



Talking Stick Learning Model to Optimize Interpersonal Intelligence of Children Aged 5-6 Years



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ABSTRACT

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This study was motivated by the researcher's observations, which showed that there were still several problems related to children's interpersonal intelligence. The problem identified was that out of 18 children in group B3, 11 appeared to have a low level of interpersonal intelligence. This condition became the focus of further investigation because it could hinder their social and emotional development in the future. The purpose of this study was to determine the extent of the effect of the talking stick learning model on the interpersonal intelligence of children aged 5–6 years at TK Islam Al-Moestafa, Jambi City. The method used in this study was a pre-experimental design in the form of a one-group pretest-posttest design. The total population in this study consisted of 60 children. The research sample included 18 children from group B3, selected using purposive sampling technique. Data were collected through observation and documentation, with an observation sheet used as the validated research instrument. Data analysis was conducted using normality and homogeneity tests, followed by hypothesis testing using a paired samples t-test. The results of the t-test analysis showed a significance value of $0.001 < 0.05$, which meant that there was a significant effect of the use of the talking stick learning model, providing a positive impact on the interpersonal intelligence of children aged 5–6 years at TK Islam Al-Moestafa, Jambi City. The effect size was 5.82, which fell into the strong effect category. Therefore, the talking stick learning model was effective in optimizing the interpersonal intelligence of children aged 5–6 years at TK Islam Al-Moestafa, Jambi City.

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1. Introduction

Early Childhood Education, often abbreviated as PAUD, has become one type of educational institution that is increasingly established and highly sought after by the community. This institution plays a role in focusing attention and training all aspects of child development, in order to prepare them to proceed to higher levels of education (Harianja, Utami & Nofianti, 2025). In designing educational programs, there are three functions of education for early childhood, namely: 1) education as a learning process that occurs within the child, 2) education as a socialization activity, 3) education as a collaborative activity. Children acquire and learn various information in the form of knowledge obtained from their

surrounding environment, especially from the educational environment ([Harianja, Utami, Siregar, Muazzomi & Indryani, 2025](#)).

During early childhood, interpersonal intelligence is one of the intelligences that must be optimized. Interpersonal intelligence is the ability to communicate well, have strong empathy, and build positive relationships with others ([Gardner, 1999](#)). During this period, the development of interpersonal intelligence is very important because the ability to empathize, communicate, and collaborate with others becomes the child's main preparation for adapting to their social environment. To optimize this intelligence, children need an atmosphere that supports opportunities to interact with both adults and their peers. With various supportive learning experiences, children will be able to develop their social and emotional skills ([Amriani & Halifah, 2024](#)). However, many problems in the field show that the learning process in PAUD is often trapped in one-way learning models, thus limiting interaction between children.

In fact, not all children in early childhood demonstrate good interpersonal intelligence abilities. Based on observations at TK Islam Al-Moestafa, Jambi City, several problems related to low interpersonal intelligence were found. The problem encountered was that out of 18 children in group B3, 11 appeared to have a low level of interpersonal intelligence. There were 3 children who showed a lack of empathy. This was evident when one child cried after losing in a competition, but his friends remained silent without giving any response or effort to comfort him.

Other behaviors were also observed when a child asked two of his friends to help tidy up toys, but the request was rejected without any positive reaction or willingness to contribute. Additionally, another behavior was seen while queuing to wash hands, where 3 children were impatient and violated the queue. This indicates that they lack sensitivity to the rights of others. Another action was observed when a child suddenly grabbed a toy from a friend and immediately used physical action to get what he wanted. This shows that the child still has difficulty articulating their desires verbally. When engaged in group activities, 2 of the children had difficulty collaborating and even showed considerable dependence on the teacher to complete tasks.

On the other hand, there are children who are very prominent in the class. They are always enthusiastic about raising their hands, providing answers, and coming forward, so that other less active children often do not get the same opportunity to be heard or demonstrate their abilities. This situation indicates the lack of a learning model that can encourage active participation from all students. This condition became the focus for further investigation because it could hinder their social and emotional development in the future.

The factors influencing the educational process have many variations and are interrelated, including the teacher's expertise in planning and delivering material. Manurung in ([Harianja & Utami, 2023](#)) states that various strategies, models, methods, and learning aids are crucial for teachers in conducting learning activities. To increase interest, curiosity, learning outcomes, motivation, and creativity, various learning resources are needed.

One learning model that is considered effective to encourage these aspects is the application of the talking stick learning model. This learning model can support cooperative aspects by encouraging every child to be actively and fairly involved in the classroom ([Viora](#)

& Pebriana, 2024). The use of a stick in this model serves as a tool to train children to respect others' right to speak and to strengthen listening skills, which are important parts of interpersonal intelligence.

The talking stick learning model is a learning approach that uses a stick as a tool for interaction in discussions or question-and-answer sessions. The child holding the stick gets the opportunity to answer or express their opinions, thereby increasing their active participation and communication skills (Octavia, Muazzomi, & Utami, 2025). The talking stick learning model supports children to increase their courage in speaking, making the classroom atmosphere more dynamic and not monotonous, and encouraging children to be actively involved during activities (Kurniasih & Sani, 2015). Therefore, this study aims to measure the effect of the talking stick learning model on optimizing interpersonal intelligence in early childhood children.

2. Method

This study used a quantitative approach with a pre-experimental design applying a one-group pretest-posttest design. In this approach, the researcher conducted two measurements, namely before the treatment (pre-test) and after the treatment (post-test) to evaluate the impact of the treatment using the talking stick learning model in improving the interpersonal intelligence of early childhood children. This research was conducted at TK Islam Al-Moestafa, located on Jl. Bougenville, Kel. Kenali Besar, Kec. Alam Barajo, Jambi City, Jambi Province. The research period was in the 2025/2026 academic year.

The population in this study was all group B students at TK Islam Al-Moestafa, Jambi City, totaling 60, and the sample in this study was class B3 students, totaling 18 children. The sampling technique used was purposive sampling, where the sample was taken and selected based on certain characteristics and adjusted to the needs of the study (Sugiyono, 2023). Data collection techniques were carried out directly during observation with instruments using an observation sheet developed through indicators of interpersonal intelligence associated with the talking stick learning model. This observation instrument had been tested for validity before being used for data collection.

The data obtained were analyzed using normality and homogeneity tests to ensure the data met the requirements for parametric analysis. Then, hypothesis testing was conducted using the Paired Samples t-Test to evaluate the significant impact of the talking stick model on children's interpersonal intelligence. To measure the strength of the impact, the effect size was calculated using Cohen's d formula. This analysis is directly related to the problem of low interpersonal intelligence and aims to assess the extent to which the talking stick learning model is effective as a solution to these problems in early childhood education.

3. Results and Discussion

Implementation of the Talking Stick Learning Model

The talking stick learning model is an approach that uses a stick as a tool. The stick will be passed from one child to another accompanied by music or a song. When the music/song stops, the child who first receives the stick is required to answer a question asked by the teacher. The questions given are adjusted to the learning material being taught. After the question-and-answer session is finished, the stick will be passed again until all children have had the same opportunity to answer questions. The Talking Stick model teaches children to respect others because they need to be patient waiting for their turn and listen when a friend is speaking. Through this activity, shy children become more confident to speak, while dominant children learn not to interrupt conversations. Therefore, children become more familiar with each other, more skilled at communicating, and understand how to respect their friends within the group. Furthermore, this activity is useful for strengthening their understanding of the learning material taught through a fun approach.



Figure 1. Application of the Talking Stick Learning Model

The results of the data analysis of the pre-test (before treatment) and post-test (after being given the talking stick learning model treatment) can be seen in the Table 1:

Table 1. Comparison of the difference between pre-test scores and post-test scores

	Pre-test Score	Post-test Score	Difference
Total	161	378	217
Average	8.94	21	12.06
Percentage	37.27%	87.5%	50.23%

Based on the presented table, a comparison between pre-test and post-test scores can be seen. Before the treatment was given, the total pre-test score for children in group B3 of TK Islam Al-Moestafa, Jambi City was 161 with an average of 8.94 and a percentage of 37.27%. After the treatment in the form of the talking stick learning model, the total post-test score reached 378 with an average of 21 and a percentage of 87.5%. From this, it can be concluded that there is a percentage difference between the pre-test and post-test of 50.23%.

The results of the normality test analysis using SPSS 29 were conducted using the Liliefors test. The significance value exceeds 0.05 (> 0.05), whereas if the significance is less than 0.05.

Table 2. Normality Test Data

Tests of Normality	Class	Kolmogorov-Smirnov			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Results	Pre-test	.149	18	.200*	.909	18	.082
	Post-test	.169	18	.190	.952	18	.450

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Based on Table 2 above, the significance value for the pre-test was 0.082, higher than 0.05, so the pre-test data is normally distributed. Meanwhile, the significance value for the post-test was 0.450, also higher than 0.05, which means the post-test data is also normally distributed. Therefore, it can be concluded that the initial test (pre-test) and final test (post-test) data are normally distributed. The results of the homogeneity test data analysis can be seen in the following table:

Table 3. Homogeneity Test

	Levene Statistic	df1	df2	Sig.
Based on Mean	3.722	1	34	.062
Based on Median	3.437	1	34	.072
Based on Median and with adjusted df	3.437	1	31.001	.073
Based on trimmed mean	3.716	1	34	.062

Based on the data shown in the table above, the significance value reached 0.062, which is higher than $\alpha = 0.05$. This indicates that the collected data has homogeneous properties. Therefore, the t-test can proceed to see the effect. The results of the hypothesis test data analysis using the t-test can be seen in the following table:

Table 4. Hypothesis Test

Paired Differences	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
				Lower	Upper			
Pair 1 Pretest- Posttest	- 12.05556	1.47418	.34747	-12.78855	11.32246	-	34.696	<.000

Based on the paired t-test sample results above, the significance value (Sig. 2-tailed) is 0.000, which is less than 0.05, indicating a significant difference between the pre-test and post-test. The effect size (Cohen's d) reached 5.82, which falls into the strong effect category. From this, it can be concluded that variable X influences variable Y, which means the talking

stick learning model has an impact on the interpersonal intelligence of children aged 5-6 years.

Discussion

Mastery of concepts and children's interest in learning can be enhanced through the application of teaching methods that emphasize multiple intelligences in early childhood education. One type of intelligence is interpersonal intelligence. This intelligence is very important for children as social individuals who need interaction with others to socialize, communicate, and collaborate, both with peers and with adults in society (Kurniasih, 2021). Therefore, interpersonal intelligence has many benefits for early childhood development, both for themselves and for their social development. Children must be trained to interact with the world around them, such as managing emotions, communicating, showing care, empathizing, sharing, and cooperating with others (Putri, Sumardi & Mulyadi, 2020).

This research was conducted at TK Islam Al-Moestafa, located in Jambi City, using two types of tests: pre-test conducted before the treatment and post-test conducted after the treatment. The purpose of the pre-test was to determine the children's condition before they received the treatment. Conversely, the post-test aimed to assess their progress after the intervention. This research focuses on the impact of the talking stick learning model on the interpersonal intelligence of children aged 5 to 6 years at TK Islam Al-Moestafa, Jambi City.

The results of the data analysis in this study showed a significant increase in interpersonal intelligence of children aged 5 to 6 years at TK Islam Al-Moestafa, Jambi City after participating in the talking stick learning model. This increase can be seen from the average pre-test data result reaching 8.94, while the average post-test result reached 21. The difference in scores between the pre-test and post-test reflects a significant improvement in children's interpersonal intelligence abilities after participating in the learning model.

Suhardiana (2018) stated that the talking stick learning model is one example of various cooperative learning models that use a stick in the process. In this method, children are divided into small groups to learn together, help each other, and be patient when the stick is passed from one child to another. The child holding the stick is given the right to speak, while others are trained to listen and respect opinions. Through this activity, children are trained to collaborate, dare to speak, and develop empathy and good social habits from an early age. The results of the paired t-test analysis showed a significance value of 0.001, which is smaller than 0.05. This means that the null hypothesis (H_0) is rejected and the alternative hypothesis (H_a) is accepted.

The ability to empathize in children aged between 5 and 6 years is closely related to their emotional and social growth. They are increasingly able to understand the feelings of others and provide appropriate responses. Sumarni, Sofia, and Irzalinda (2020) argue that empathy at this stage develops through social interaction manifested in prosocial behaviors such as helping, sharing, and respecting people around them. This aligns with the opinion expressed by Wijayanti, Khairani, and Anwar (2023), who state that the talking stick learning model is a collaborative method that provides opportunities for each student to speak and listen in turn. These turn-taking speaking and listening activities contribute to the development of communication skills, which are the foundation for empathy formation.

Communication skills in early childhood include conveying ideas as well as understanding and responding to information from others. [Arafah, Desmitar, & Diyenti \(2025\)](#) indicate that early childhood communication skills relate to the appropriate use of language in social interactions. Children with these abilities can express opinions well, provide appropriate answers, and respond effectively to friends or teachers. This relates to the idea expressed by [Karlina, Amirudin, & Purwati \(2024\)](#) that the talking stick learning model is a collaborative approach that provides systematic speaking opportunities to each student using a tool (stick), so that all students can express opinions, listen to their friends, and provide verbal responses in group discussions. The application of this model has proven to improve students' communication skills.

Children's ability to cooperate involves interaction, collaboration, and completing tasks with peers, enabling children to build good social relationships with people around them ([Amriani & Halifah, 2024](#)). In this context, children's ability to collaborate and complete tasks shows that they not only participate in team activities but also actively contribute to task division, helping friends, and setting group goals efficiently. Furthermore, the ability of children to cooperate by expressing ideas in turn shows children's participation in group discussions, listening to friends, and expressing ideas alternately ([Ayu et al., 2025](#)). Thus, these two abilities complement each other, because children learn to collaborate in completing tasks while also interacting verbally through the exchange of ideas. This aligns with research conducted by [Sasmithaningrum \(2024\)](#) stating that the talking stick-based learning model is a collaborative approach that invites students to actively engage using a stick as a tool to regulate speaking turns. With this approach, children can build social interactions in the classroom, so that children can practice listening, respecting, and cooperating with their group mates, which is part of interpersonal intelligence that emphasizes the ability to understand others, show empathy, and collaborate effectively.

4. Conclusion

Berdasarkan hasil dan pembahasan yang telah diuraikan sebelumnya, dapat disimpulkan bahwa terdapat pengaruh positif terhadap peningkatan kecerdasan interpersonal setelah diterapkannya model pembelajaran *talking stick* pada anak-anak berusia 5-6 tahun di TK Islam Al-Moestafa Kota Jambi yang dapat dilihat dari hasil data *pre-test* dan *post-test* melalui pengujian hipotesis. Melalui uji hipotesis dapat dikatakan bahwa hipotesis nol (H_0) ditolak dan hipotesis alternatif (H_a) diterima yang berarti penerapan model pembelajaran *talking stick* berpengaruh terhadap kecerdasan interpersonal anak usia 5-6 tahun di TK Islam Al-Moestafa Kota Jambi.

5. Conclusion

Based on the results and discussion described above, it can be concluded that there is a positive effect on improving interpersonal intelligence after the implementation of the talking stick learning model in children aged 5-6 years at TK Islam Al-Moestafa, Jambi City, as seen from the pre-test and post-test data results through hypothesis testing. Through hypothesis testing, it can be stated that the null hypothesis (H_0) is rejected and the alternative hypothesis (H_a) is accepted, which means the application of the talking stick learning model affects the interpersonal intelligence of children aged 5-6 years at TK Islam Al-Moestafa, Jambi City.

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