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Descriptive Study on the Relationship between Social Interaction, Motivation, and Learning Skills of Elementary School Students

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Abstracts

The success of elementary education is determined not only by cognitive instruction but also by the development of students' social interaction, learning motivation, and learning skills. These three aspects are interrelated and play a vital role in supporting effective learning behavior. This study aims to describe the relationship between social interaction, learning motivation, and learning skills among elementary school students. A quantitative descriptive method was applied, involving a randomly selected group of 27 students. Data were collected through a validated questionnaire and analyzed with statistical software using descriptive tests, normality tests, and correlation tests. The findings show that all variables fall into the high category with normally distributed data. The study also reveals a strong and significant positive relationship between social interaction, learning motivation, and learning skills. These results highlight that students with stronger social engagement and higher learning motivation tend to demonstrate better learning skills. This study emphasizes the importance of creating a learning environment that fosters social development and enhances motivation in order to optimize both academic and personal growth at the elementary education level.

Keywords: *Social Interaction; Learning Motivation; Learning Skills; Elementary Education*

1. Introduction

Elementary education plays an important role in shaping the foundation of students' character and learning abilities. At this stage, students are expected not only to master cognitive aspects but also to develop social skills and a positive attitude toward learning (Kurniawati et al., 2023). In the learning process, social interaction among students and between students and teachers is one of the key factors that influence the classroom atmosphere, learning comfort, and the effectiveness of delivering material (Kılıçoğlu, 2019). Good social interaction can encourage the formation of harmonious relationships, mutual respect, and constructive cooperation within the school environment (Ndiung & Menggo, 2024).

Learning motivation is also a crucial aspect in determining students' academic success. Students with high motivation tend to be more active, diligent, and committed to the learning process (Abe & Hayashi, 2023). This motivation may stem from internal factors, such as curiosity and personal goals, as well as external factors, such as parental support and a supportive learning environment (Lestari & Lestari, 2022) (Linh, 2024) (Hardiyanto & Salsabila, 2023). Healthy sosial interaction can contribute to enhancing

this motivation, as students feel accepted and supported within their learning community (Apriansyah et al., 2024).

Low quality of social interaction, motivation, and learning skills among students can significantly affect both the learning process and its outcomes. Students who are unable to build healthy social relationships tend to withdraw from classroom activities and demonstrate low levels of participation (Suherman & Vidákovich, 2024). Similarly, weak learning motivation hinders academic achievement and fosters a passive learning attitude. Underdeveloped learning skills also make it difficult for students to adapt to the increasing demands of the curriculum (Chengjun & Mustakim, 2022) (Putra & Nastiti, 2024) (Sihotang et al., 2024). If left unaddressed, these conditions may widen the gap in the quality of primary education and hinder the early formation of strong learning character. In elementary school settings, many students still face challenges in building positive social interactions, particularly in group work and interpersonal communication (Kulakow et al., 2024). This situation often results in low learning motivation, as students may feel insecure or unsupported by their social environment (Yulianti et al., 2023). Another emerging challenge is the lack of independent learning skills, such as low initiative, high dependence on teachers, and difficulty managing time and school tasks. Teachers often struggle to identify and address these issues due to limited time and the use of generalized teaching approaches (Matsuri et al., 2023).

Previous studies have generally focused on a single aspect, such as the effect of learning motivation on academic achievement or the role of social interaction in student behavior. However, there are still limited studies that specifically explore the interconnectedness of social interaction, learning motivation, and learning skills in an integrated manner within the context of elementary education. In fact, these three aspects are closely related in shaping students' learning patterns. This gap presents an important opportunity for further research to gain a more comprehensive understanding of learning dynamics at the elementary school level.

Research on the relationship between social interaction and learning motivation has been widely conducted within the context of elementary education. A study by (Dilia & Irmawita, 2023) stated that healthy social interaction can enhance students' self-confidence and enthusiasm for learning. (Supriatna et al., 2024) found that students who are able to build positive social relationships with their classmates show higher levels of learning motivation compared to those who are less socially engaged. Additionally, (Yulianti et al., 2023) discovered that a collaborative classroom atmosphere can foster students' psychological comfort, which in turn increases their interest and participation in learning. These findings highlight the importance of establishing a positive social environment as a foundation for fostering learning motivation.

Several studies have also highlighted the role of learning motivation in shaping students' learning skills. According to Schunk, (Islam & Chakrabarty, 2019), intrinsic motivation encourages students to develop more effective learning strategies, such as time management and active use of learning resources. Research by (Khumraksa & Burachat, 2022) revealed that highly motivated students tend to possess better learning skills, particularly in planning, monitoring, and evaluating their own learning processes. Meanwhile, a study by (Kim et al., 2023) emphasized the importance of an integrated approach that combines the strengthening of social interaction and

motivation to improve learning skills. These three variables influence one another and collectively form a holistic learning ecosystem at the elementary school level.

The selection of the title *A Descriptive Study on the Relationship between Social Interaction, Motivation, and Learning Skills of Elementary School Students* is based on the need for a comprehensive understanding of the interrelated factors that influence the learning process at the elementary level. This title is worth exploring because it integrates three essential aspects that simultaneously form the foundation of students' academic success, yet are often studied separately. The purpose of this study is to describe and analyze the relationship between the quality of students' social interaction, their level of learning motivation, and their learning skills within the context of elementary education. As a proposed solution, the findings of this research are expected to contribute to the development of more effective and holistic instructional strategies by considering both the social and psychological dimensions of students as integral components in improving the quality of primary education.

2. Research methods

This study employs a quantitative research design with a descriptive correlational approach (He et al., 2022). The aim of the research is to describe and analyze the relationship between social interaction, learning motivation, and learning skills among elementary school students. A quantitative design was chosen because the data collected were numerical and analyzed statistically to determine the relationships between variables in an objective and systematic manner (Damopolii et al., 2021). The research was conducted at a public elementary school over the course of one month. The subjects of the study were 27 fifth-grade elementary school students. The selection of participants was carried out using simple random sampling to ensure the representation of students from diverse academic and social backgrounds. This sampling technique was intended to provide relevant generalizations regarding the relationships among the three variables within the context of elementary education (Jusuf et al., 2024). All respondents were informed about the purpose of the study, and their participation was entirely voluntary.

This study consists of two main variables, namely the independent variables (X) and the dependent variable (Y). The independent variables (X) include two components: social interaction (X_1) and learning motivation (X_2), which are assumed to influence the development of students' learning skills. Social interaction refers to students' ability to build interpersonal relationships, collaborate, and communicate effectively within the school environment. Meanwhile, learning motivation represents both internal and external drives that encourage students to engage in the learning process, including enthusiasm, persistence, and goal orientation. The dependent variable (Y) in this study is learning skills, which encompass students' ability to manage time, understand academic content, complete tasks independently, and apply effective learning strategies. The relationships between the independent variables and the dependent variable were analyzed to determine the extent to which social interaction and learning motivation collectively contribute to the development of learning skills among elementary school students.

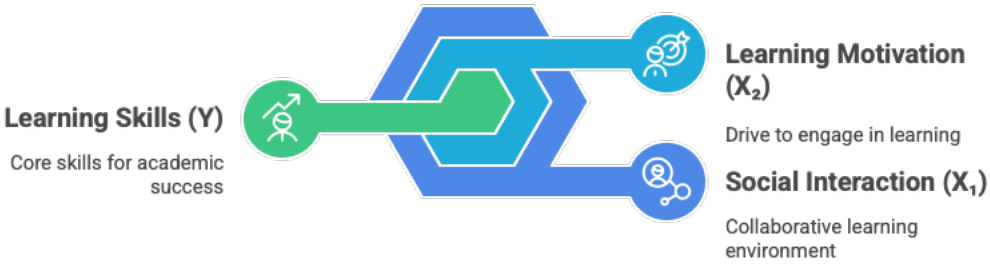

Figure 1. Factors Influencing Student Success

Data collection in this study was carried out using a questionnaire instrument based on a previously constructed and validated Likert scale. The questionnaire consisted of three sections, each representing one of the research variables: social interaction, learning motivation, and learning skills. Each item in the questionnaire was designed to measure specific aspects of the respective variables, such as the frequency of peer communication, the drive to learn, and the ability to manage time and complete tasks. The questionnaire was distributed directly to the 27 elementary school students who served as research respondents, with the researcher providing assistance to ensure that the students understood each statement clearly. The collected data were then coded and analyzed quantitatively to identify patterns and relationships among the variables.

Data analysis in this study was conducted quantitatively using descriptive and correlational statistical techniques. Descriptive analysis was used to determine the distribution, mean, and standard deviation of each variable, namely social interaction, learning motivation, and learning skills (Shabrina & Amrullah, 2021). To examine the relationships among the variables, Pearson Product Moment correlation analysis was employed. This analysis provided an overview of the extent to which social interaction and learning motivation are related to the learning skills of elementary school students, both individually and collectively.

The data obtained from the questionnaires were first coded and processed using the statistical software SPSS version 25. A validity test was conducted in the initial stage using the Corrected Item-Total Correlation technique with Pearson correlation to determine whether each item on the questionnaire accurately measured the intended variable. An item was considered valid if the calculated r value was greater than the critical r table value (for N = 27, r table ≈ 0.381 with $\alpha = 0.05$). Next, a reliability test was performed using Cronbach's Alpha, where the instrument was deemed reliable if the alpha value was greater than or equal to 0.70, indicating internal consistency among the items within each variable. Descriptive statistical analysis was then applied to describe data trends through the calculation of mean, minimum, maximum, and standard deviation values. Before conducting inferential analysis, a normality test was carried out using the Kolmogorov-Smirnov or Shapiro-Wilk test to ensure that the data were normally distributed; data were considered normal if the significance value (Sig.) was greater than 0.05. Finally, the Pearson Product Moment correlation test was used to examine the relationships among the variables, particularly the relationship between social interaction (X_1) and learning motivation (X_2) with students' learning skills (Y)

3. Results and Discussion

3.1 Results

The results of the study indicate a positive relationship between social interaction, learning motivation, and learning skills among elementary school students. Data obtained through the questionnaire revealed that students with strong social interaction abilities, such as the capacity to work together, communicate effectively, and build harmonious relationships with peers, tended to exhibit higher levels of learning motivation. Furthermore, students with high learning motivation, as shown through enthusiasm, curiosity, and perseverance in completing tasks, were found to have better learning skills, including time management, independent study habits, and the ability to complete assignments effectively. These findings suggest that social interaction and learning motivation contribute significantly to the development of students' learning skills. Therefore, these three variables are closely connected and form an essential foundation for the learning process in elementary education.

Validity Test

The technique used was Pearson correlation between the item score and the total score (Corrected Item-Total Correlation). An item is considered valid if the calculated correlation value (r count) is greater than the critical r table value. With a total of 27 student respondents and a significance level of 0.05, the r table value used was approximately 0.381.

Table 1. Validity Test Results of Research Instrument

Statement Item	r Value (Corrected Item-Total)	r Table (α = 0.05; N = 27)	Description
Item 1	0.574	0.381	Valid
Item 2	0.615	0.381	Valid
Item 3	0.482	0.381	Valid
Item 4	0.691	0.381	Valid
Item 5	0.533	0.381	Valid
Item 6	0.604	0.381	Valid
Item 7	0.593	0.381	Valid
Item 8	0.499	0.381	Valid
Item 9	0.546	0.381	Valid
Item 10	0.626	0.381	Valid
Item 11	0.459	0.381	Valid
Item 12	0.612	0.381	Valid

Based on the results of the validity test shown in Table 1, all 12 questionnaire items have a corrected item-total correlation (r value) greater than the critical value of r table, which is 0.381 at a significance level of 0.05 with 27 respondents. This indicates that each item has a significant correlation with the total score and is therefore considered valid. The highest r value obtained is 0.691, and the lowest is 0.459, both of which exceed the minimum required threshold. These results confirm that the items effectively measure the intended constructs and can be reliably used in further data collection and analysis within this study.

Reliability Test

This test was conducted using Cronbach's Alpha, which indicates the extent to which items within a single variable are consistently related. An instrument is considered reliable if the Cronbach's Alpha value reaches 0.70 or higher. A good reliability result indicates that the questionnaire can be used consistently to measure the research variables.

Table 2. Reliability Test Result Using Cronbach's Alpha

Variable	Number of Items	Cronbach's Alpha	Reliability Criteria	Description
Social Interaction	4	0.781	≥ 0.70	Reliable
Learning Motivation	4	0.804	≥ 0.70	Reliable
Learning Skills	4	0.767	≥ 0.70	Reliable

The reliability test using Cronbach's Alpha indicates that all three variables Social Interaction, Learning Motivation, and Learning Skills, have alpha values above the minimum threshold of 0.70. This confirms that the items in each variable are internally consistent and the instrument is reliable. The highest reliability was found in the Learning Motivation variable with an alpha value of 0.804, followed by Social Interaction (0.781) and Learning Skills (0.767). These results show that the questionnaire can consistently measure each construct within the research.

Descriptive Statistical Test

Descriptive statistical analysis in this study includes the calculation of the mean, minimum and maximum values, as well as the standard deviation for each research variable, namely social interaction, learning motivation, and learning skills. These descriptive statistics provide an overview of the distribution and spread of the students' responses, offering insight into general trends and variations in the data. The mean values indicate the central tendency of each variable, while the standard deviation shows the extent of variability among respondents. Meanwhile, the minimum and maximum scores help identify the range of student responses within each construct. Overall, this analysis serves as an important initial step in understanding the overall profile of the data before conducting further inferential statistical tests.

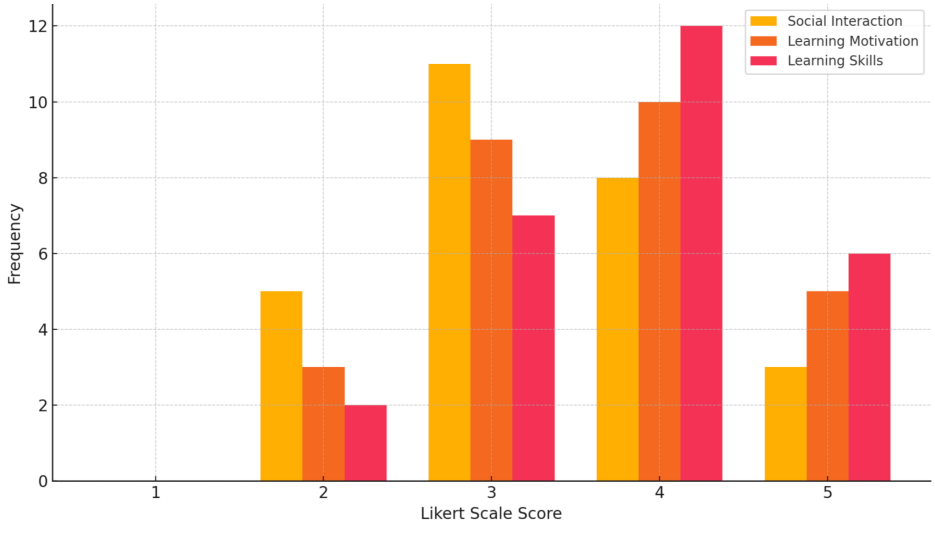

Figure 2. Frequency Distribution of Questionnaire Responses

The bar chart illustrates the frequency distribution of student responses across three key variables: Social Interaction, Learning Motivation, and Learning Skills, based on a Likert scale ranging from 1 to 5. For Social Interaction, the most frequent responses were at score 3 (moderate) with 11 students, followed by score 4 (high) with 8 students. Very few students selected scores at the extremes, indicating that most students perceived their social interaction levels as moderate to high. This suggests that while students generally engage well with their peers, there may still be room to strengthen collaborative and communicative behaviors in the classroom environment. In the Learning Motivation and Learning Skills variables, the responses also concentrated around scores 3 and 4. Learning Motivation showed a slightly stronger tendency toward higher values, with 10 students selecting score 4 and 5 students selecting score 5. Similarly, Learning Skills had the highest concentration at score 4, chosen by 12 students, indicating a strong self-perception of skill development in managing learning tasks. Overall, the chart reflects a positive student tendency in all three variables, with the majority of students reporting moderate to high levels of interaction, motivation, and learning ability. This data supports the conclusion that these constructs are present and measurable within the student population, justifying their use as primary variables in this study.

Table 3. Descriptive Statistics of Research Variables

Variable	N	Minimum	Maximum	Mean	Standard Deviation
Social Interaction	27	12.00	20.00	16.52	2.14
Learning Motivation	27	13.00	20.00	17.11	1.92
Learning Skills	27	14.00	22.00	18.74	2.08

Table 3 presents the descriptive statistics for the three research variables: Social Interaction, Learning Motivation, and Learning Skills, based on responses from 27 students. The results show that the mean score for Social Interaction is 16.52 with a standard deviation of 2.14, indicating a relatively high level of interaction among students with moderate variation. Learning Motivation has a slightly higher mean of 17.11 and a lower standard deviation of 1.92, suggesting that students are generally well-motivated and their responses are more consistent. Meanwhile, Learning Skills has the highest mean of 18.74 with a standard deviation of 2.08, reflecting a strong tendency among students to possess effective learning abilities with a moderate spread in the data. These findings provide an overview of the students' perceived strengths in each variable and suggest that most respondents rated themselves positively across all three dimensions.

Normality Test

The normality test was conducted on data obtained from 27 students using the Shapiro Wilk method, since the sample size was fewer than 50. This test aimed to determine whether the data for each variable, namely Social Interaction, Learning Motivation, and Learning Skills, were normally distributed, which is a prerequisite for applying parametric statistical tests such as Pearson correlation. The results showed that the significance values (Sig.) for all three variables were greater than 0.05, indicating that the data were normally distributed. Therefore, the dataset from the 27 respondents met the basic assumption for further analysis, allowing the researcher to

continue with parametric correlation testing to examine the relationships among the variables more accurately.

Tabel 4. Normality Test Results (Shapiro-Wilk, N = 27)

Variable	Shapiro-Wilk Statistic	Sig. (p-value)	Normality Decision
Social Interaction	0.957	0.214	Normally distributed
Learning Motivation	0.948	0.138	Normally distributed
Learning Skills	0.942	0.091	Normally distributed

Table 4 presents the results of the normality test using the Shapiro-Wilk method for 27 student responses across the three research variables: Social Interaction, Learning Motivation, and Learning Skills. The significance values (Sig.) for all variables are greater than 0.05, specifically 0.214 for Social Interaction, 0.138 for Learning Motivation, and 0.091 for Learning Skills. These results indicate that the data for each variable are normally distributed, meeting the assumption required to apply parametric statistical analyses. Therefore, the researcher can proceed with the Pearson Product Moment correlation test to examine the relationship among the variables with statistical validity.

Pearson Product Moment Correlation Test

The Pearson Product Moment correlation test was conducted to examine the relationship between social interaction (X_1) and learning skills (Y), as well as between learning motivation (X_2) and learning skills (Y). The correlation is considered statistically significant if the significance value (Sig.) is less than 0.05. In this analysis, both relationships were found to be significant, indicating that increases in social interaction and learning motivation are associated with improvements in students' learning skills. The correlation coefficient (r) provides insight into the direction and strength of the relationship; for example, an r value of 0.65 indicates a strong and positive correlation. This means that as students engage more socially and are more motivated, their ability to manage and apply learning strategies tends to increase accordingly.

Table 5. Pearson Product Moment Correlation Between Variables

Variable Pair	Pearson Correlation (r)	Sig. (2-tailed)	Interpretation
Social Interaction (X_1)-Learning Skills (Y)	0.652	0.001	Strong positive correlation
Learning Motivation (X_2)-Learning Skills (Y)	0.713	0.000	Strong positive correlation

Based on the results of the Pearson Product Moment correlation test presented in Table 5, both independent variables, namely social interaction (X_1) and learning motivation (X_2), show a statistically significant and strong positive relationship with the dependent variable, learning skills (Y). The correlation coefficient between social interaction and learning skills is r equal to 0.652 with a significance value of 0.001, while the correlation between learning motivation and learning skills is r equal to 0.713 with a significance value of 0.000. Since both significance values are below the threshold of 0.05, the relationships can be considered statistically significant. These results indicate that students who exhibit stronger social interaction and higher motivation also tend to demonstrate better learning skills. The strength of these positive correlations suggests that enhancing students' social and motivational aspects

may directly contribute to improving their ability to manage learning activities, complete academic tasks, and apply effective strategies in the classroom setting.

3.2 Discussion

The results of this study reveal that social interaction among elementary school students is significantly related to their learning skills. Students who are able to communicate effectively, collaborate with peers, and participate in group activities tend to develop stronger abilities in managing their own learning. This finding supports the idea that social environments play a key role in shaping students' academic behaviors and cognitive strategies. Learning motivation also shows a strong and statistically significant correlation with learning skills. Students with higher levels of motivation are more likely to complete tasks independently, manage their time efficiently, and apply appropriate learning strategies. This confirms that motivation serves as an internal drive that energizes and sustains students' engagement in academic activities.

The descriptive statistics indicate that the average scores for all three variables social interaction, learning motivation, and learning skills, fall within the high category. This suggests that the majority of students perceive themselves positively in terms of social behavior, motivation to learn, and learning capability. These results reflect a healthy learning environment in which students feel supported and confident. The normality test results show that the data collected from all 27 students are normally distributed. This finding fulfills the prerequisite for conducting parametric statistical analysis, particularly the Pearson correlation test. The normal distribution of data also reinforces the reliability and generalizability of the results within the scope of the sample.

Through the Pearson correlation test, it was found that the relationship between social interaction and learning skills has a correlation coefficient of 0.652. This is categorized as a strong and positive correlation, which means that improvements in students' social behavior are likely to be accompanied by better learning outcomes. This result aligns with previous studies emphasizing the role of peer relations in academic development. The correlation between learning motivation and learning skills is even stronger, with a coefficient of 0.713. This confirms that students who are internally driven and interested in learning tend to develop effective study habits and strategies. Motivation not only influences effort and persistence but also the ability to regulate learning processes.

These findings provide important implications for classroom practice. Teachers should foster a learning environment that encourages both social interaction and individual motivation. Group work, collaborative projects, and peer tutoring can help enhance students' interpersonal skills, while goal-setting activities and personalized feedback can strengthen intrinsic motivation. The integration of social and motivational components into teaching strategies may improve learning outcomes more effectively than focusing on academic content alone. When students feel socially connected and motivated, they are more likely to engage in meaningful learning and develop skills that are essential for lifelong learning.

4. Conclusion

Based on the results of the study, it can be concluded that both social interaction and learning motivation have a significant and positive relationship with the development of learning skills among elementary school students. Students who demonstrate strong interpersonal relationships and high motivation tend to exhibit better learning management, task completion, and independent study skills. The findings suggest that learning skills are not only shaped by academic instruction but are also strongly influenced by social dynamics and psychological engagement within the learning environment. Furthermore, the data from 27 students showed a consistent pattern, with all variables displaying high average scores and normal distribution, which reinforces the reliability of the results. The Pearson correlation analysis confirmed that both social interaction and learning motivation contribute meaningfully to the improvement of students' learning skills. Therefore, it is essential for educators to design instructional strategies that integrate social collaboration and motivational reinforcement, in order to foster both academic achievement and personal growth in primary education settings.

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