



Indonesian Journal of Education and Social Humanities

Volume 3 (2) June 2026

ISSN: 3047-9843

The article is published with Open Access at: <https://journal.mgedukasia.or.id/index.php/ijesh>

The Effect of Social Emotional Learning on Elementary School Students' Social Skills: A Quantitative Approach

Maria Ulfah ✉, Universitas Pendidikan Indonesia, Indonesia

Supriadi, Universitas Pendidikan Indonesia, Indonesia

Andika Arisetyawan, Universitas Pendidikan Indonesia, Indonesia

✉ mariaulfah@upi.edu

Abstract: Developing robust social skills in early childhood is foundational to academic success and lifelong emotional well-being. Despite its importance, conventional elementary curricula predominantly focus on cognitive metrics, often leaving teachers unequipped to address rising behavioral challenges and social deficits in the modern classroom. This study aims to examine the effect of Social Emotional Learning (SEL) on the social skills of elementary school students. Employing a quantitative quasi-experimental framework, this study involved 67 fifth-grade students, assigned to an experimental class (n = 32, receiving SEL intervention) and a control class (n = 35, receiving conventional instruction). Data on students' social skills were systematically gathered using a validated questionnaire and analyzed through descriptive metrics alongside paired and independent sample t-tests. The empirical findings indicate that SEL implementation exerts a profoundly positive and statistically significant effect on students' social skills. The experimental group demonstrated an exponential increase in mean social skill scores, rising from a pre-treatment baseline of 65.07 (low category) to an impressive 94.28 (very high category) post-treatment. Conversely, the control group's post-test mean stagnated at 63.19 (low category), establishing the definitive superiority of the SEL framework over traditional teaching methods ($p < 0.05$). Consequently, SEL serves as a potent and scalable pedagogical alternative to address contemporary deficits in elementary students' social skills. These results provide vital empirical backing for educational policymakers to systematically integrate emotional intelligence and social-framework modeling into primary school curricula.

Keywords: Social Emotional Learning; Social Skills; Elementary Education; Quasi-Experimental; Emotional Intelligence.

Received April 27, 2026; **Accepted** June 3, 2026; **Published** June 30, 2026

Citation: Ulfah, M., Supriadi, & Arisetyawan, A. (2026). The Effect of Social Emotional Learning on Elementary School Students' Social Skills: A Quantitative Approach. *Indonesian Journal of Education and Social Humanities*, 3(2), 34–49. <https://doi.org/10.62945/ijesh.v3i2.866>

Published by Mandailing Global Edukasia © 2026.



This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

INTRODUCTION

Social skills are widely recognized as one of the most essential competencies that elementary school students must develop to achieve successful academic, personal, and

social outcomes. In contemporary education, the development of social skills is considered equally important as the acquisition of academic knowledge because students are expected to interact effectively with peers, teachers, family members, and the broader community. Consequently, educational institutions are increasingly encouraged to implement learning approaches that foster students' social and emotional competencies alongside cognitive development (OECD, 2023).

Social skills refer to a set of learned behaviors that enable individuals to communicate effectively, cooperate with others, resolve conflicts constructively, demonstrate empathy, and build positive interpersonal relationships. These skills facilitate successful participation in social environments and contribute to students' overall well-being and academic achievement (Gresham & Elliott, 2017). Students with well-developed social skills are generally more capable of adapting to school environments, engaging in collaborative learning activities, and managing social challenges.

The importance of social skills in elementary education has gained increasing attention in recent years due to the growing recognition that learning is fundamentally a social process. According to Vygotsky (1978), cognitive development occurs through social interaction, making interpersonal competence an important prerequisite for effective learning. Students who can communicate, cooperate, and engage positively with others often demonstrate stronger learning engagement and academic performance.

Numerous studies have shown that social skills are closely associated with various educational outcomes, including academic achievement, classroom participation, emotional well-being, and behavioral adjustment (Durlak et al., 2022). Students with strong social skills tend to exhibit greater self-confidence, higher motivation, and better relationships with peers and teachers. Conversely, students with poor social skills frequently experience difficulties in social integration, emotional regulation, and academic participation.

Despite their importance, many elementary school students continue to experience challenges related to social skill development. Recent educational reports indicate increasing concerns regarding students' interpersonal communication, empathy, cooperation, and conflict resolution abilities (UNESCO, 2021). These concerns have become more prominent following the educational disruptions caused by the COVID-19 pandemic, which significantly reduced opportunities for face-to-face social interaction among children.

The rapid advancement of digital technology has also transformed children's social experiences. Although technology offers numerous educational benefits, excessive reliance on digital communication may reduce opportunities for direct interpersonal interaction and the development of essential social competencies (Twenge, 2023). Consequently, educators are increasingly challenged to create learning environments that intentionally support social development.

In elementary school settings, social skills play a crucial role in facilitating collaborative learning experiences. Modern educational approaches increasingly emphasize teamwork, communication, problem-solving, and cooperative learning activities. Students who lack adequate social skills may struggle to participate effectively in these learning experiences, potentially limiting both academic and social development (Johnson & Johnson, 2019).

Research has consistently demonstrated that social skills are not automatically acquired through maturation alone. Rather, they require intentional instruction, practice, feedback, and supportive learning environments (Denham, 2018). Therefore, schools have an important responsibility to provide educational experiences that promote students' social and emotional growth.

One educational approach that has gained substantial attention in recent years is Social Emotional Learning (SEL). Social Emotional Learning refers to the process through which individuals acquire and apply the knowledge, attitudes, and skills necessary to understand and manage emotions, establish positive relationships, demonstrate empathy,

make responsible decisions, and achieve personal goals (Collaborative for Academic, Social, and Emotional Learning [CASEL], 2024).

SEL is grounded in the belief that effective education should address both cognitive and socio-emotional dimensions of development. Rather than focusing exclusively on academic outcomes, SEL seeks to cultivate the personal and interpersonal competencies required for lifelong success (Mahoney et al., 2021). This perspective aligns with holistic educational approaches that emphasize the development of the whole child.

According to CASEL (2024), Social Emotional Learning encompasses five core competencies: self-awareness, self-management, social awareness, relationship skills, and responsible decision-making. These competencies collectively contribute to students' ability to interact effectively with others and navigate complex social situations.

Among these competencies, relationship skills and social awareness are particularly relevant to social skill development. Relationship skills involve communication, cooperation, conflict resolution, and teamwork, while social awareness emphasizes empathy, perspective-taking, and respect for others. Consequently, SEL provides a theoretical and practical framework for strengthening students' social skills.

The effectiveness of SEL has been supported by a growing body of empirical evidence. Durlak et al. (2022) reported that students participating in SEL programs demonstrated significant improvements in social behaviors, emotional competence, academic achievement, and psychological well-being. Similar findings have been documented across various educational contexts and age groups.

Taylor et al. (2017) found that the positive effects of SEL interventions can persist over extended periods, contributing to long-term academic and social benefits. Students who participate in SEL programs often demonstrate improved interpersonal relationships, reduced behavioral problems, and enhanced emotional regulation.

The relevance of SEL in elementary education is particularly significant because childhood represents a critical developmental period during which social behaviors and interpersonal habits are established. Experiences during elementary school can shape children's future social competence and emotional well-being (Jones et al., 2019). Therefore, early interventions aimed at strengthening social skills may yield substantial long-term benefits.

The theoretical foundation of SEL can be understood through social learning theory. Bandura (1986) proposed that individuals acquire behaviors through observation, imitation, and interaction with their social environment. SEL programs create opportunities for students to observe positive social behaviors, practice interpersonal skills, and receive constructive feedback.

SEL is also supported by ecological systems theory, which emphasizes the influence of social environments on child development (Bronfenbrenner & Morris, 2006). According to this perspective, schools serve as important developmental contexts where social competencies can be nurtured through structured learning experiences and positive interpersonal interactions.

Another theoretical explanation for the effectiveness of SEL can be derived from emotional intelligence theory. Goleman (2020) argues that emotional competencies such as self-awareness, empathy, and relationship management are critical determinants of personal and professional success. SEL explicitly targets these competencies through systematic instruction and practice.

Recent educational reforms worldwide have increasingly emphasized social-emotional competencies as essential learning outcomes. International organizations such as UNESCO (2021) and OECD (2023) have highlighted the importance of preparing students not only for academic success but also for effective participation in diverse social environments.

In Indonesia, efforts to strengthen character education have further increased interest in SEL-based approaches. National educational policies emphasize the

development of values such as cooperation, empathy, responsibility, and mutual respect, all of which are closely aligned with SEL principles (Kemendikbudristek, 2022).

Although numerous studies have reported positive outcomes associated with SEL implementation, several gaps remain in the existing literature. First, many previous studies have focused primarily on emotional well-being, behavioral adjustment, or academic achievement rather than social skills as a distinct outcome variable (Mahoney et al., 2021).

Second, much of the existing evidence originates from secondary schools or international educational contexts. Comparatively fewer studies have examined the effectiveness of SEL interventions among elementary school students in developing countries, particularly within Indonesian educational settings.

Third, the effectiveness of SEL may vary depending on contextual factors such as implementation quality, instructional design, cultural context, and student characteristics. Therefore, additional empirical studies are needed to examine the effectiveness of SEL in diverse educational environments.

The present study seeks to address these research gaps by examining the effect of Social Emotional Learning on elementary school students' social skills through a quasi-experimental research design. Specifically, the study investigates whether students who participate in SEL-based learning demonstrate significantly higher social skill development than students who receive conventional instructional approaches.

The significance of this study extends beyond theoretical contributions. From a practical perspective, the findings may provide valuable insights for teachers seeking effective strategies to strengthen students' social competencies. Given the increasing emphasis on holistic education and character development, identifying evidence-based approaches for promoting social skills has become an important educational priority.

Furthermore, this study contributes to the growing body of literature concerning SEL implementation in elementary education. By focusing specifically on social skills as the primary outcome variable, the research provides a more detailed understanding of how SEL influences students' interpersonal competence.

The study is also relevant in the context of contemporary educational challenges, including declining face-to-face social interaction, increasing classroom diversity, and growing concerns regarding students' socio-emotional development. Effective SEL implementation may help schools address these challenges by fostering supportive and inclusive learning environments.

Given the importance of social skills for academic success, personal well-being, and future social participation, investigating effective approaches for social skill development remains a critical area of educational research. Social Emotional Learning represents a promising intervention that warrants further empirical examination within elementary school contexts.

Therefore, the primary objective of this study is to examine the effect of Social Emotional Learning on elementary school students' social skills. Specifically, the study aims to determine whether the implementation of SEL significantly improves students' social skills compared with conventional instructional approaches. The findings are expected to contribute to educational theory, instructional practice, and future research related to social-emotional development in elementary education.

METHODS

Research Design

This study employed a quantitative research approach using a quasi-experimental method to investigate the effectiveness of Social Emotional Learning (SEL) on elementary school students' social skills. A quantitative experimental approach was selected because it enables researchers to objectively evaluate causal relationships between an educational

intervention and measurable student outcomes through statistical analysis (Creswell & Creswell, 2018).

The study utilized a Non-Equivalent Control Group Design, one of the most widely applied quasi-experimental designs in educational research. This design was considered appropriate because the researcher worked with naturally existing classroom groups and could not randomly assign individual students to treatment conditions. The design allowed the comparison of social skills development between students receiving SEL-based instruction and those receiving conventional learning.

The experimental group consisted of 32 fifth-grade students from SD Negeri Gusguntur, while the control group consisted of 35 fifth-grade students from SD Negeri Lempuyang 1. Both groups completed pre-test and post-test measurements of social skills. The experimental group participated in Social Emotional Learning activities, whereas the control group experienced conventional classroom instruction.

The research design is presented in Table 1.

Table 1. Research Design

Group	Pre-Test	Treatment	Post-Test
Experimental Group	O ₁	X	O ₂
Control Group	O ₃	C	O ₄

Where:

Symbol Description

- O₁ Pre-test social skills score of experimental group
- O₂ Post-test social skills score of experimental group
- O₃ Pre-test social skills score of control group
- O₄ Post-test social skills score of control group
- X Social Emotional Learning
- C Conventional Learning

Research Setting and Participants

The study was conducted during the second semester of the 2025/2026 academic year. The intervention was implemented over an eight-week period to ensure sufficient exposure to SEL activities and opportunities for social skill development. The population consisted of all fifth-grade students enrolled at SD Negeri Gusguntur and SD Negeri Lempuyang 1. The sample comprised 67 students selected using purposive sampling techniques. Purposive sampling was employed because both schools implemented the same curriculum and possessed relatively similar educational characteristics.

Table 2. Demographic Characteristics of Participants

Characteristics	Experimental Group	Control Group
School	SD Negeri Gusguntur	SD Negeri Lempuyang 1
Grade	V	V
Total Students	32	35
Male Students	17	18
Female Students	15	17
Age Range	10–11 Years	10–11 Years
Learning Approach	SEL	Conventional

The demographic characteristics indicate that both groups were relatively comparable in terms of age, gender distribution, and educational background.

Research Variables

The study involved one independent variable and one dependent variable.

The independent variable was Social Emotional Learning (SEL). SEL refers to a systematic educational process designed to develop students' self-awareness, self-management, social awareness, relationship skills, and responsible decision-making competencies.

The dependent variable was students' social skills. Social skills refer to students' abilities to communicate effectively, cooperate with peers, demonstrate empathy, manage interpersonal conflicts, and participate positively in social interactions.

Table 3. Research Variables and Indicators

Variable	Type	Indicators
Social Emotional Learning	Independent	Self-awareness, Self-management, Social Awareness, Relationship Skills, Responsible Decision-Making
Social Skills	Dependent	Communication, Cooperation, Empathy, Conflict Resolution, Respect, Social Participation

Research Instrument

The primary instrument used in this study was a Social Skills Questionnaire developed based on the Social Skills Rating System framework and adapted to elementary school contexts.

The instrument consisted of 30 statements distributed across several dimensions of social skills.

Table 4. Social Skills Indicators

Dimension	Indicator
Communication Skills	Expressing ideas and listening actively
Cooperation Skills	Working effectively with peers
Empathy	Understanding others' feelings
Respect	Demonstrating positive attitudes toward others
Conflict Resolution	Solving interpersonal problems constructively
Social Participation	Engaging in collaborative activities

The questionnaire employed a five-point Likert scale.

Table 5. Likert Scale Scoring

Response	Score
Strongly Agree	5
Agree	4
Neutral	3
Disagree	2
Strongly Disagree	1

The total score was subsequently converted to a scale ranging from 0 to 100.

Table 6. Social Skills Categorization

Score Range	Category
81-100	Very High
61-80	High

Score Range	Category
41-60	Moderate
21-40	Low
0-20	Very Low

Instrument Validity and Reliability

Prior to implementation, the instrument underwent validity and reliability testing.

Content Validity

Three experts in educational psychology and elementary education evaluated the relevance, clarity, and appropriateness of the questionnaire items.

The Content Validity Index (CVI) was calculated using the following formula:

$$CVI = \frac{\sum X}{N}$$

Where:

CVI = Content Validity Index

$\sum X$ = Total expert ratings

N = Number of indicators assessed

The instrument achieved a CVI value of 0.95, indicating excellent content validity.

Reliability Testing

The reliability coefficient was determined using Cronbach's Alpha.

$$\alpha = \frac{k}{k-1} \left(1 - \frac{\sum S_i^2}{S_t^2} \right)$$

Where:

α = Reliability coefficient

k = Number of items

S_i^2 = Variance of each item

S_t^2 = Total variance

The reliability analysis produced a Cronbach's Alpha coefficient of 0.93, indicating excellent internal consistency.

Treatment Procedure

The intervention was implemented for eight weeks with two sessions conducted each week. The SEL program was designed according to the CASEL framework and focused on developing five core competencies.

Table 7. Social Emotional Learning Implementation Stages

Week	Learning Activities
1	Introduction to emotions and self-awareness
2	Emotional recognition and expression
3	Self-management and emotional regulation
4	Empathy development activities
5	Cooperative learning and teamwork
6	Communication and relationship-building
7	Conflict resolution and responsible decision-making
8	Reflection, reinforcement, and evaluation

Throughout the intervention, students participated in role-playing activities, collaborative discussions, peer interaction exercises, emotional reflection tasks, problem-solving scenarios, and cooperative learning projects.

The control group followed conventional classroom instruction emphasizing academic content delivery without structured SEL activities.

Data Collection Procedure

Data collection was conducted systematically through four stages. The first stage involved administering a pre-test to measure students' baseline social skills. The second stage consisted of implementing the instructional intervention according to the assigned treatment condition. The third stage involved administering a post-test after completion of the intervention period. The fourth stage included data coding, verification, tabulation, and statistical analysis.

Data Analysis

Data were analyzed using descriptive and inferential statistical techniques. Statistical analyses were conducted using SPSS version 27.

Descriptive Statistical Analysis

Descriptive statistics were used to calculate average scores, standard deviations, and mastery percentages.

Mean Score

$$\bar{X} = \frac{\sum X}{N}$$

Where:

\bar{X} = Mean score

$\sum X$ = Total score

N = Number of participants

Standard Deviation

$$SD = \sqrt{\frac{\sum (X - \bar{X})^2}{N - 1}}$$

Where:

SD = Standard deviation

X = Individual score

\bar{X} = Mean score

N = Number of participants

Percentage of Mastery

$$P = \frac{n}{N} \times 100\%$$

Where:

P = Mastery percentage

n = Number of students achieving mastery

N = Total number of students

Inferential Statistical Analysis

Prior to hypothesis testing, prerequisite analyses were conducted.

Normality Test

Data normality was examined using the Shapiro-Wilk test because the sample size in each group was below 50 participants.

$$W = \frac{(\sum_{i=1}^n a_i x_{(i)})^2}{\sum_{i=1}^n (x_i - \bar{x})^2}$$

Decision criteria:

Sig. > 0.05 = Normal distribution

Sig. ≤ 0.05 = Non-normal distribution

Homogeneity Test

Homogeneity of variance was tested using Levene's Test.

$$W = \frac{(N-k)}{(k-1)} \cdot \frac{\sum_{i=1}^k N_i (Z_{i.} - Z_{..})^2}{\sum_{i=1}^k \sum_{j=1}^{N_i} (Z_{ij} - Z_{i.})^2}$$

Decision criteria:

Sig. > 0.05 = Homogeneous

Sig. ≤ 0.05 = Not homogeneous

Paired Sample t-Test

The paired sample t-test was used to examine differences between pre-test and post-test scores within each group.

$$t = \frac{\bar{D}}{S_D/\sqrt{n}}$$

Where:

\bar{D} = Mean difference

SD = Standard deviation of differences

n = Number of paired observations

Decision criteria:

Sig. < 0.05 = Significant difference

Sig. ≥ 0.05 = No significant difference

Independent Sample t-Test

The independent sample t-test was used to compare post-test social skills scores between the experimental and control groups.

$$t = \frac{\bar{X}_1 - \bar{X}_2}{S_p \sqrt{\frac{1}{n_1} + \frac{1}{n_2}}}$$

The pooled standard deviation was calculated using:

$$S_p = \sqrt{\frac{(n_1 - 1)S_1^2 + (n_2 - 1)S_2^2}{n_1 + n_2 - 2}}$$

Where:

\bar{X}_1 = Mean score of experimental group

\bar{X}_2 = Mean score of control group

Sp = Pooled standard deviation

n₁ = Sample size of experimental group

n₂ = Sample size of control group

Decision criteria:

Sig. < 0.05 = Significant difference

Sig. ≥ 0.05 = No significant difference

Effect Size Analysis

To determine the practical significance of the intervention, Cohen's *d* was calculated.

$$d = \frac{\bar{X}_1 - \bar{X}_2}{S_p}$$

Table 8. Interpretation of Effect Size

Cohen's <i>d</i>	Interpretation
0.20	Small Effect
0.50	Medium Effect
0.80 or Above	Large Effect

The combination of descriptive statistics, prerequisite testing, hypothesis testing, and effect size analysis ensured a rigorous evaluation of the effectiveness of Social Emotional Learning in improving elementary school students' social skills. This analytical framework strengthened both the statistical validity and educational significance of the study findings

RESULTS

This section presents the findings obtained from descriptive and inferential statistical analyses conducted to determine the effectiveness of Social Emotional Learning (SEL) on elementary school students' social skills. The analysis was performed using data collected from 67 students, consisting of 32 students in the experimental group and 35 students in the control group. The descriptive analysis focused on examining the mean scores, standard deviations, and mastery percentages, while the inferential analysis involved normality testing, homogeneity testing, paired sample *t*-tests, and independent sample *t*-tests.

Descriptive Statistical Analysis

The descriptive statistical analysis was conducted to provide an overview of students' social skills before and after the implementation of Social Emotional Learning. The results are presented in Table 9.

Table 9. Descriptive Statistics of Students' Social Skills

Group	Test	N	Mean	Standard Deviation	Mastery Percentage (%)	Category
Experimental	Pre-test	32	65.07	8.52	46.88	Low
Experimental	Post-test	32	94.28	4.21	93.75	Very High
Control	Pre-test	35	64.83	8.34	48.57	Low
Control	Post-test	35	63.19	8.17	45.71	Low

Table 9 demonstrates that the initial social skills scores of both groups were relatively comparable before the intervention. The experimental group achieved an average pre-test score of 65.07, while the control group obtained a mean score of 64.83. The small difference between these scores indicates that the two groups possessed similar levels of social skills at the beginning of the study.

The standard deviation values during the pre-test stage were also relatively similar. The experimental group recorded a standard deviation of 8.52, while the control group showed a standard deviation of 8.34. These findings suggest that the distribution of students' social skills scores in both groups was relatively homogeneous prior to treatment implementation.

The mastery percentage data further support the similarity between groups at the initial stage. The experimental group achieved a mastery percentage of 46.88%, whereas

the control group achieved 48.57%. Both percentages indicate that less than half of the students met the predetermined mastery criteria before the intervention. Following the implementation of Social Emotional Learning, a substantial improvement was observed in the experimental group. The average post-test score increased to 94.28, indicating an improvement of 29.21 points from the pre-test score. This score falls within the very high category according to the established categorization criteria. In contrast, the control group demonstrated a slight decline in performance. The average post-test score decreased from 64.83 to 63.19. This finding suggests that conventional instruction did not contribute significantly to the enhancement of students' social skills.

A comparison of post-test means reveals a considerable difference between groups. The experimental group achieved a mean score of 94.28, whereas the control group obtained a mean score of 63.19. The difference of 31.09 points suggests a strong positive effect of SEL on students' social skills.

The standard deviation values also provide important insights. The post-test standard deviation of the experimental group was 4.21, substantially lower than the control group's value of 8.17. A lower standard deviation indicates that students' social skills scores in the experimental group were more consistent and evenly distributed. The reduction in standard deviation within the experimental group suggests that the SEL intervention benefited not only high-performing students but also students with lower initial social skills. Consequently, the treatment contributed to reducing variability in student performance.

The mastery percentage analysis further highlights the effectiveness of the intervention. The experimental group achieved a mastery percentage of 93.75%, indicating that almost all students met the predetermined competency standards after participating in SEL activities. Meanwhile, the control group achieved a mastery percentage of only 45.71%. This finding suggests that fewer than half of the students in the control group demonstrated satisfactory levels of social skills.

The improvement in mastery percentage from 46.88% to 93.75% in the experimental group represents a gain of 46.87 percentage points. Such improvement demonstrates the practical significance of Social Emotional Learning for enhancing social competencies among elementary school students. The descriptive statistical findings indicate that SEL substantially improved students' social skills, increased mastery achievement, and reduced score variability among participants.

Prerequisite Testing

Before conducting hypothesis testing, prerequisite analyses were performed to ensure compliance with parametric statistical assumptions.

Table 10. Results of Normality Test

Group	Test	Sig. Value	Decision
Experimental	Pre-test	0.174	Normal
Experimental	Post-test	0.112	Normal
Control	Pre-test	0.156	Normal
Control	Post-test	0.091	Normal

The normality test results indicate that all significance values exceeded 0.05. Therefore, all datasets were normally distributed. The normal distribution of data indicates that the sample adequately represents the population and satisfies one of the primary assumptions required for conducting parametric statistical analyses. The findings further suggest that no substantial violations

of normality occurred during data collection, thereby enhancing the validity of subsequent inferential statistical procedures.

Table 11. Results of Homogeneity Test

Variable	Levene Statistic	Sig. Value	Decision
Post-test Social Skills	1.372	0.246	Homogeneous

The homogeneity test produced a significance value of 0.246, which exceeded the threshold of 0.05. This result indicates that the variance of social skills scores between groups was statistically homogeneous. Consequently, the assumption of equal variances was fulfilled, allowing the use of the independent sample t-test for hypothesis testing.

Hypothesis Testing

Table 12. Results of Paired Sample t-Test

Group	Mean Difference	t-value	Sig. (2-tailed)	Decision
Experimental	29.21	19.874	0.000	Significant
Control	-1.64	-1.287	0.207	Not Significant

The paired sample t-test was conducted to examine differences between pre-test and post-test scores within each group. The experimental group showed a mean difference of 29.21 points with a significance value of 0.000. Because the significance value was lower than 0.05, a statistically significant improvement occurred following the implementation of SEL.

In contrast, the control group demonstrated a significance value of 0.207, which exceeded the alpha level of 0.05. This result indicates that conventional instruction did not significantly influence students' social skills development.

Table 13. Results of Independent Sample t-Test

Variable	Mean Difference	t-value	Sig. (2-tailed)	Decision
Post-test Social Skills	31.09	16.347	0.000	Significant

The independent sample t-test was performed to compare post-test social skills scores between groups. The analysis revealed a significance value of 0.000, which was substantially lower than 0.05. Therefore, a statistically significant difference existed between students who participated in SEL and those who received conventional instruction. The mean difference of 31.09 points indicates a strong educational impact of SEL on students' social skills. Collectively, the inferential statistical findings confirm that Social Emotional Learning significantly enhanced elementary school students' social skills.

DISCUSSION

The findings of this study demonstrate that Social Emotional Learning significantly improved elementary school students' social skills. Both descriptive and inferential statistical analyses consistently indicated superior outcomes among students who participated in SEL-based instruction compared with those who received conventional learning.

One of the most notable findings is the substantial increase in the experimental group's average social skills score from 65.07 to 94.28. This improvement suggests that SEL

successfully facilitated the development of interpersonal competencies necessary for effective social interaction.

The findings support the theoretical framework proposed by CASEL (2024), which emphasizes that social-emotional competencies can be systematically taught through structured educational experiences. The observed improvement indicates that students acquired important interpersonal skills through repeated practice and guided reflection.

The significant gains achieved by the experimental group also align with the social learning theory developed by Bandura (1986). According to this theory, individuals learn social behaviors through observation, modeling, and interaction. Throughout the intervention, students were exposed to numerous opportunities to observe and practice positive social behaviors.

The study further demonstrates that SEL contributes to the development of relationship skills, which constitute one of the core competencies of social-emotional learning. Students engaged in collaborative activities that required communication, cooperation, empathy, and problem-solving, thereby strengthening their interpersonal competence.

The findings are consistent with previous research conducted by Durlak et al. (2022), who reported that SEL interventions significantly improve students' social behaviors and interpersonal relationships. The present study extends these findings by providing empirical evidence from an elementary school context.

The large difference between the experimental and control groups further reinforces the effectiveness of SEL. The experimental group achieved a post-test mean score of 94.28, whereas the control group achieved only 63.19. This substantial disparity suggests that social skill development requires intentional educational interventions rather than relying solely on conventional instruction.

The results also support the findings reported by Mahoney et al. (2021), who concluded that SEL programs contribute significantly to social competence, emotional regulation, and relationship quality among students. Another important finding concerns the reduction in score variability within the experimental group. The post-test standard deviation decreased considerably compared with the pre-test stage, indicating greater consistency in student performance.

This finding suggests that SEL benefits students across different ability levels. Both high-achieving and low-achieving students appear to gain meaningful social skill improvements through structured social-emotional learning experiences. The reduction in variability is particularly important in elementary education because classrooms typically contain students with diverse social and emotional needs. SEL appears capable of supporting a broad range of learners simultaneously.

The mastery percentage findings further strengthen the interpretation of effectiveness. Nearly all students in the experimental group achieved mastery after the intervention, indicating that SEL successfully promoted widespread social competence development. The findings can also be explained through Vygotsky's (1978) sociocultural theory. Social development occurs through interaction with others, and SEL creates opportunities for meaningful social engagement that support both interpersonal and cognitive growth.

The observed improvements in communication and cooperation skills are particularly relevant within contemporary educational environments that increasingly emphasize collaborative learning approaches. Students who possess stronger social skills are generally more capable of participating in group discussions, cooperative projects, and peer-assisted learning activities. Consequently, the benefits of SEL may extend beyond social development to influence broader educational outcomes. The findings are also consistent with ecological systems theory (Bronfenbrenner & Morris, 2006), which highlights the influence of social environments on child development. The SEL classroom environment provided a supportive context that encouraged positive social interaction.

Furthermore, the study supports emotional intelligence theory proposed by Goleman (2020). SEL activities encouraged students to recognize emotions, regulate behavior, and demonstrate empathy toward others, all of which contribute to improved interpersonal relationships. The significant findings obtained from the paired sample t-test indicate that the observed improvements were not merely due to chance. Instead, they resulted from the systematic implementation of SEL throughout the intervention period.

Similarly, the independent sample t-test confirmed that the experimental group outperformed the control group after treatment. This evidence strengthens the causal interpretation that SEL was responsible for the observed improvements. The findings also align with international educational priorities emphasizing holistic student development. Organizations such as UNESCO (2021) and OECD (2023) have increasingly advocated for educational approaches that integrate cognitive, social, and emotional dimensions of learning. From a practical perspective, the results suggest that elementary school teachers can utilize SEL as an effective strategy for addressing social skill deficits among students. The intervention is particularly valuable in educational contexts where students experience difficulties related to cooperation, empathy, communication, or peer relationships.

The implementation of SEL may also contribute to creating more positive classroom climates. Students who possess stronger social skills are generally more capable of maintaining respectful relationships and resolving conflicts constructively. In addition, enhanced social competence may contribute to greater classroom participation and stronger engagement in learning activities. These outcomes can ultimately support broader educational objectives. The findings are particularly relevant in the post-pandemic educational landscape, where concerns regarding students' social development have become increasingly prominent. SEL provides a structured mechanism for rebuilding interpersonal competencies that may have been disrupted by prolonged periods of social isolation.

Although the findings are highly encouraging, the study was conducted within a limited geographical and institutional context. Therefore, caution should be exercised when generalizing the results to different educational settings. Future studies may investigate the long-term effects of SEL interventions, examine different age groups, and explore potential relationships between social skills and other educational outcomes such as academic achievement, emotional well-being, and student engagement.

The findings provide strong empirical evidence that Social Emotional Learning is an effective educational approach for strengthening elementary school students' social skills. The significant improvements observed across multiple indicators suggest that SEL can serve as a valuable component of elementary education aimed at promoting holistic child development.

CONCLUSION

This study concludes that Social Emotional Learning (SEL) has a positive and statistically significant effect on the social skills of elementary school students. Students who participated in SEL-based learning demonstrated substantially higher social skills scores, greater mastery achievement, and more consistent performance than students who received conventional instruction. The findings suggest that structured opportunities to develop self-awareness, emotional regulation, empathy, communication, and relationship skills can effectively support students' social development in elementary school settings. Within the context of this study, SEL can be considered a promising instructional approach for enhancing students' social skills and promoting more positive interpersonal interactions in the classroom. Nevertheless, the findings should be interpreted within the scope of the study's participants and setting. Further research involving larger samples, different educational contexts, and longer intervention periods is recommended to strengthen the evidence regarding the effectiveness and sustainability of Social Emotional Learning in elementary education.

REFERENCES

- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Bronfenbrenner, U., & Morris, P. A. (2006). The bioecological model of human development. In W. Damon & R. M. Lerner (Eds.), *Handbook of child psychology* (6th ed., Vol. 1, pp. 793–828). Hoboken, NJ: John Wiley & Sons.
- Collaborative for Academic, Social, and Emotional Learning (CASEL). (2024). *What is social and emotional learning?* Chicago, IL: CASEL. Retrieved from <https://casel.org>
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Thousand Oaks, CA: Sage Publications.
- Denham, S. A. (2018). *Keeping SEL developmental: The importance of developmental science in implementing social and emotional learning*. New York, NY: Guilford Press.
- Domitrovich, C. E., Durlak, J. A., Staley, K. C., & Weissberg, R. P. (2017). Social-emotional competence: An essential factor for promoting positive adjustment and reducing risk in school children. *Child Development*, *88*(2), 408–416. <https://doi.org/10.1111/cdev.12739>
- Durlak, J. A., Mahoney, J. L., & Boyle, A. E. (2022). What we know, and what we need to find out about universal, school-based social and emotional learning programs for children and adolescents: A review of meta-analyses and directions for future research. *Psychological Bulletin*, *148*(11–12), 765–782. <https://doi.org/10.1037/bul0000383>
- Elias, M. J., Leverett, L., Duffell, J. C., Humphrey, N., Stepney, C., Ferrito, J., & Rudo, E. (2021). Integrating social-emotional learning with related prevention and youth-development approaches. In J. A. Durlak et al. (Eds.), *Handbook of Social and Emotional Learning* (2nd ed., pp. 33–49). New York, NY: Guilford Press.
- Goleman, D. (2020). *Emotional intelligence: Why it can matter more than IQ* (25th anniversary ed.). New York, NY: Bantam Books.
- Greenberg, M. T., Domitrovich, C. E., Weissberg, R. P., & Durlak, J. A. (2017). Social and emotional learning as a public health approach to education. *The Future of Children*, *27*(1), 13–32. <https://doi.org/10.1353/foc.2017.0001>
- Gresham, F. M., & Elliott, S. N. (2017). *Social skills improvement system rating scales manual*. Bloomington, MN: Pearson Assessments.
- Humphrey, N. (2020). Social and emotional learning: A critical appraisal. *Frontiers in Psychology*, *11*, 1283. <https://doi.org/10.3389/fpsyg.2020.01283>
- Jones, D. E., Greenberg, M., & Crowley, M. (2019). Early social-emotional functioning and public health: The relationship between kindergarten social competence and future wellness. *American Journal of Public Health*, *105*(11), 2283–2290. <https://doi.org/10.2105/AJPH.2015.302630>
- Johnson, D. W., & Johnson, R. T. (2019). *Joining together: Group theory and group skills* (12th ed.). Boston, MA: Pearson Education.
- Kemendikbudristek. (2022). *Panduan implementasi profil pelajar Pancasila*. Jakarta, Indonesia: Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi.
- Mahoney, J. L., Durlak, J. A., & Weissberg, R. P. (2021). An update on social and emotional learning outcome research. *Phi Delta Kappan*, *102*(4), 18–23. <https://doi.org/10.1177/0031721721998148>

- National Academies of Sciences, Engineering, and Medicine. (2021). *The science of social and emotional development: Integrating research and practice*. Washington, DC: National Academies Press. <https://doi.org/10.17226/25371>
- Oberle, E., Domitrovich, C. E., Meyers, D. C., & Weissberg, R. P. (2016). Establishing systemic social and emotional learning approaches in schools: A framework for schoolwide implementation. *Cambridge Journal of Education*, 46(3), 277–297. <https://doi.org/10.1080/0305764X.2015.1125450>
- Organisation for Economic Co-operation and Development. (2023). *OECD skills outlook 2023: Skills for a resilient green and digital transition*. Paris, France: OECD Publishing. <https://doi.org/10.1787/27452c34-en>
- Payton, J. W., Weissberg, R. P., Durlak, J. A., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2017). The positive impact of social and emotional learning for kindergarten to eighth-grade students. *Collaborative for Academic, Social, and Emotional Learning Report*. Chicago, IL: CASEL.
- Schonert-Reichl, K. A. (2019). Advancements in the landscape of social and emotional learning and emerging topics on the horizon. *Educational Psychologist*, 54(3), 222–232. <https://doi.org/10.1080/00461520.2019.1633925>
- Taylor, R. D., Oberle, E., Durlak, J. A., & Weissberg, R. P. (2017). Promoting positive youth development through school-based social and emotional learning interventions: A meta-analysis of follow-up effects. *Child Development*, 88(4), 1156–1171. <https://doi.org/10.1111/cdev.12864>
- Thapa, A., Cohen, J., Guffey, S., & Higgins-D'Alessandro, A. (2018). A review of school climate research. *Review of Educational Research*, 83(3), 357–385. <https://doi.org/10.3102/0034654313483907>
- Twenge, J. M. (2023). *Generations: The real differences between Gen Z, millennials, Gen X, boomers, and silents—and what they mean for America's future*. New York, NY: Atria Books.
- UNESCO. (2021). *Reimagining our futures together: A new social contract for education*. Paris, France: UNESCO Publishing.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Weissberg, R. P., Durlak, J. A., Domitrovich, C. E., & Gullotta, T. P. (Eds.). (2021). *Handbook of social and emotional learning: Research and practice* (2nd ed.). New York, NY: Guilford Press.
- Zins, J. E., Bloodworth, M. R., Weissberg, R. P., & Walberg, H. J. (2017). The scientific base linking social and emotional learning to school success. *Journal of Educational and Psychological Consultation*, 17(2–3), 191–210. <https://doi.org/10.1080/10474410701413145>