	-0.187	-1.655 0.103

Source: Processed Data, 2026.

Based on the regression results presented in Table 6, the estimated regression equation is: $Y = 0,220 + 0,063X_1 + 0,004X_2 - 0,003X_3 - 0,001X_4 + 0,008X_5 - 0,001X_6 + \epsilon$. This equation reflects the effects of the educational level of the board of commissioners (X₁), experience of the board of commissioners (X₂), educational level of the board of directors (X₃), experience of the board of directors (X₄), firm size (X₅), and profitability (X₆) on sustainability report quality (Y). The constant value of 0.220 indicates that, when all independent variables are equal to zero, the predicted value of sustainability report quality is 0.220. The regression coefficients reveal that the educational level of the board of commissioners, experience of the board of commissioners, and firm size have positive coefficients of 0.063, 0.004, and 0.008, respectively, indicating positive associations with sustainability report quality. Conversely, the educational level of the board of directors, experience of the board of directors, and profitability exhibit negative coefficients of -0.003, -0.001, and -0.001, respectively, suggesting that increases in these variables tend to reduce sustainability report quality, holding other variables constant. Therefore, a one-unit change in each independent variable is expected to influence sustainability report quality according to the direction and magnitude of its respective regression coefficient.

Coefficient of Determination Test (Adjusted R²)

Table 7. Coefficient of Determination Test Results

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0,406 ^a	0,165	0,091	0,086

Source: Processed Data, 2026

Based on the results presented in Table 7, the Adjusted R Square value of 0.091 indicates that 9.1% of the variation in sustainability report quality can be explained by the educational level and experience of both the board of commissioners and the board of directors after controlling for firm size and profitability. The remaining 90.9% of the variation is attributable to factors not included in the research model.

The relatively low coefficient of determination suggests that sustainability report quality is a complex phenomenon influenced by various internal and external organizational factors. Factors such as corporate governance mechanisms, stakeholder pressure, industry characteristics, the presence of sustainability committees, and

organizational commitment to sustainability practices may also contribute to explaining sustainability report quality but are not incorporated into the present study.

Model Feasibility Test (F-Test)

Table 8. Model Feasibility Test Results (F-Test)

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0,099	6	0,017	2.240	0,050 ^b
	Residual	0,503	68	0,007		
	Total	0,603	74			

Source: Processed Data, 2026

Table 8 shows that the F-statistic value is 2.240 with a significance level of 0.050. These results indicate that the educational level of the board of commissioners, experience of the board of commissioners, educational level of the board of directors, experience of the board of directors, firm size, and profitability jointly influence sustainability report quality. Furthermore, the model satisfies the 5% significance criterion and can therefore be considered statistically feasible. Nevertheless, the relatively limited explanatory power of the model should be acknowledged as a research limitation, highlighting the need for further investigation into additional determinants of sustainability report quality..

Hypothesis Testing Results (t-Test)

Table 9. Hypothesis Testing Results (t-Test)

Hypothesis Variable		Sig.	Result
H1	Educational Level of the Board of Commissioners (X1)	0.036	Supported
H2	Experience of the Board of Commissioners (X2)	0.050	Supported
H3	Educational Level of the Board of Directors (X3)	0.957	Not Supported
H4	Experience of the Board of Directors (X4)	0.568	Not Supported

Source: Processed Data, 2026

Based on the hypothesis testing results presented in Table 9, the educational level of the board of commissioners (X1) has a significance value of 0.036 (< 0.050), indicating a positive and statistically significant effect on sustainability report quality (Y). This finding suggests that higher educational attainment among commissioners contributes to improving the quality of corporate sustainability reports. The experience of the board of commissioners (X2) has a significance value of 0.050 (≤ 0.050), indicating a positive effect on sustainability report quality, although the result lies at the threshold of statistical significance. This finding implies that the experience possessed by commissioners supports the enhancement of sustainability reporting quality.

In contrast, the educational level of the board of directors (X3) and the experience of the board of directors (X4) have significance values of 0.957 and 0.568, respectively, both exceeding the 0.050 significance level. Therefore, neither variable has a statistically significant effect on sustainability report quality. Furthermore, the control variables, namely firm size (X5) and profitability (X6), also do not exhibit

significant effects on sustainability report quality, with significance values of 0.428 and 0.103, respectively, both above the 0.050 threshold.

Discussion

The Effect of the Educational Level of the Board of Commissioners on Sustainability Report Quality

The results of the first hypothesis test indicate that the educational level of the board of commissioners has a positive effect on sustainability report quality. This finding suggests that the higher the educational attainment of the board of commissioners, the higher the quality of sustainability reports produced by the company. The results imply that the knowledge possessed by commissioners is an important factor influencing the effectiveness of their monitoring role in the preparation and disclosure of sustainability-related information.

The distribution of the educational level of the board of commissioners shows a relatively symmetrical pattern with slight positive skewness, indicating that most companies in the sample have commissioners with educational levels around the average value, while a smaller number of firms have commissioners with relatively higher educational attainment. This condition suggests that, in general, the sampled companies possess boards of commissioners with sufficient knowledge capacity to understand sustainability-related issues. From the perspective of resource-based theory, knowledge constitutes a strategic resource that enables commissioners to perform their monitoring function more effectively in overseeing the preparation and disclosure of sustainability reports.

The findings demonstrate that the knowledge resources possessed by the board of commissioners contribute to organizational outcomes in the form of higher-quality sustainability reports. Within the framework of agency theory, the board of commissioners serves as a monitoring mechanism designed to mitigate conflicts of interest between principals and agents. However, the effectiveness of this monitoring function is determined not merely by the formal existence of the board but also by the competencies of individual commissioners. Higher levels of knowledge enhance commissioners' analytical capabilities, understanding of sustainability issues, and ability to perform effective oversight (Amaliyah & Solikhah, 2019). Consequently, commissioners are better equipped to evaluate managerial decisions, assess the adequacy of sustainability disclosures, and encourage greater transparency, thereby reducing information asymmetry and improving sustainability report quality.

These findings further extend the resource-based theory perspective by highlighting knowledge as an intangible resource that contributes to competitive advantage. In this context, the educational attainment of commissioners represents not only formal academic achievement but also accumulated critical thinking skills, information-processing capabilities, adaptability to changes in the business environment, and understanding of regulatory requirements. These attributes constitute valuable resources that enable commissioners to perform their monitoring and advisory functions more effectively than boards with lower educational attainment. The results are consistent with previous studies by Umukoro et al. (2019), Swardani et al. (2021), Tanputra et al. (2023), Puspitasari et al. (2023), and Rahindayati et al. (2015),

which found that the educational level of the board of commissioners positively affects sustainability report quality. Higher educational attainment reflects greater intellectual capacity, broader understanding of environmental, social, and governance issues, and stronger analytical capabilities. These attributes enable commissioners to provide strategic guidance, evaluate sustainability policies, and promote transparency in sustainability reporting. Knowledge acquired through higher education also strengthens the board's monitoring function over management, thereby enhancing the quality and credibility of information disclosed to stakeholders.

The Effect of the Experience of the Board of Commissioners on Sustainability Report Quality

The results of the second hypothesis test reveal that the experience of the board of commissioners positively affects sustainability report quality. This finding suggests that longer and broader experience among commissioners contributes to higher-quality sustainability reports. The results indicate that the accumulation of knowledge acquired through professional experience enhances the effectiveness of monitoring activities, strategic advisory roles, and evaluations of corporate policies and reporting practices. The distribution of commissioners' experience is relatively symmetrical with slight positive skewness, indicating that most firms have commissioners whose experience levels are close to the sample average, while a smaller number of firms possess commissioners with substantially higher levels of experience. Such a distribution reflects the accumulation of strategic knowledge, governance expertise, and broader business insights among experienced commissioners, which ultimately supports more comprehensive and transparent sustainability disclosures.

These findings confirm that experience serves as an important source of knowledge for commissioners and contributes to sustainability report quality. Agency theory suggests that commissioners act as monitoring agents responsible for reducing information asymmetry between principals and agents. Commissioners with extensive experience across different industries possess broader knowledge of business models and operational strategies (Kor & Sundaramurthy, 2008), enabling them to identify risks, evaluate managerial performance, and provide more effective guidance (Hillman & Dalziel, 2003). Consequently, commissioners' experience functions as a strategic knowledge resource that enhances oversight and advisory effectiveness, contributing to more comprehensive, accurate, and transparent sustainability reporting.

The findings also support resource-based theory, which views board experience as a valuable intangible resource developed through the accumulation of knowledge, skills, learning processes, and direct involvement in organizational dynamics over time. Unlike tangible resources that are relatively easy to acquire and imitate, experience is developed gradually through participation in decision-making processes, problem-solving activities, and stakeholder interactions, making it unique and difficult to replicate. Experience across various industries enables commissioners to better understand business risks, regulatory requirements, and stakeholder expectations regarding sustainability issues.

The results are consistent with studies conducted by Jamil et al. (2021), Haniffa and Cooke (2005), Zhang et al. (2016), Ekaputri and Eriandani (2022), and Ibrahim and

Hanefah (2016), all of which found a positive relationship between board experience and sustainability report quality. Commissioners with extensive industry experience and longer tenure tend to possess greater strategic insight, deeper understanding of business dynamics, and stronger sensitivity to environmental and social issues. Such experience enables more effective oversight, higher-quality decision-making, and greater transparency and accountability in sustainability reporting.

The Effect of the Educational Level of the Board of Directors on Sustainability Report Quality

The results of the third hypothesis test indicate that the educational level of the board of directors does not significantly affect sustainability report quality. This finding suggests that the educational level of directors is not supported by the empirical data as a determinant of sustainability report quality. The result is inconsistent with resource-based theory, which views education as a strategic resource capable of enhancing sustainability reporting quality. Theoretically, educational attainment reflects intellectual capacity, analytical skills, and strategic decision-making capabilities. Within the framework of agency theory, directors are expected to reduce information asymmetry by providing adequate non-financial disclosures to stakeholders.

The distribution of directors' educational levels is relatively normal with a slight negative skew, indicating that most companies have directors whose educational attainment is close to the average level. The average educational level of directors is 1.375, which generally corresponds to an undergraduate degree. However, such educational qualifications do not necessarily reflect expertise in sustainability reporting frameworks such as GRI Standards, ESG principles, or sustainability-related regulations. These findings are consistent with studies by Gold et al. (2021), Khan et al. (2019), Musa et al. (2020), and Suhardjo et al. (2024), which reported that directors' educational attainment does not significantly influence sustainability report quality. A high level of formal education does not necessarily ensure sufficient understanding of sustainability reporting standards or ESG-related issues. Furthermore, educational backgrounds that are not directly related to sustainability may fail to contribute meaningfully to the quality of sustainability disclosures.

However, these findings contradict those of Katmon et al. (2017), Kipngetich et al. (2019), Puspitasari et al. (2023), Hadya and Susanto (2018), and Suwasono and Prasetyo (2023), who found that higher educational attainment among directors contributes positively to sustainability reporting quality. Directors with higher levels of education are generally expected to possess stronger analytical capabilities in understanding sustainability risks, transparency requirements, and stakeholder expectations. Nevertheless, the present findings suggest that formal education alone may be insufficient unless it is specifically relevant to sustainability issues.

The primary responsibility of the board of directors is to formulate and execute corporate strategies and oversee operational activities. Consequently, directors tend to focus more on achieving business targets and operational efficiency. Formal educational attainment does not necessarily translate into a commitment to improving sustainability report quality unless it is directly related to sustainability-related competencies and knowledge.

The Effect of the Experience of the Board of Directors on Sustainability Report Quality

The results of the fourth hypothesis test indicate that the experience of the board of directors does not significantly affect sustainability report quality. This finding suggests that directors' work experience is not supported by the empirical data as a determinant of sustainability report quality. The result is inconsistent with resource-based theory, which considers experience a strategic source of organizational knowledge. Although work experience theoretically broadens directors' understanding of corporate operations, regulatory compliance, risk management, and disclosure practices, the findings suggest that experience alone may not be sufficient to improve sustainability reporting quality without support from other factors such as sustainability orientation, governance systems, or specialized sustainability reporting training.

The distribution of directors' experience exhibits negative skewness, indicating that most directors possess experience levels above the average. Nevertheless, companies within the cyclical consumer sector, including retail, automotive, tourism, and entertainment industries, tend to recruit directors whose experience is primarily oriented toward market demand management, operational efficiency, and sales growth. Consequently, accumulated experience is often focused on commercial and financial objectives rather than sustainability-related competencies or non-financial disclosure practices.

These findings are consistent with studies by Qahtani and Elgharbawy (2019), Saha et al. (2023), Mai and Sembiring (2023), and Salehi et al. (2020), which found that directors' experience, measured by tenure and age, does not significantly influence sustainability report quality. Knowledge derived from directors' work experience is often concentrated on strategic operational decision-making and financial performance achievement, causing sustainability issues to receive less attention. Furthermore, directors' experience may not always be relevant to sustainability reporting standards, limiting its contribution to improving report quality.

However, these findings differ from those reported by Noor et al. (2024), Erin et al. (2021), Nugraha (2024), Setiawan et al. (2018), and Álvarez and Dominguez (2023), who found a positive relationship between directors' experience and sustainability report quality. Experienced directors are often expected to possess broader strategic perspectives, deeper managerial knowledge, and greater awareness of sustainability-related issues. Nevertheless, the present findings suggest that such experience does not automatically translate into higher-quality sustainability reporting.

CONCLUSION

Based on the hypothesis testing and discussion of the research findings, the following conclusions can be drawn:

1. The educational level of the board of commissioners has a positive effect on the sustainability report quality of cyclical consumer sector companies listed on the Indonesia Stock Exchange during the 2020–2024 period. Higher educational attainment enhances commissioners' knowledge and capabilities in monitoring management and providing strategic guidance to improve sustainability reporting quality.

2. The experience of the board of commissioners positively affects sustainability report quality, although the effect is observed at the threshold of statistical significance (Sig. = 0.050). This finding supports the resource-based theory perspective that accumulated experience constitutes a strategic resource that strengthens monitoring functions and contributes to sustainability reporting quality.
3. The educational level of the board of directors does not significantly affect sustainability report quality. This finding suggests that higher educational attainment among directors does not necessarily function as a strategic resource for improving sustainability reporting quality.
4. The experience of the board of directors does not significantly affect sustainability report quality. This finding indicates that extensive experience among directors does not necessarily serve as a driving factor in strategic decision-making and policy formulation aimed at enhancing sustainability report quality.

REFERENCES

- Adams, C. A., Alhamood, A., He, X., Tian, J., Wang, L., & Wang, Y. (2022). *The development and implementation of GRI Standards: practice and policy issues*. Edward Elgar Publishing Ltd.
- Adhariani, D., & du Toit, E. (2020). Readability of sustainability reports: evidence from Indonesia. *Journal of Accounting in Emerging Economies*.doi:10.1108/jaee-10-2019-0194
- Álvarez, I. G., & Dominguez, L. R. (2023). Board of directors and environmental practices: the effect of board experience, culture, and tenure. *Environment Development and Sustainability*, 27(1), 1643-1668. <https://doi.org/10.1007/s10668-023-03937-z>
- Amanamah, R. B. (2024). Exploring the impact of board experience diversity on voluntary disclosure: The moderating role of firm size. *Corporate Board: Role, Duties and Composition*, 20(3), 91–104. <https://doi.org/10.22495/cbv20i3art9>
- Tobing, R. A., & Rusherlistyani, Z. (2019). Pengaruh Kinerja Keuangan, Ukuran Perusahaan, dan Good Corporate Governance Terhadap Pengungkapan Sustainability Report. *Reviu Akuntansi dan Bisnis Indonesia*, 3(1). <https://doi.org/10.18196/rab.030139>.
- Traxler, A. A., Schrack, D., & Greiling, D. (2020). Sustainability reporting and management control – A systematic exploratory literature review. *Journal of Cleaner Production*, 276, 1–17. <https://doi.org/10.1016/j.jclepro.2020.122725>
- Umukoro, O. E., Uwuigbe, O. R., Uwuigbe, U., Adegboye, A., Ajetunmobi, O., & Nwaze, C. (2019). Board Expertise and Sustainability Reporting in Listed Banks in Nigeria. *IOP Conference Series: Earth and Environmental Science*, 331(1), 012048. <https://doi.org/10.1088/1755-1315/331/1/012048>
- Wiersema, M. F., & K. A. Bantel. (1992). Top management team demography and corporate strategic change. *Academy of Management Journal*, 35, 91-121
- Wijethilake, C., Ekanayake, A., & Perera, S. (2015). Board involvement in corporate performance: evidence from a developing country. *Journal of Accounting in Emerging Economies*, 5(3), 250-268.

- Wolff, J. A., & Reed, R. (2000). Firm resources and joint ventures: what determines zero-sum versus positive-sum outcomes?. *Managerial and Decision Economics*, 21(7), 269–284. <https://doi.org/10.1002/mde.991>
- Zhang, J., Kong, D., & Wu, J. (2016). Doing Good Business by Hiring Directors with Foreign Experience. *Journal of Business Ethics*, 153, 859–876. <https://doi.org/10.1007/s10551-016-3416-z>.