

Research Article

# The Effect of the Cooperative Learning Model Type Think Pair Share (TPS) on Communication Skills, Self-Efficacy, and Learning Outcomes of Students in Indonesian Language Subject

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## ABSTRACT

This study aims to determine the effect of the Think Pair Share (TPS) learning model on students' communication skills, self-efficacy, and learning outcomes. The research method used was a quasi-experimental design with a Nonequivalent Control Group Design. The research sample consisted of 57 students, divided into two classes: the experimental class, which was treated using the Think Pair Share model, and the control class, which was taught using conventional lecture methods. The instruments used in this study included a communication skills questionnaire, a self-efficacy questionnaire, a learning achievement test, and an observation sheet. Data were analyzed using t-tests and N-Gain to examine significant differences between the two groups. The results of the study show that: (1) The TPS learning model had an effect on students' communication skills. The application of the Think Pair Share cooperative learning model improved students' communication skills in grade IX, as indicated by the average score of the communication skills questionnaire per item, which was 3.69 and categorized as very good. Classroom observations also showed that students actively engaged in discussions, expressed opinions, and gave constructive feedback to their peers. (2) The TPS model had a significant effect on students' self-efficacy. The t-test result showed  $t = 7.014$  with  $p = 0.000 < 0.05$ , indicating that the difference in self-efficacy between the experimental and control classes was statistically significant. Observations supported this finding, showing that students became more confident in expressing opinions, actively participated, and were able to take initiative in completing tasks. (3) The TPS model also had a significant effect on learning outcomes. The experimental class obtained an average N-Gain score of 0.79 (high category), while the control class obtained 0.38 (moderate category). This indicates that students who were taught using TPS experienced better mastery of the material and collaborative skills compared to those taught using conventional methods.

**Keywords:** Think Pair Share; communication skills; self-efficacy; learning outcomes

## 1. INTRODUCTION

Education plays a strategic role in preparing individuals to face life challenges, become productive members of society, and contribute to nation-building in the future (Kurniason & Yani, 2021). The Indonesian National Education System Law No. 20 of 2003 emphasizes that education is a conscious and planned effort to create a learning environment and process that enables learners to actively develop their potential, including spirituality, self-control, intelligence, noble character, and the skills needed by themselves, society, the nation, and the state (Kemendikbud, 2003). However, in practice, the quality of education in Indonesia still faces serious challenges. This condition is reflected in the results of the *Programme for International Student Assessment (PISA)* conducted by the OECD, which regularly evaluates reading, mathematics, and science skills every three years. Indonesia's position in these assessments remains relatively low, indicating persistent weaknesses in national education quality (Nwaukwa & Okolocha, 2020). At the junior high school level, education is not only aimed at strengthening foundational knowledge but also at developing higher-order thinking skills, particularly critical thinking. According to Erstad et al. (2021), critical thinking involves analyzing issues or problems based on facts and evidence objectively, without personal bias. This skill is crucial to prepare students for real-life problem-solving. Furthermore, Vygotsky's developmental theory emphasizes that learners develop not only cognitively but also socially, where interaction with teachers and peers facilitates the achievement of learning potential (Suryana et al., 2022). This highlights the importance of designing instruction that fosters collaboration, discussion, and interaction among students.

Social development is closely related to students' communication skills. Communication serves as an essential medium to convey ideas, clarify understanding, and build interactions between individuals (Widodo et al., 2021). Unfortunately, studies reveal that Indonesian students' communication skills remain relatively low (Suaidah & Pasaribu, 2022). This limitation hinders their ability to express opinions, discuss ideas, and develop collaborative solutions. The situation worsened during the Covid-19 pandemic, when online and limited offline learning led to significant learning loss, including

a decline in students' academic achievement (Hanafiah et al., 2022). The pandemic also affected psychological aspects, particularly self-efficacy, or students' confidence in their learning abilities. Lismandasari & Farhan (2022) noted that learning loss contributed to reduced self-efficacy among students in completing assignments and facing examinations. In fact, self-efficacy is a crucial factor influencing academic achievement, as students with higher self-efficacy are more optimistic, persistent, and confident in accomplishing academic tasks (Almaiah et al., 2020). Thus, improving students' self-efficacy is a critical component of effective instructional strategies.

Observations conducted at SMP Negeri 4 Linggang Mapan, Kutai Barat, indicated low achievement in Bahasa Indonesia. Out of 31 ninth-grade students, only 5 students (16.12%) reached the minimum mastery criterion (75), while 26 students (83.8%) did not meet the standard. One contributing factor was the teacher's frequent reliance on lecture-based instruction, which often led to passive and bored students (Rikawati & Sitinjak, 2020). In contrast, students showed more active participation when engaged in discussion-based methods (Widiastuti & Kania, 2021). Considering that Bahasa Indonesia serves not only as a compulsory subject but also as a language of instruction supporting the mastery of other fields of knowledge (Gereda, 2020), the low levels of communication skills, self-efficacy, and learning outcomes in this subject are of great concern.

One promising alternative to address these challenges is the cooperative learning model type *Think Pair Share* (TPS). TPS is a structured discussion-based model consisting of three phases: *think* (individual reflection), *pair* (discussion in pairs), and *share* (presenting results to the class) (Idayani, 2021). Previous studies have shown that TPS is effective in improving student participation and learning outcomes. Dipraya (2015; 2018) reported that TPS improved mastery learning from 36.67% in the first cycle to 84% in the second cycle. Moreover, TPS was proven to enhance students' learning activities, willingness to express ideas, and critical thinking skills (Mulyono et al., 2021). Nevertheless, research that simultaneously examines the impact of TPS on communication skills, self-efficacy, and learning outcomes, particularly in Bahasa Indonesia, remains limited. Based on this background, this study aims to analyze the effect of the cooperative learning model type Think Pair Share (TPS) on students' communication skills, self-efficacy, and learning outcomes in Bahasa Indonesia for ninth-grade students at SMP Negeri 4 Linggang Mapan, Kutai Barat Regency.

## 2. RESEARCH METHOD

This study employed a quantitative approach with a quasi-experimental design, specifically a Nonequivalent Control Group Design, comparing two classes: the experimental class, which implemented the cooperative Think Pair Share (TPS) model, and the control class, which used conventional instruction (lecture and Q&A). The participants were ninth-grade students at SMPN 4 Linggang Mapan (29 students; experimental class) and SMPN 5 Linggang Melapeh (28 students; control class) in the second semester of the 2023/2024 academic year (February–March 2024). Both groups received pretests and posttests to measure learning outcomes on the "experiment report text"; self-efficacy was measured at posttest in both groups; and communication skills were measured once (posttest) in the experimental class to capture actual attainment during TPS implementation. The instruments comprised a multiple-choice test of learning outcomes (blueprinted to curricular indicators) and questionnaires for self-efficacy (Bandura-based) and communication skills (based on relevant literature indicators). All instruments passed validity testing (item–total Pearson correlations,  $r_{\text{calculated}} > r_{\text{table}}$  0.381;  $n = 29$ ) and reliability testing (Cronbach's alpha  $> 0.70$ ), indicating suitability for use. The TPS treatment followed three core phases: Think (individual reflection on a problem/text), Pair (paired discussion), and Share (class presentation/response), whereas the control class received structured lecture-based instruction. Structured classroom observations were used to monitor fidelity to instructional syntax in both classes. Data analysis included descriptive statistics, assumption tests (Kolmogorov–Smirnov for normality and Levene's test for homogeneity), and inferential tests aligned with variable characteristics: t-tests to compare relevant scores and N-Gain to assess improvement in learning outcomes (high  $\geq 0.70$ ; medium  $0.30 < 0.70$ ; low  $< 0.30$ ). This approach enabled a comprehensive examination of the effects of TPS on communication skills, self-efficacy, and learning outcomes within authentic classroom contexts.

## 3. RESULTS AND DISCUSSION

### 3.1 Description of the Research Object

The object of this research is two junior high schools located in Linggang Bingung Subdistrict, Kutai Barat Regency, East Kalimantan Province, namely SMP Negeri 4 Linggang Mapan as the experimental group and SMP Negeri 5 Linggang Melapeh as the control group. The selection of these schools was based on considerations of accreditation status, facilities, and student learning achievements, which differ between the two schools. This contrast provided an objective basis for comparing the effectiveness of the Think Pair Share (TPS) cooperative learning model. SMP Negeri 4 Linggang Mapan is located on Jalan Pendidikan RT 3 and is a public school with a C accreditation status. This accreditation reflects that the school is still in the stage of improving its educational quality, thus requiring systematic efforts to enhance teaching and learning. The school has 15 teachers, 3 administrative staff, and 31 students. Its facilities include classrooms, a language laboratory, and a library, but remain limited in supporting optimal instruction. Therefore, the implementation of the TPS model in this school is expected to contribute to improving students' learning outcomes, self-efficacy, and communication skills. Meanwhile, SMP Negeri 5 Linggang Melapeh is a public school with a B accreditation rating of 82, and has more complete learning facilities compared to SMP Negeri 4 Linggang Mapan. The school provides six classrooms, two libraries, one science laboratory, one language laboratory, and one computer laboratory. With these more adequate facilities, the learning process runs more effectively and supports student achievement in both academic and non-academic fields. In this study, SMP Negeri 5 Linggang Melapeh served as the control group to compare the effectiveness of the TPS model with

conventional teaching methods.

The implementation of the Think Pair Share (TPS) cooperative learning model was conducted in the experimental class over four sessions, consisting of one pretest, two treatment meetings, and one posttest. During the treatment sessions, the Bahasa Indonesia teacher applied TPS learning with the topic “Experiment Report Text,” in which students were asked to think individually, discuss in pairs, and then share their discussion results with the class. The assignments varied across sessions but remained within the scope of experiment reports. This process encouraged students’ communication, collaboration, and self-efficacy. The researcher used observation sheets to ensure fidelity to the cooperative learning syntax. After the treatment, students completed a posttest identical to the pretest to measure improvement in learning outcomes. For comparison, the control class at SMP Negeri 5 Linggang Melapeh followed four sessions with the same structure but was taught using conventional methods (lecture and Q&A) without TPS implementation.

### 3.2 Descriptive Statistical Analysis

Descriptive analysis is the initial stage in processing research data, aimed at providing a general overview of the characteristics of the data obtained from the research instruments. This analysis functions to present the data systematically, thereby allowing the researcher to understand the distribution and variation of scores, both in terms of measures of central tendency (mean, median, mode) and measures of dispersion (standard deviation, minimum, and maximum).

**Table 1.** Descriptive Statistical

Variabel	N	Min	Max	Sum	Mean	Std. Deviation
Communication Skills	29	24,00	32,00	855,00	29,4828	2,19774
Self Efficacy Experiment	29	42,00	56,00	1506,00	51,9310	4,03495
Self Efficacy Control	28	36,00	54,00	1227,00	43,8214	4,65915
Experimental Learning Outcomes Pretest	29	44,00	76,00	1744,00	60,1379	9,34927
Experimental Learning Outcomes Posttest	29	80,00	100,00	2664,00	91,8621	5,60436
Control Learning Outcomes Pretest	28	28,00	64,00	1437,00	51,3214	11,32043
Control Learning Outcomes Posttest	28	60,00	84,00	2012,00	71,8571	5,81004

Based on the results of the descriptive analysis in **Table 1**, several findings can be explained as follows:

- The descriptive analysis of students’ communication skills in the experimental class (N = 29) shows a minimum score of 24 and a maximum score of 32, with a mean of 29.48 and a standard deviation of 2.20. When converted to the average score per item ( $29.48 \div 8 = 3.69$ ), the result falls into the very good category based on the 1–4 Likert scale. This finding indicates that the implementation of the Think Pair Share (TPS) cooperative learning model effectively enhanced students’ communication skills during group discussions.
- The self-efficacy variable was measured in both groups, the experimental and the control class. In the experimental class, the minimum score was 42 and the maximum was 56, with a mean of 51.93 and a standard deviation of 4.03. This mean score falls within the high category (42–56), suggesting that most students demonstrated strong confidence in facing the learning process. In the control class, the minimum score was 36 and the maximum was 54, with a mean of 43.82 and a standard deviation of 4.66. Although this also falls into the high category, the average score was lower than that of the experimental class. These results indicate that the TPS model contributed more effectively to the improvement of students’ self-efficacy compared to conventional teaching methods.
- In the experimental class, the pretest results showed a minimum score of 44 and a maximum of 76, with a mean of 60.14 and a standard deviation of 9.35. This indicates that most students had not yet achieved the Minimum Mastery Criterion (75). However, after the TPS treatment, the posttest results improved significantly with a minimum score of 80 and a maximum of 100, yielding a mean of 91.86 and a standard deviation of 5.60. Almost all students surpassed the mastery criterion, indicating that the TPS model had a positive impact on students’ learning achievement. In the control class, the pretest results showed a minimum score of 28 and a maximum of 64, with a mean of 51.32 and a standard deviation of 11.32. This also indicated that most students were below the mastery criterion. After the conventional learning sessions, the posttest results improved with a minimum score of 60 and a maximum of 84, producing a mean of 71.86 and a standard deviation of 5.81. Although there was an increase, the mean score remained below the mastery criterion and was lower than that of the experimental class.

**Table 2.** Interpretation of Students’ Mastery Learning Outcomes Based on the Minimum Mastery Criterion (SKM) 75

Group	N	Mean	SKM	Category
Experimental Pretest	29	60,14	75	Not Yet Completed
Experimental Posttest	29	91,86	75	Completed
Control Pretest	28	51,32	75	Not Yet Completed
Control Posttest	28	71,86	75	Not Yet Completed

Based on the **Table 2**, it can be seen that in the experimental class before treatment (pretest), the average learning outcome was 60.14, which was still below the SKM score of 75. This indicates that the students' average achievement had not yet reached mastery. After being given treatment through the cooperative learning model TPS, the average learning outcome increased to 91.86, surpassing the SKM, and thus the students were declared to have achieved mastery. In the control class, the pretest mean score was 51.32, also below the SKM, indicating that students had not yet achieved mastery. After conventional instruction, the posttest mean score increased to 71.86; however, it still did not reach the SKM of 75, meaning that students in the control group were still classified as not achieving mastery. These results demonstrate that only the experimental class successfully achieved mastery learning based on the SKM of 75, while the control class, despite showing improvement, still fell below the established mastery standard.

### 3.3 Prerequisite Analysis Test

#### 3.3.1 Normality Test

**Table 3.** Normality Test

Variable	Kolmogorov-Smirnov <sup>a</sup>		
	Statistic	df	Sig.
Communication Skills	,172	28	,233
Self Efficacy Experiment	,218	28	,402
Self Efficacy Control	,188	28	,313
Experiment Pretest Learning Outcomes	,168	28	,243
Experiment Posttest Learning Outcomes	,168	28	,441
Learning Outcomes of the Control Pretest	,196	28	,207
Learning Outcomes of the Control Posttest	,188	28	,212

Based on the **Table 3**, it was found that the posttest communication skills questionnaire in the experimental class obtained a Sig. value of 0.233, which is greater than 0.05; therefore, the data are normally distributed. The posttest self-efficacy questionnaire in the experimental class obtained a Sig. value of 0.402, and the control class posttest obtained 0.313. Both values are greater than 0.05, indicating that the data are normally distributed. The experimental class pretest learning outcomes test showed a Sig. value of 0.243, while the control class pretest obtained 0.207. The experimental class posttest learning outcomes showed a Sig. value of 0.441, and the control class posttest obtained 0.212. Both are greater than 0.05, which means the data are normally distributed. Based on these results, it can be concluded that all data in this study are normally distributed. This indicates that the normality assumption requirement has been met, so further analysis using parametric statistical techniques can be carried out.

#### 3.3.2 Homogeneity Test

**Table 4.** Homogeneity Test

Variable	Sig.	Description
Self Efficacy	0,464	Homogeneous
Learning Outcomes Pretest	0,271	Homogeneous
Learning Outcomes Posttest	0,864	Homogeneous

The results of the homogeneity test indicate that all variables in this study have Sig. values greater than 0.05. Specifically, the self-efficacy variable obtained a Sig. value of 0.464, the pretest learning outcomes obtained 0.271, and the posttest learning outcomes obtained 0.864. Since all Sig. values are above 0.05, it can be concluded that the data are homogeneous. This means that the variance of the data between the experimental and control groups is equal, thereby fulfilling the assumption of homogeneity. Consequently, the dataset meets one of the key requirements for further parametric statistical analysis, such as the t-test and N-Gain test.

#### 3.3.3 T-Test

**Table 5.** Inferential Test

Variable	Levene's Test Sig.	T	df	Sig. (2-tailed)	Conclusion
Self Efficacy	0,464	7,014	54	0,000	There is a significant difference

Based on the results of the independent t-test on students' self-efficacy data in the experimental and control classes, the calculated t-value was 7.014 with a significance value (Sig. 2-tailed) = 0.000 < 0.05. This indicates that there is a significant

difference between the self-efficacy of students in the experimental class who were given treatment using the TPS learning model and those in the control class who received conventional lecture-based instruction. It can be concluded that the instructional treatment applied in this study had a significant effect on improving students' self-efficacy.

### 3.3.4 N-Gain

**Table 6.** Comparison of Average N-Gain Learning Outcomes between the Experimental and Control Classes

Group	Pretest	Posttest	N-Gain	N-Gain Category
Experimental	60,14	91,86	0,79	High
Control	51,53	71,85	0,38	Medium

Based on the N-Gain calculation results, the average N-Gain in the experimental class was 0.79, which falls into the high category, while the average N-Gain in the control class was 0.38, categorized as medium. The average pretest score in the experimental class was 60.14, which increased to 91.86 in the posttest, whereas the control class improved from 51.53 to 71.85. These results demonstrate that the improvement in learning outcomes in the experimental class was more significant compared to the control class. This indicates that the implementation of the Think Pair Share (TPS) cooperative learning model in the experimental class was more effective in enhancing students' learning outcomes than the conventional teaching strategy applied in the control class. Thus, the use of the TPS model had a more optimal positive impact on students' mastery of the material and conceptual understanding.

## 3.4 Discussion

### 3.4.1 The Effect of the Cooperative Learning Model Type Think Pair Share on the Communication Skills of Ninth-Grade Students.

Based on the findings, the implementation of the Think Pair Share (TPS) cooperative learning model had a positive effect on the communication skills of ninth-grade students. This was evident from the results of the communication skills questionnaire, where the total average score was 29.48 from 8 items. When converted into an average per item ( $29.48 \div 8 = 3.69$ ), it showed that students' overall communication skills were at a very good level. Classroom observations reinforced these findings, as during pair discussions and group presentations, students were actively exchanging ideas, collaborating, and displaying confidence in presenting their group's results. These findings are consistent with Slavin (2015), who asserted that cooperative learning enhances students' social and communication skills through structured and collaborative interactions. Thus, TPS not only improved students' mastery of content but also supported the development of communication skills as an essential social competence. Students' communication skills were also reflected in how they presented their group discussions to the class. Observations showed that some students delivered their ideas fluently and clearly, while also responding to peers' questions and accepting feedback. The choice of words and diction made it easier for others to follow the context of the discussion, indicating students' increasing ability to communicate effectively and present their arguments confidently. The improvement was not only verbal but also psychological, as students demonstrated higher levels of self-confidence during presentations. Students who had previously been hesitant to speak in front of others became more willing to participate and interact, as the structured stages of TPS gave them opportunities to practice and refine their communication skills.

Zain and Ahmad (2021) emphasized that TPS positively affects communication skills, self-efficacy, and learning outcomes, motivating students to engage more in the learning process. Through TPS, students learn collaboratively, support each other, integrate new knowledge with prior knowledge, and develop independent understanding through exploration, discussion, explanation, and communication. Similarly, Wicaksono et al. (2019) explained that TPS encourages students to improve their communication skills during learning activities. Students were better able to express meaning, articulate ideas, formulate definitions, and draw general conclusions. Their enhanced communication was evident in their appropriate use of vocabulary and context, enabling them to construct persuasive and meaningful arguments. Saleh (2023) also found that TPS reduced students' hesitation and reluctance to speak in class. By requiring students to share ideas with peers and then with the whole class, TPS encouraged oral communication in a supportive manner. Likewise, Irma et al. (2020) confirmed that TPS had a significant effect on communication skills, as students in the experimental group became more active in discussion and opinion sharing compared to the control group. TPS facilitated cooperative learning processes that naturally involved interaction with peers, making students more engaged in class activities.

Ariska et al. (2022) highlighted that many students initially faced difficulties in asking questions or requesting clarification from teachers due to shyness or lack of confidence. Often, monotonous teaching strategies led to passive classroom environments. The application of TPS helped address these barriers, as students became more capable of asking questions, expressing ideas, and practicing active listening to solve problems collaboratively. In line with this, Amir and Suhartina (2023) found that TPS significantly enhanced communication skills even at the higher education level. Their study showed that university students, too, benefited from TPS, becoming better prepared to communicate in front of their peers and more confident in sharing perspectives. Overall, the TPS model proved to be an effective instructional strategy for improving students' communication skills. By encouraging structured dialogue, idea sharing, and peer feedback, TPS enabled students to develop stronger verbal expression, better vocabulary use, and greater confidence in public speaking.

Communication skills, as one of the essential indicators of learning effectiveness, thus became an important outcome of applying the TPS cooperative learning model.

### **3.4.2 The Effect of the Cooperative Learning Model Type Think Pair Share on the Self-Efficacy of Ninth-Grade Students**

Based on the results of the independent t-test analysis, the application of the Think Pair Share (TPS) cooperative learning model had a significant effect on the self-efficacy of ninth-grade students at SMPN 4 Linggang Mapan. The obtained t-value was 7.014 with a significance level ( $p = 0.000 < 0.05$ ), indicating that the difference in self-efficacy between the experimental and control groups did not occur by chance but was statistically significant. This suggests that the TPS model effectively enhanced students' confidence in their learning abilities and in completing academic tasks. This finding was reinforced by classroom observations, where students in the experimental group appeared more confident in expressing opinions, actively participating in pair discussions and group presentations, and taking the initiative to complete the teacher's instructions. These results are consistent with Bandura (2015), who explained that self-efficacy can be improved through learning experiences involving social interaction, peer support, and opportunities for success in challenging tasks. Thus, the TPS model not only improved students' cognitive and communication skills but also had a positive psychological impact in the form of increased self-efficacy.

Nevertheless, classroom observations also revealed that some students still expressed their opinions with hesitation, and a few were not fully confident when sharing ideas, often due to fear of making mistakes. This suggests that further or more intensive treatment may be required to strengthen self-efficacy, enabling students to become more confident in voicing their opinions and sharing their ideas openly. This study aligns with Oktariani (2018), who found that TPS did not significantly affect self-efficacy among junior high school students due to inhibiting factors such as low confidence in personal abilities and the use of instructional approaches that were not fully suitable. Although TPS encouraged students to exchange opinions during peer discussions, some remained hesitant when asked to present in front of the class. This indicates the need for continued practice in oral communication to reinforce self-efficacy.

In contrast, Zulfiantry et al. (2021) found that TPS positively influenced students' self-efficacy, as students in the experimental group demonstrated greater progress compared to those taught conventionally. The TPS model facilitated students' understanding of the material, improved problem-solving skills, and encouraged active classroom participation, whereas conventional teaching often led to boredom and passivity. Similarly, Putri et al. (2021) emphasized that TPS not only improved self-efficacy in terms of academic comprehension but also integrated cultural values into learning, enabling students to connect knowledge with broader cultural contexts. Further evidence was provided by Nwaukwa and Okolocha (2020), who found that TPS enhanced self-efficacy in accounting students by promoting active classroom participation, peer learning, prior reflection before presenting, and better comprehension of subject matter. Students reported more enjoyable learning experiences, which improved both engagement and mastery of the material. Likewise, Imani et al. (2019) reported that students became more willing to share opinions, ask questions, and interact without hesitation under TPS, showing greater self-confidence and accelerated understanding.

According to Samaila et al. (2024), TPS supports students in increasing classroom activity, making them more confident and assured in active participation. Through collaboration, discussions, and peer learning, students developed higher self-efficacy and better monitored their learning progress. TPS thus provides significant positive effects compared to traditional methods, which often fail to sustain student engagement and limit the development of learning outcomes. Overall, students with strong self-efficacy tend to believe in their ability to achieve academic success. The TPS model helped students to voice their opinions without fear, ask questions of both peers and teachers, and engage more fully in the learning process. The greater the students' involvement in learning activities, the higher their self-efficacy becomes, which in turn supports improved performance and learning outcomes.

### **3.4.3 The Effect of the Cooperative Learning Model Type Think Pair Share on the Learning Outcomes of Ninth-Grade Students**

Based on the N-Gain calculation, the application of the Think Pair Share (TPS) cooperative learning model had a significant positive effect on the learning outcomes of ninth-grade students at SMPN 4 Linggang Mapan. The average pretest score in the experimental class was 60.14, which increased to 91.86 in the posttest, with an average N-Gain of 0.79, categorized as high according to Hake (1999). Conversely, the control class taught with conventional methods improved from a pretest average of 51.53 to 71.85 in the posttest, with an N-Gain of 0.38, which falls into the medium category. These results indicate that students in the experimental class achieved greater improvement in understanding and mastering the subject matter compared to the control group. Classroom observations confirmed this finding, as students were more actively engaged in pair discussions and group presentations, and successfully completed assignments collaboratively and on time. These findings are consistent with Slavin (2015), who emphasized that cooperative learning models can enhance learning outcomes through structured social interaction, active student involvement, and successful experiences in collaborative tasks. Thus, TPS was proven effective in improving students' learning outcomes, not only in cognitive achievement but also in fostering teamwork and collaboration.

The results of this study are supported by Afriyola et al. (2020), who reported that the TPS model positively influences students' learning outcomes. Although challenges were encountered during its implementation, students' performance continued to improve as they practiced discussions with peers. Students were encouraged to think critically about the subject matter, share their ideas in pairs, and explain their reasoning. This structured process helped students become more

accustomed to discussions and to confidently express and receive feedback during learning activities. Similarly, Dharma et al. (2019) explained that TPS is effective in enhancing students' learning outcomes, as it enables students to better recall material and perform well in assessments by actively engaging in collaborative tasks. Further support comes from Mulyono et al. (2021), who found that TPS increased students' ability to solve problems collectively, making them more responsible, active, and willing to exchange ideas. This collaborative environment enhanced their capacity to complete assignments and improved overall learning performance. Abiodun et al. (2022) also emphasized that cooperative learning strategies like TPS significantly improve students' outcomes compared to conventional teaching, as the model strengthens memory, thinking skills, and problem-solving abilities.

Ugwu (2019) similarly noted that TPS has a stronger impact on learning compared to traditional methods, although its success requires consistent and sufficient application over time. The effectiveness of TPS lies in its proper implementation, as teachers must adapt and provide enough practice for students to maximize results. In line with this, Sholichah et al. (2022) argued that TPS positively influences learning outcomes by fostering student independence, enthusiasm, and active engagement in discussions. With the teacher acting as a facilitator, students were encouraged to participate more actively, take initiative, and assume responsibility for solving problems. Overall, optimal learning outcomes can be achieved when appropriate instructional strategies are applied. The TPS model helps students practice independent problem-solving, motivates them to learn, and makes the learning process more enjoyable. By creating a supportive and interactive learning environment, TPS serves as an effective alternative for enhancing mastery of subject matter and improving students' academic performance.

#### 4. CONCLUSION

Based on the findings, the implementation of the cooperative learning model Think Pair Share (TPS) was proven to have a positive and significant effect on ninth-grade students' communication skills, self-efficacy, and learning outcomes at SMPN 4 Linggang Mapan. Students demonstrated an improvement in communication skills with an average questionnaire score of 3.69 (very good category), a significant increase in self-efficacy as shown by the independent t-test results ( $t = 7.014$ ;  $p = 0.000 < 0.05$ ), and enhanced learning outcomes with an average N-Gain of 0.79 (high category) compared to 0.38 (medium category) in the control class. These findings confirm that TPS is effective in strengthening both academic and non-academic competencies, particularly in building confidence, collaboration, and mastery of content. Therefore, teachers are encouraged to consistently apply TPS while providing initial guidance to foster active participation, students are advised to utilize group discussions to enhance communication and confidence, schools are expected to support TPS implementation by ensuring adequate time and facilities, and future researchers are recommended to extend similar studies to other subjects or grade levels and employ mixed methods to explore the long-term effects of TPS on students' competencies.

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