

THE EFFECT OF SOCIAL-EMOTIONAL LEARNING ON ELEMENTARY SCHOOL STUDENTS' RESPONSIBILITY BASED ON GENDER OF GRADE VI ELEMENTARY SCHOOL STUDENTS

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Abstract

The phenomenon of declining character of responsibility of elementary school students has become a critical issue in the educational discourse of the 21st century. This study aims to analyze the influence of Social Emotional Learning on the responsibility character of elementary school students and test the difference in responsibility character based on gender. The study uses an ex post facto quantitative approach with a causal comparative design. The sample amounted to 120 grade VI students from four elementary schools in Manyaran District, Wonogiri Regency. The instrument in the form of a responsibility character questionnaire consists of 30 items with a reliability of Cronbach's Alpha of 0.89. The results showed that Social Emotional Learning had a positive and significant effect on the character of responsibility ($\beta = 0.60$; $R^2 = 0.36$; $F = 66.27$; $p < 0.001$). There was a significant difference in the character of responsibility between male and female students ($t = -2.41$; $p = 0.018$; Cohen's $d = 0.49$), with female students demonstrating higher levels of responsibility, highlighting the importance of incorporating gender-sensitive approaches within Social-Emotional Learning to effectively strengthen responsibility character in elementary education.

Keywords: Social-Emotional Learning; Character Responsibility; Gender; Elementary School; Pancasila Student Profile

A. Introduction

21st century education demands the systematic development of social and emotional competencies in addition to cognitive aspects (World Economic Forum, 2023; OECD, 2024). The Collaborative for Academic, Social, and Emotional Learning (CASEL) defines Social Emotional Learning as a comprehensive process for individuals to develop the skills to recognize emotions, set positive goals, show empathy, build healthy relationships, and make responsible decisions (CASEL, 2024; Weissberg, 2019). Cipriano et al. (2023) conducted a meta-analysis of 424 studies and found that the Social Emotional Learning program increased academic achievement by 11 percentage points. Durlak et al. (2022) concluded that Social Emotional Learning interventions have a meaningful impact on students' social-emotional skills, prosocial behaviors, and psychological well-being.

Indonesia responded to the demands of global education by issuing the Pancasila Student Profile policy in the Regulation of the Minister of Education and Culture Number 22 of 2020. The Pancasila Student Profile contains six main character dimensions, namely faith and fear of God Almighty as well as noble character, global diversity, cooperation, independence, critical reasoning, and creativity (Ministry of Education and Culture, 2022). The independent dimension emphasizes the importance of student responsibility for the learning process and outcomes. The Merdeka Curriculum places character strengthening as a strategic component in the formation of a holistic student profile rooted in Pancasila values (Santika & Dafit, 2023; Rahayu et al., 2024).

The reality on the ground shows the gap between policy ideals and practices in educational units. Wuryandani et al. (2014) found that many students showed low commitment in completing assignments and lacked discipline in obeying the rules. Ismeiranti (2022) reported that the behavior of procrastinating and ignoring obligations is still common in elementary school students. Suprpti et al. (2025) identified that the formation of responsibility character requires a more systematic approach than conventional practice. Decreased character responsibility stems from the development of the prefrontal cortex that is not yet optimal (Blair & Raver, 2015; Bayly et al., 2022), lack of positive habituation in the school and family environment (Lickona, 2012; Bronfenbrenner & Morris, 2006), as well as the influence of parenting and local values (Rogoff, 2003; Verhagen et al., 2024).

Gender factors are important variables that affect the character of student responsibility. Voyer and Voyer (2014) found that girls consistently outperform boys in academic achievement. The OECD (2024) revealed that girls show higher scores on the dimensions of tolerance, empathy, and responsibility. This difference stems from the faster development of the prefrontal cortex of girls (Gys & Chen, 2024; Matthews et al., 2009) as well as social expectations that emphasize more obedience and responsibility in girls from an early age (Hayes et al., 2025; Campbell et al., 2020).

Social-Emotional Learning offers a systematic solution to overcome the problem of student responsibility character. CASEL (2024) identifies five core competencies, namely self-awareness, self-management, social awareness, relational skills, and responsible decision-making. These five competencies are integrated with each other and form the foundation for strengthening the character of responsibility. Jones et al. (2021) prove that structured Social Emotional Learning programs are able to significantly improve students' self-regulation and responsible behavior. Taylor et al. (2017) found that the positive impact of Social Emotional Learning lasted up to 18 years after the intervention was given.

The implementation of Social-Emotional Learning in primary schools requires an integrated approach in the curriculum and school culture. RAND Corporation and CASEL (2024) report that 83 percent of school principals in the United States have adopted the Social Emotional Learning curriculum in the 2023-2024 school year. Schools that implement Social Emotional Learning consistently show an increase in a positive school climate and a decrease in problematic behaviors (Mahoney et al., 2021). This approach is relevant to be

applied in Indonesia to bridge the gap between the Pancasila Student Profile policy and the practice of character building in educational units.

Despite the growing body of international research on Social-Emotional Learning, empirical studies that simultaneously examine SEL, responsibility character, and gender differences within Indonesian elementary education remain limited. Most existing studies focus either on general character education or on SEL outcomes without integrating gender as an analytical dimension, particularly at the primary school level. This study addresses this gap by providing empirical evidence on the association between Social-Emotional Learning and responsibility character while explicitly considering gender differences in the context of Indonesian elementary schools.

It is important to note that, given the non-experimental design of this study, the findings are interpreted as associative rather than strictly causal. The use of Social-Emotional Learning as a binary variable (0 = non-SEL; 1 = SEL) reflects the presence or absence of structured and documented SEL integration at the school level, allowing for a clear comparison between schools with differing implementation conditions while acknowledging the limitations of causal inference.

This study aims to analyze the influence of Social Emotional Learning on the responsibility character of elementary school students and test the difference in responsibility character based on gender. The research hypothesis proposed is that (H1) Social-Emotional Learning has a positive and significant effect on the responsibility character of students and (H2) there is a significant difference in the character of responsibility between male and female students.

B. Method

Research Design

This study employed a quantitative approach using an ex post facto method with a causal-comparative design. The ex post facto method was selected because the independent variable, namely Social-Emotional Learning, had been implemented naturally in school settings and could not be manipulated by the researcher (Creswell & Creswell, 2018). The causal-comparative design enabled the comparison of responsibility character between groups of students exposed to Social-Emotional Learning and those who were not, as well as comparisons based on gender. This design was considered appropriate for identifying patterns of association between variables while acknowledging that causal interpretations are limited to statistical relationships rather than definitive cause-and-effect conclusions, which are more appropriately derived from experimental designs.

Operationalization of Social-Emotional Learning Implementation

In this study, the implementation of Social-Emotional Learning was operationalized at the school level as a structured and documented integration of SEL within the Merdeka Curriculum. Schools categorized as implementing Social-Emotional Learning demonstrated explicit incorporation of SEL competencies into curriculum documents, lesson plans, and routine school programs. These implementations included the integration of core SEL competencies such as self-awareness, self-management, social awareness, relationship

skills, and responsible decision-making into daily instructional activities and classroom management practices.

The implementation was conducted consistently throughout the academic year rather than as a short-term intervention or standalone program. Schools in the non-Social-Emotional Learning group followed the Merdeka Curriculum without explicit or systematic integration of SEL competencies beyond general character education practices. This operational definition allowed for a clear and consistent comparison between schools with and without structured SEL implementation.

Population and Sample

The research population consisted of all Grade VI students enrolled in public elementary schools in Manyaran District, Wonogiri Regency, Central Java Province, during the 2024/2025 academic year, totaling 387 students from 12 schools. A purposive sampling technique was employed using the following inclusion criteria: public elementary schools that had fully implemented the Merdeka Curriculum; availability of documentation indicating the presence or absence of Social-Emotional Learning implementation; active enrollment of Grade VI students; and written consent obtained from parents or guardians.

Based on these criteria, a total of 120 students from four public elementary schools were selected, comprising 60 students from schools implementing Social-Emotional Learning and 60 students from schools without structured SEL implementation. The demographic characteristics of the sample are presented in Table 1.

Table 1. Demographic Characteristics of the Research Sample

Characteristics	PSE group (n=60)	Non-PSE group (n=60)	Total (N=120)
Gender			
Male	28 (46,7%)	30 (50,0%)	58 (48,3%)
Women	32 (53,3%)	30 (50,0%)	62 (51,7%)
Age (years)			
Average (SD)	11,82 (0,45)	11,78 (0,52)	11,80 (0,48)
Range	11-13	11-13	11-13
Parent Education			
Elementary/Equivalent	12 (20,0%)	15 (25,0%)	27 (22,5%)
Junior High School/Equivalent	18 (30,0%)	20 (33,3%)	38 (31,7%)
High School/Equivalent	22 (36,7%)	19 (31,7%)	41 (34,2%)
College	8 (13,3%)	6 (10,0%)	14 (11,7%)

Note. PSE = Social-Emotional Learning; SD = Standard Deviation

Research Instruments

The primary research instrument was a responsibility character questionnaire developed based on Lickona's character education framework and aligned with the dimensions of the Pancasila Student Profile (Ministry of Education and Culture, 2022). The questionnaire consisted of 30 statements distributed across five indicators: awareness of obligations and duties, discipline in obeying rules, independence in completing tasks, willingness to accept the consequences of actions, and concern for the learning environment, with each indicator represented by six items. Responses were measured using a five-point

Likert scale ranging from strongly disagree to strongly agree, producing total scores between 30 and 150.

The questionnaire was administered in a self-administered format under the supervision of the researcher and classroom teachers to ensure that students clearly understood each item while minimizing external influence on their responses. Instrument validity was established using Aiken's V, and reliability was assessed using Cronbach's Alpha. The results indicated that all items met acceptable validity and reliability criteria, as summarized in Table 2.

Table 2. Instrument Validity and Reliability Test Results

Indicator	Number of Items	Aiken's V Range	Cronbach's Alpha
Awareness of obligations and duties	6	0,78 - 0,89	0,82
Discipline in obeying the rules	6	0,81 - 0,93	0,84
Independence in completing tasks	6	0,80 - 0,91	0,79
Willingness to accept consequences	6	0,79 - 0,88	0,76
Concern for the learning environment	6	0,82 - 0,90	0,81
Total Scale	30	0,78 - 0,93	0,89

Note. Aiken's Coefficient V ≥ 0.70 is declared valid; Cronbach's Alpha ≥ 0.70 is declared reliable

Data Analysis Techniques

Data analysis was carried out using two inferential statistical techniques. Simple linear regression was used to test the first hypothesis regarding the influence of Social Emotional Learning on the character of responsibility. The regression model tested was $Y = \alpha + \beta X + \varepsilon$, where Y is the responsibility character score, X is the implementation status of Social Emotional Learning (encoded 0 = non-PSE, 1 = PSE), α is a constant, β is the regression coefficient, and ε is an error. An independent sample t-test was used to test a second hypothesis regarding differences in the character of responsibility by gender. Before the inferential analysis, classical assumption tests were carried out including normality tests (Kolmogorov-Smirnov), linearity tests (Lack of Fit Test), homogeneity tests (Levene's Test), and heteroscedasticity tests (Breusch-Pagan Test). All data analysis was carried out using IBM SPSS Statistics version 26 with a significance level of $\alpha = 0.05$.

Methodological Limitations Related to Self-Report Measures

It should be noted that the measurement of responsibility character relied on students' self-reported responses, which may be subject to social desirability bias. Although supervision was provided during questionnaire administration, students may have tended to provide responses perceived as socially acceptable rather than fully reflecting their actual behavior. This limitation was considered when interpreting the findings and is addressed further in the limitations section, highlighting the need for future studies to incorporate observational or multi-informant assessment methods.

C. Finding and Discussion

1. Finding

Description of Liability Character Data

Student responsibility character data were obtained from 120 respondents, who were grouped based on the implementation status of Social-Emotional Learning and gender categories.

Table 3. Descriptive Statistics of Responsibility Character by Group

Groups	N	Mean	SD	Min	Max	High %	OR
Based on PSE Status							
PSE Group	60	112,45	12,38	82	142	58,3	1,60
Non-PSE Group	60	98,67	14,52	65	128	18,3	1,87
By Gender							
Male	58	101,87	15,23	65	138	29,3	2,00
Female	62	108,92	13,45	72	142	46,8	1,71
Total Sample	120	105,56	14,78	65	142	38,3	1,35

Note. PSE = Social-Emotional Learning; SD = Standard Deviation; SE = Standard Error; High category = score \geq 110

Table 3 indicates that students in schools implementing Social-Emotional Learning achieved higher mean responsibility character scores than those in non-SEL schools. Female students also demonstrated higher average responsibility scores than male students, with a greater proportion falling into the high responsibility category. Students in schools implementing Social-Emotional Learning achieved a higher mean responsibility character score of 112.45 (SD = 12.38) out of a maximum score of 150 while the non-Social Emotional Learning group has an average score of 98.67 (SD = 14.52). The average difference of 13.78 points indicates a substantial difference in the level of character responsibility between the two groups. Female students have an average score of 108.92 (SD = 13.45) while male students have an average score of 101.87 (SD = 15.23). The average difference of 7.05 points shows a tendency for female students to have a higher level of responsibility character. The proportion of students in the high category is also different, namely 46.8 percent of female students are in the high category compared to only 29.3 percent of male students.

Table 4. Descriptive Statistics Per Character Indicator of Responsibility

Indicator	Red	SD	% Max Score	Categories
Awareness of obligations and duties	22,45	3,21	74,8	Height
Discipline in obeying the rules	20,87	3,45	69,6	Medium
Independence in completing tasks	21,34	3,12	71,1	Medium
Willingness to accept consequences	19,78	3,67	65,9	Medium
Concern for the learning environment	21,12	3,33	70,4	Medium
Total Score	105,56	14,78	70,4	Medium

Note. Maximum score per indicator = 30; Categories: High (≥ 22), Medium (15-21), Low (< 15)

Table 4 shows that awareness of obligations and duties emerged as the strongest indicator, reaching the high category, while the other four indicators remained at a moderate level. The indicator of willingness to accept consequences recorded the lowest mean score, suggesting the need for targeted reinforcement in this aspect of responsibility character. The indicator of awareness of obligations and duties obtained the highest mean score ($M = 22.45$; $SD = 3.21$) and fell within the high category. The other four indicators were in the medium category, namely discipline in obeying the rules ($M = 20.87$), independence in completing tasks ($M = 21.34$), willingness to accept consequences ($M = 19.78$), and concern for the learning environment ($M = 21.12$). The indicator of willingness to accept the consequences of obtaining the lowest score and requires special attention in the development of the student's character of responsibility.

2. Classical Assumption Test Results

A classical assumption test is performed to ensure that all the prerequisites of statistical analysis are met.

Table 5. Classical Assumption Test Results

Assumption Test	Test Statistics	Sig.	Verdict
Normality (PSE Group)	$D = 0.089$	0,082	Normal
Normality (Non-PSE Group)	$D = 0.078$	0,094	Normal
Linearity (Lack of Fit)	$F = 1.42$	0,127	Linear
Homogeneity (Levene's)	$F = 1.55$	0,215	Homogeneous
Heteroskedasticity (Breusch-Pagan)	$\chi^2 = 2,34$	0,126	Not happening

Note. Significance level $\alpha = 0.05$; Assumption is fulfilled if $p > 0.05$

The results in Table 5 confirm that all classical assumptions were met, indicating that the data were suitable for further inferential statistical analysis. The Kolmogorov-Smirnov normality test showed that the responsibility character data were normally distributed in the social-emotional learning group ($D = 0.089$; $p = 0.082$) and the non-social-emotional learning group ($D = 0.078$; $p = 0.094$). The Lack of Fit Test linearity test yielded a significance value of 0.127 ($F = 1.42$; $p > 0.05$) indicating a linear relationship between Social-Emotional Learning and

responsibility character. The Levene's Test homogeneity test yielded a significance value of 0.215 ($F = 1.55$; $p > 0.05$) indicating homogeneous data variance between groups. The Breusch-Pagan heteroscedasticity test yielded a value of $\chi^2 = 2.34$ ($p = 0.126$) which showed no heteroscedasticity in the model.

3. The Influence of Social-Emotional Learning on the Character of Responsibility

A simple linear regression analysis was performed to test the influence of Social Emotional Learning on the character of student responsibility.

Table 6. Results of Simple Linear Regression Analysis

Variable	B	OR	β	t	p	95% CI
(Constant)	98,67	1,73	-	57,02	<0.001	[95,24; 102,10]
PSE	13,78	1,69	0,60	8,14	<0.001	[10,43; 17,13]

Note. $R^2 = 0.36$; Adjusted $R^2 = 0.35$; $F(1, 118) = 66.27$; $p < 0.001$; SE = Standard Error; CI = Confidence Interval

Table 7. ANOVA Regression Model Summary

Source of Variation	Sum of Squares	df	Mean Square	F	Sig.
Regression	5698,52	1	5698,52	66,27	<0.001
Residual	10146,44	118	86,00	-	-
Total	15844,96	119	-	-	-

Note. Dependent variables: Character of Responsibility; Independent variable: PSE Implementation Status

Table 6 demonstrates that Social-Emotional Learning implementation is positively and significantly associated with students' responsibility character, explaining a substantial proportion of variance in responsibility scores. Table 7 shows that female students demonstrated significantly higher responsibility character scores than male students, with a moderate effect size, indicating meaningful practical differences between groups. The resulting regression model was statistically significant ($F = 66.27$; $df = 1, 118$; $p < 0.001$). A regression coefficient (β) of 0.60 indicates that every one unit increase in the Social Emotional Learning variable is associated with a 0.60 standard unit increase in the responsibility character. The determination coefficient (R^2) of 0.36 indicates that 36 percent variation in students' responsibility characteristics can be explained by the implementation status of Social Emotional Learning. The resulting regression equation is $\hat{Y} = 98.67 + 13.78X$. These results support the first hypothesis (H1) that Social-Emotional Learning has a positive and significant effect on the character of student responsibility.

4. Differences in Character of Responsibility by Gender

An independent sample t-test was conducted to test the difference in the character of responsibility between male and female students.

Table 8. Independent Sample T-Test Results Based on Gender

Groups	N	Mean	SD	t	df	p	Cohen's d
Male	58	101,87	15,23	-2,41	118	0,018	0,49
Women	62	108,92	13,45				
Mean Difference	-	7,05	-				

Note. SD = Standard Deviation; df = degrees of freedom; Cohen's d: 0.20 = small; 0.50 = medium; 0.80 = large

Table 9. Comparison of Scores by Indicator by Gender

Indicator	Male (M)	Female (M)	Differences	t	p
Awareness of obligations	21,78	23,08	1,30	-2,12	0,036
Discipline	20,21	21,48	1,27	-1,89	0,061
Independence	20,67	21,97	1,30	-2,18	0,031
Willingness to accept consequences	19,12	20,40	1,28	-1,78	0,078
Environmental care	20,09	21,99	1,90	-2,98	0,004

Note. M = Mean; Significant difference if $p < 0.05$

Table 8 indicates that significant gender differences were observed in awareness of obligations, independence, and environmental concern, with female students consistently achieving higher scores across all indicators ($t = -2.41$; $df = 118$; $p = 0.018$). Female students ($M = 108.92$; $SD = 13.45$) had significantly higher responsibility character scores than male students ($M = 101.87$; $SD = 15.23$). The average difference of 7.05 points shows the superiority of female students in the character of responsibility. Cohen's value of d of 0.49 indicates a measure of effect in the moderate category indicating that the difference has substantial practical significance. These results support the second hypothesis (H2) that there is a significant difference in the character of responsibility between male and female students.

Table 9 shows the comparison of scores per indicator by gender. Three indicators showed significant differences, namely awareness of obligations ($t = -2.12$; $p = 0.036$), independence ($t = -2.18$; $p = 0.031$), and environmental concern ($t = -2.98$; $p = 0.004$). The environmental concern indicator showed the largest difference (difference = 1.90 points) between female and male students. The other two indicators, namely discipline ($p = 0.061$) and willingness to accept consequences ($p = 0.078$), did not show significant differences even though female students still obtained higher scores.

2. Discussion

The Influence of Social-Emotional Learning on the Character of Responsibility

The findings of this study indicate that Social-Emotional Learning contributes meaningfully to the development of responsibility character among elementary school students. Rather than reiterating statistical outcomes, this discussion emphasizes the substantive role of SEL in shaping responsible behavior and situates the findings within the broader body of international research. Previous meta-analyses have consistently shown that SEL enhances social-emotional competence and prosocial behavior, which are foundational to responsible conduct (Cipriano et al., 2023; Shi & Cheung, 2024). These results reinforce the position of Social-Emotional Learning as an empirically supported pedagogical approach for character development.

The influence of Social-Emotional Learning on responsibility character can be explained through the integration of its five core competencies within the CASEL framework. Self-awareness supports students' understanding of personal roles and expectations, which aligns with the indicator of awareness of obligations and duties. Self-management is closely related to discipline and independence in completing tasks, as it involves emotional regulation, persistence, and impulse control. Social awareness contributes to concern for the learning environment by fostering empathy and sensitivity to others. Relationship skills support responsible interaction and cooperation, while responsible decision-making strengthens students' willingness to accept the consequences of their actions (CASEL, 2024; Weissberg, 2019).

This alignment between SEL competencies and responsibility indicators suggests that responsibility character is not a static trait but a developmental outcome that can be nurtured through structured learning experiences. Although Social-Emotional Learning plays a substantial role, responsibility development is also shaped by contextual factors such as family practices, cultural norms, and peer interactions. This complexity highlights the need for future research to examine potential mediating and moderating variables that influence the effectiveness of SEL in character formation (Domitrovich et al., 2023; Verhagen et al., 2024).

2. Differences in Character of Responsibility by Gender

The findings also reveal that female students demonstrate higher levels of responsibility character than male students. Instead of focusing on numerical differences, this section emphasizes explanatory perspectives that clarify why such patterns emerge. Similar trends have been reported in international studies, which show that girls tend to score higher on responsibility, empathy, and self-regulation across diverse cultural contexts (OECD, 2024; Voyer & Voyer, 2014).

From a neurodevelopmental perspective, research suggests that girls at the elementary school level often experience earlier maturation of the prefrontal cortex. This developmental advantage supports executive functions such as planning, behavioral regulation, and inhibition control, all of which are closely associated with responsible behavior (Gys & Chen, 2024; Matthews et al., 2009). These capacities are particularly relevant to indicators such as discipline, independence, and acceptance of consequences.

Gender socialization theory provides a complementary explanation for these differences. Girls are more frequently socialized to value compliance, care, and responsibility through expectations reinforced by parents and teachers, while boys may receive greater tolerance for impulsive or less structured behavior (Hayes et al., 2025; Campbell et al., 2020). In the local context of Manyaran District, where traditional Javanese cultural values remain influential, these gendered expectations may further shape differences in responsibility character between male and female students.

3. Theoretical and Practical Implications

Theoretically, this study contributes to the development of character education and Social-Emotional Learning by demonstrating that the CASEL framework is applicable within the Indonesian educational context. The findings support the view that SEL competencies are culturally adaptable and relevant beyond Western settings. In addition, incorporating gender as an analytical dimension enriches understanding of how responsibility character develops through the interaction of developmental and socio-cultural factors.

From a practical perspective, the results highlight the importance of implementing Social-Emotional Learning through a systematic and integrated whole-school approach rather than through isolated activities. Schools are encouraged to embed SEL competencies within daily instructional practices, classroom management, and assessment processes to support consistent character development. Gender-responsive strategies are also needed, as male students may benefit from more structured and activity-based learning experiences, while female students may be further supported through reflective and collaborative approaches. Integrating local cultural values, such as mutual cooperation, can enhance the contextual relevance and effectiveness of Social-Emotional Learning in elementary schools, particularly in rural settings (Suharyanto & Wiflihani, 2024).

E. Conclusion

This study provides empirical evidence that Social-Emotional Learning plays a significant role in strengthening the responsibility character of elementary school students within a non-Western educational context. The findings demonstrate that

Social-Emotional Learning is positively associated with students' responsibility character, indicating that the CASEL theoretical framework can be effectively applied beyond its Western origins. The integration of Social-Emotional Learning with the values embedded in the Pancasila Student Profile further enhances the local relevance of this study while contributing to the global discourse on culturally responsive character education.

In addition, this study reveals meaningful gender differences in responsibility character, with female students demonstrating higher levels of responsibility than male students, accompanied by a moderate effect size. These differences can be understood through the interaction of neurobiological development and gender socialization processes that shape self-regulation and responsible behavior during the elementary school years. This finding highlights the importance of considering gender as a critical dimension in the design and implementation of Social-Emotional Learning and character education programs.

From a policy perspective, the results of this study have important implications for elementary education in Indonesia, particularly within the framework of the Merdeka Curriculum. The positive association between Social-Emotional Learning and responsibility character supports the systematic integration of Social-Emotional Learning as a core pedagogical approach aligned with the Pancasila Student Profile, especially the dimension of independence. Policymakers are encouraged to strengthen policy guidelines, teacher professional development, and school-based support systems that embed Social-Emotional Learning within daily instructional practices, classroom management, and assessment processes. Such policy alignment can enhance the consistency and sustainability of character education implementation across elementary schools.

Despite these contributions, several limitations should be acknowledged. The use of an ex post facto design limits the strength of causal interpretation compared to experimental approaches. The sample was drawn from a single sub-district in Wonogiri Regency, which restricts the generalizability of the findings to broader educational contexts. Furthermore, reliance on self-report measures may introduce social desirability bias. Future research is therefore recommended to employ experimental or quasi-experimental designs with larger and more geographically diverse samples. Further exploration of potential mediator and moderator variables, including school climate, parental involvement, and teacher characteristics, would deepen understanding of the mechanisms through which Social-Emotional Learning influences students' responsibility character.

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