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The Effect of the Implementation of the Cooperative Learning Model Type Student Teams Achievement Division (STAD) on Creativity, Initiative, Motivation and Student Learning Outcomes

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ABSTRACT

This study investigates the implementation and impact of the Student Teams Achievement Division (STAD) cooperative learning model in the Islamic Cultural History (Sejarah Kebudayaan Islam/SKI) curriculum at Madrasah Tsanawiyah (MTs) in Rejang Lebong Regency. The objectives are twofold: (1) to describe the application of the STAD model in classroom settings, and (2) to analyze its influence on students' creativity, initiative, motivation, and learning outcomes. Employing a quantitative research design, data were collected from a sample of 35 students using validated and reliable questionnaires. These instruments measured key variables such as creativity, initiative, motivation, and academic performance. Statistical analysis revealed that the STAD model significantly enhances students' creativity, initiative, and motivation. Although a positive trend was observed in learning outcomes, its impact was comparatively moderate. The findings underscore the effectiveness of structured cooperative learning in promoting active engagement and supporting the development of 21st-century competencies within the SKI subject area. The study concludes that STAD is a valuable pedagogical strategy that benefits student-centered learning but recommends adaptations for optimal outcomes. Suggested improvements include rotating student roles within teams, integrating holistic assessment tools, providing teacher training in group facilitation, implementing project-based learning activities, and incorporating contextual Islamic case studies to enrich content relevance and critical thinking.

Keywords: Learning Outcomes, Cooperative Learning, Student Teams Achievement Division

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INTRODUCTION

21st century education demands a transformation of the model teacher-centered towards the development of 4C skills (Critical thinking, creativity, collaboration, communication) (Weng et al., 2022; Siregar, 2024; Fitriono, 2023). However, the disparity in the quality of education in Indonesia as it occurs in madrassas is a challenge in itself. As an institution that integrates general science and religion, Madrasah Tsanawiyah (MTs) is expected to give birth to a globally competitive generation of Muslims. Unfortunately, learning in many MTs is still dominated by conventional methods such as lectures and memorization, which is contrary to the principle of Freedom of Learning which emphasizes Higher Order Thinking Skills (HOTS) and the formation of the character of Pancasila Students (Hart & Widowati, 2022; Wala & Koroh, 2022). This condition is even more severe in the subject of Islamic Cultural History (SKI), where 45% of students in one of the regions have not reached the KKM (average score of 65/100), with 72% of students admitting to being bored and 65% rarely engaging in discussions. In fact, SKI not only teaches historical chronology, but also Islamic exemplary

values that are relevant to the current context. The limitations of teachers in implementing innovative models further exacerbate the situation, especially for Generation Z who tend to be interactive and need experiential learning (Paulina & Ernawati, 2022). Approaches such as cooperative learning (CL) and conventional instruction (CI) are commonly used in the classroom interchangeably, and the results show that some successfully present reading comprehension with specific groups of students while some do not (Alhaidari, 2006).

The gap between curriculum demands and learning practices in MTs demands solutions that are able to combine students' cognitive, affective, and psychomotor needs. One model that has the potential to answer this challenge is Student Teams Achievement Divisions (STAD) which is the best part of CL (Cecchini et al., 2021). According to Trinova and Dalena (2017), this model divides students into heterogeneous groups of four to six people (based on ability, gender, and background) to encourage collaboration through structured discussions, followed by individual quizzes that are converted into learning-enhanced-based group scores (Individual Progress). This mechanism reduces the dominance of lecture methods by shifting the role of teachers from Knowledge Transmitter to become facilitators, while students actively build understanding through arguments, questions, and feedback between group members (Peer Assessment). The advantage of STAD lies in the integration of individual responsibility and group synergy, i.e. students with a better understanding of becoming Peer Tutor, while a reward system based on relative progress (not absolute value) motivates all ability levels (Slavin, 2012; Aida, 2023). This model allows students to critically analyze knowledge material through collaborative case studies, replacing chronological memorization with cause-and-effect analysis skills (Causal Reasoning). Initially, the STAD model was used for high school students. Especially with the unique characteristics of madrasas that focus on Islamic religious learning, demanding the adaptation of a model that not only improves academic results, but also internalizes the exemplary value of Islamic history through activities Problem-based learning. This gap strengthens the urgency of research to test the effectiveness of STAD in the context of SKI learning, as well as to design operational guidelines that align coosperative principles with the vision of holistic madrasah education.

Creativity does not only play a role in the ability to generate ideas (Mulyati, 2019), but as a cognitive foundation to reconstruct the knowledge gained by students that require a collaborative environment. This model stimulates Divergent Thinking by combining individual reflection and group synergy. However, the implementation of STAD should also reach the initiative aspect, where individual responsibility in heterogeneous groups encourages students to take an active role as Peer Tutor moderator (Mendo-Lázaro et al., 2022; Hidayat & Muhtar, 2024). Relative progression-based reward system within STAD (Slavin, 1995, 2012, 2015), as well as increasing motivation, because students are motivated to contribute to the success of the team, according to the findings Odutayo & Fonseca (2024) which states that STAD creates a conducive learning environment.

However, the integration of STAD with authentic assessments and Islamic materials is still a challenge. Limited learning outcomes with an average of 75.63 indicate that cognitive enhancement requires a holistic approach, as stated by (Motwani et al., 2022) that emphasizes the need for Cognitive scaffolding in STAD. At MTs Rejang Lebong, 67% of learning time is still dominated by lecture methods, so teachers need to design activities that not only target creativity, but also optimize initiatives through Role-playing Islamic history, fostering motivation by Reward System value-based ta'awun, and deepening learning outcomes through contextual analysis of social-modern problems. Thus, STAD has the potential to become a structural solution that harmonizes the cognitive, affective, and psychomotor needs of students, as well as the vision of holistic madrasah education.

A number of studies have shown that the STAD-type cooperative learning model has been proven to be effective in improving various aspects of learning, especially in cognitive learning outcomes and student motivation. Studies conducted by Harahap (2013) at MTsN Banda Aceh showed that the implementation of STAD increased student learning outcomes by 23% on the ecosystem concept, while encouraging an increase in motivation by 34% and increasing participation in group discussions. Other research by Kusumawardani et al. (2018)

proving that the integration of STAD with poster media resulted in an 18% increase in learning outcomes in visual-based materials, as well as reducing academic anxiety through more structured collaborative interactions.

The effectiveness of STAD is not limited to one field of study or level of education, but rather shows flexibility in various disciplines. Wulandari & Kusumastuti (2020) in her research at Madrasah Ibtidaiyah (MI) found that STAD creates an active learning environment, with 78% of students engaging in the role of peer tutors to explain material to members of their group. At the junior high school level, Santika (2016) proving that the combination of STAD with Geometer's Sketchpad program is able to increase students' creative thinking skills by 21%, especially in solving abstract geometry problems. In the subject of Civic Education (PKn), the research (Rambe, 2021) at the elementary school level, it showed an increase in student learning activities by 28% through STAD-based group discussions combined with case simulations. Based on research (Ghaith, 2001), high-achieving students felt they contributed more to group learning than low-achieving students, but this did not affect their appreciation of the STAD method. On the other hand, low-achieving students feel more comfortable and benefit more from STAD than if they study in a competitive environment, without reducing the positive experience of high-achieving students.

In addition to improving academic outcomes and student participation, STAD has also been shown to play a role in the development of HOTS. This model involves a variety of learning activities, including demonstrations (Motor Activities), problem analysis (Intellectual Activities), as well as group presentations (Oral Activities), which is in accordance with the criteria of creativity according to (Munandar, 2016) namely smoothness, flexibility, and originality. Study Knirk & Gustafson (1986) shows that experiential learning design (Experience-based learning), like STAD, allows students to reconstruct acquired knowledge into contextual solutions. In addition, the reward system is based on individual improvement in the STAD, as stated by Slavin (1995), in line with the theory law of effect Thorndike, who emphasized that positive reinforcement can strengthen students' collaborative behavior. Thus, STAD not only enhances conceptual understanding, but also builds students' critical thinking, cooperation, and academic initiative skills. This study aims to 1) explain the application of the STAD-type cooperative learning model in MTs Rejang Lebong Regency. Analyzing the influence of the application of the STAD-type cooperative learning model on 2) creativity, 3) initiative, 4) motivation, and 5) student learning outcomes at MTs Rejang Lebong Regency.

METHOD

This study uses a quantitative approach to measure and test certain theories through the collection and analysis of numerical data, so that they can be analyzed using statistical techniques. The quantitative approach emphasizes on hypothesis testing, variable control, as well as generalization of research results to a wider population (Creswell, 2014). In this study, a quantitative approach was used to examine the relationship between independent variables, namely the application of a STAD type cooperative learning model, and bound variables such as learning creativity, learning initiative, learning motivation, and student learning outcomes in the subject of SKI at MTs Rejang Lebong Regency.

Research design is an overview of the overall research plan carried out to achieve a specific goal. The design of this study aims to determine the relationship between independent variables (the application of the STAD model) and several bound variables (creativity, initiative, motivation, and learning outcomes). The relationship between these variables will be tested using multiple linear regression analysis, which allows researchers to see the effect of free variables on several bound variables simultaneously. This research is in the form of field research by collecting data from MTs students in Rejang Lebong Regency.

The population in this study is all MTs students in Rejang Lebong Regency, which consists of 9 MTs, both public and private, with a total number of students of 2,019 students. The research sample was taken using the stratified random sampling technique, where samples were taken randomly from each existing stratum (schools). Based on the sample determination formula, around 23.47% to 26.30% of the population was taken, so the number of samples used

in this study was 455 to 531 students. This sampling is based on calculations adjusted to the principle of adequate population representation.

The main instrument used in collecting data for this study was a questionnaire or questionnaire that was distributed to the respondents. The questionnaire contains structured questions specifically designed to measure research variables, namely the application of cooperative learning models of STAD (X), creativity (Y1), initiative (Y2), motivation (Y3), and learning outcomes (Y4). The preparation of this instrument is based on relevant theories and literature reviews that support the research topic. In addition to questionnaires, data is also collected through direct observation by researchers during the learning process in the classroom, as well as documentation that functions as supporting data related to student conditions and the school environment. To complete the data, interviews with teachers were conducted to obtain additional information about the implementation of the STAD-type cooperative learning model in teaching and learning activities.

The data obtained from the questionnaire is then processed and tabulated. Respondents' answers were converted into an ordinal scale using a 5-point Likert scale, with categories ranging from 5 for "Always", 4 for "Often", 3 for "Occasionally", 2 for "Rarely", to 1 for "Never". This tabulation process aims to facilitate the analysis of the variables of the application of the STAD-type cooperative learning model as well as other bound variables such as creativity, initiative, motivation, and student learning outcomes. Thus, the collected data can be analyzed systematically to describe the conditions and effectiveness of the implementation of the learning model.

Before being used for data collection, the questionnaire is first tested for validity and reliability so that the results obtained can be trusted. The validity test was carried out by measuring the correlation between the score of each question item and the total score using the product moment method. This process can be done manually or with the help of statistical software such as SPSS or Excel. This correlation shows the extent to which each question is able to accurately measure the variable in question (Ghozali, 2018).

Next, a reliability test was performed to assess the internal consistency of the instrument using the Cronbach Alpha coefficient. This coefficient value shows how stable and reliable the questionnaire is in measuring the research variables. Reliability calculations can also be done with the help of statistical software. The higher the Cronbach Alpha value, the better the consistency of the instrument (Ghozali, 2018).

Once the validity and reliability are assured, the validity of the data is tested through several procedures. First, the homogeneity test aims to find out whether the variance of data from several groups is uniform or homogeneous. This test uses Levene's Test, where the data is considered homogeneous if the significance value is greater than 0.05. If this value is smaller, then the data is not homogeneous. Second, normality tests are carried out to ensure that the data collected is distributed normally. This test can use the Kolmogorov-Smirnov Test or the Liliefors Test. The data is considered normal if the significance value (Asymp. Sig. 2-tailed) is greater than 0.05. In addition, visual examination of the distribution of data can also help assess normality. Finally, the multicollinearity test is performed to ensure that there is no perfect linear relationship between independent variables that can interfere with the analysis. The criteria used are a minimum tolerance value of 0.10 and a maximum Variance Inflation Factor (VIF) of 10. If these values are met, then multicollinearity does not occur (Ghozali, 2018).

To test the significance of the implementation of the STAD learning model in MTs Rejang Lebong Regency using SPSS and Excel software, a t-test will be used with the formula:

$$t = \frac{Mx - \mu 0}{\frac{S}{\sqrt{n}}}$$

Information:

Mx = average observation results,
μ_0 = expected average value,
S = standard deviation, and
n = number of samples.

Furthermore, to determine the relationship between the independent variable (X), namely the application of the STAD learning model, and the bound variables (Y1 = creativity, Y2 = initiative, Y3 = motivation, and Y4 = student learning outcomes), Pearson correlation analysis was used. The selection of correlation formulas is adjusted to the number of samples and the type of data available. The correlation coefficient is calculated to measure the strength and direction of the relationship between variable X and each variable Y. After the correlation value is obtained, the determination coefficient (R^2) is also calculated to find out how much the X variable contributes to the changes that occur in each Y variable.

To test the research hypothesis, namely to determine the influence of independent variables (STAD model) on bound variables (creativity, initiative, motivation, and learning outcomes), multiple linear regression analysis will be used. Before conducting regression analysis, the data will be tested to meet the basic assumptions of regression, such as normality tests, linearity tests, and multicollinearity tests. The normality test was carried out using the Liliefors test, while the linearity test was carried out by looking at the linear regression equation between the free variable and the bound variable. The hypotheses proposed in this study were tested using multiple linear regression analysis, with the following statistical hypotheses:

1. Hypothesis 1
   - H0: There was no relationship between the application of the STAD-type cooperative learning model and the students' learning creativity.
   - Ha: There is a positive relationship between the application of the STAD-type cooperative learning model and student learning creativity.
2. Hypothesis 2
   - H0: There was no relationship between the implementation of the STAD-type cooperative learning model and the student's learning initiatives.
   - Ha: There is a positive relationship between the implementation of the STAD-type cooperative learning model and student learning initiatives.
3. Hypothesis 3
   - H0: There was no relationship between the application of the STAD-type cooperative learning model and student learning motivation.
   - Ha: There is a positive relationship between the application of the STAD-type cooperative learning model and student learning motivation.
4. Hypothesis 4
   - H0: There was no relationship between the implementation of the STAD-type cooperative learning model and student learning outcomes.
   - Ha: There is a positive relationship between the application of the STAD-type cooperative learning model and student learning outcomes.

RESULT AND DISCUSSION

Data Validity Test Results

Before proceeding with inferential statistical analysis, the validity of the instrument and the suitability of the data were first tested with the basic assumptions of parametric analysis. The variance homogeneity test of the instrument was processed using the Levene's Test through SPSS to assess the similarity of variance between four data groups, namely the application of the STAD model (X), learning creativity (Y_1), learning initiative (Y_2), and learning motivation (Y_3). Because the significance value of the Levene's Test (Based on Mean) was 0.790 ($p > 0.05$), the variance of the four data groups was declared homogeneous. Furthermore, the One-Way ANOVA complemented with values F = 0.449 and p = 0.718, again confirming the absence of significant differences in variants between groups. Thus, all data of the variables X, Y_1, Y_2, and Y_3 are worthy of further analysis using parametric techniques (Creswell, 2014).

Table 1. Data validity test results

Tests / Criteria	Statistics	df_1	df_2	F	Sig.	Sum of Squares	Mean Square
Levene's Test (Based on Mean)	0,349	3	136	–	0,790	–	–
Levene's Test (Based on	0,346	3	136	–	0,792	–	–

Tests / Criteria	Statistics	df_1	df_2	F	Sig.	Sum of Squares	Mean Square
Median)							
Levene's Test (Adjusted df)	0,346	3	133,664	–	0,792	–	–
Levene's Test (Based on Trimmed Mean)	0,366	3	136	–	0,778	–	–
ANOVA Between Groups	–	3	–	0,449	0,718	125,771	41,924
ANOVA Within Groups	–	–	136	–	–	12 694,114	93,339
ANOVA Total	–	–	139	–	–	12 819,886	–

Source: Primary Data Analysis, 2024.

Based on SPSS processing, the value of Levene's Statistic on the average-based method (*based on mean*) of 0.349 with degrees of freedom ($df_1 = 3$; $df_2 = 136$) and significance $p = 0.790$. Since $p > 0.05$, it can be concluded that the variance of the four data groups does not differ significantly and the homogeneity assumption is fulfilled (Creswell, 2014). Furthermore, the One-Way ANOVA analysis also showed that the F value was calculated as 0.449 with $p = 0.718$, which again confirmed that there was no difference in variance between groups ($p > 0.05$). Therefore, all data that include STAD application variables, creativity, initiative, and learning motivation are considered homogeneous and worthy of further analysis using parametric techniques. The successful fulfillment of this homogeneity assumption supports the validity of the use of ANOVA, as recommended by Creswell (2018) in compiling a quantitative study that homogeneity tests should be performed to ensure the consistency of variants before parametric hypothesis testing.

Then a validity test is carried out to ensure that the research instrument can measure the concept to be measured precisely and accurately. The validity test was carried out by calculating the correlation of *product moment* between the score of each question item and the total score of the respondents. The test criteria used was to compare the value of the r calculation with the r of the table at a significant level of 5%. If r counts are greater than r table, then the question item is considered valid. The results of the validity test can be seen in the table.

Table 2. The results of the validity test of the research instrument.

No.	Variable	Number of Items	Range r-count	r table ($\alpha = 0.05$)	Validity Decision
1.	Implementation of STAD (X)	35	0,371 – 0,763	0,334	All items are valid (r count > r table)
2.	Learning Creativity (Y_1)	35	0,465 – 0,727	0,334	All items are valid (r count > r table)
3.	Learning Initiative (Y_2)	35	0,340 – 0,667	0,334	All items are valid (r count > r table)
4.	Learning Motivation (Y_3)	35	0,335 – 0,712	0,334	All items are valid (r count > r table)

Source: Primary Data Analysis, 2024.

Based on the table, the results of the validity test showed that all question items in the four research variables, namely the application of the STAD type cooperative learning model (X), learning creativity (Y1), learning initiative (Y2), and learning motivation (Y3) had a greater r-count value than the r-table (0.3338), so that it can be concluded that all instrument items are valid and measure the concept according to the research objectives (Creswell, 2014).

Reliability tests were carried out to ensure that the questionnaires used in this study were consistent and reliable. Reliability refers to the ability of an instrument to produce similar results if measurements are taken repeatedly (Creswell, 2014). Reliability was measured using the Cronbach Alpha coefficient, which calculates the internal consistency of the Likert scale used in the questionnaire.

Table 3. The results of the reliability test of the research instrument.

No.	Variable	N of Items	Cronbach's Alpha	Reliability Criteria	Conclusion
1.	Implementation of STAD (X)	20	0,901	≥ 0.60 (reliable)	Reliable (0.901 > 0.60)
2.	Learning Creativity (Y_1)	20	0,932	≥ 0.60 (reliable)	Reliable (0.932 > 0.60)
3.	Learning Initiative (Y_2)	20	0,895	≥ 0.60 (reliable)	Reliable (0.895 > 0.60)
4.	Learning Motivation (Y_3)	20	0,898	≥ 0.60 (reliable)	Reliable (0.898 > 0.60)

Source: Primary Data Analysis, 2024.

The results of the reliability test showed that all questions on the four research variables, namely the application of the STAD (X) type cooperative learning model, learning creativity (Y1), learning initiative (Y2), and learning motivation (Y3) had a Cronbach's Alpha value on the four variables well above the minimum limit of 0.60. So that the instrument is declared consistent and reliable to measure research constructs. These results ensure that if the questionnaire is repeated on a similar sample, the respondents' answers will show high uniformity (Tavakol & Dennick, 2011).

The normality test was carried out to find out whether the research data had a distribution that was close to the normal distribution. Normal distributions are one of the basic assumptions in parametric statistical analysis such as linear regression, so it is important to test these assumptions before proceeding to further analysis stages. In this study, the normality test was carried out using two statistical approaches, namely Kolmogorov–Smirnov and Shapiro–Wilk, with the help of SPSS software. However, because the number of samples < 50 (n = 35), the main reference in decision-making is the significance value of the Shapiro–Wilk test (Ghozali, 2018).

The criteria used in the interpretation of the normality test results are as follows: if the significance value (Asymp. Sig.) is greater than 0.05, then the data is considered to be normally distributed. Conversely, if the significance value is less than 0.05, then the data is considered not to be normally distributed. Based on the results of the Shapiro–Wilk test listed in the table, it can be seen that all variables in this study, both independent variables and bound variables, show a significance value above 0.05. This means that the data from each variable is distributed normally.

Table 4. The results of the normality test of the research data used Kolmogorov–Smirnov and Shapiro–Wilk.

No.	Variable	Kolmogorov–Smirnov (p)	Shapiro–Wilk (p)	N	Normality Criteria (p > 0.05)	Distribution
1.	Application of the STAD Type Cooperative Learning Model (X)	0,090	0,278	35	0.278 > 0.05	Usual
2.	Learning Creativity (Y_1)	0,200*	0,276	35	0.276 > 0.05	Usual
3.	Learning Initiative (Y_2)	0,138	0,216	35	0.216 > 0.05	Usual
4.	Learning Motivation (Y_3)	0,200*	0,628	35	0.628 > 0.05	Usual

Note: p with an asterisk () indicates the lower bound of the actual significance value (Lilliefors Significance Correction).

Source: Primary Data Analysis, 2024.

Based on the Table, it can be concluded that all variables in the study, namely the application of the STAD (X) type cooperative learning model, learning creativity (Y_1), learning initiative (Y_2), and learning motivation (Y_3), were all normally distributed because the significance value exceeded 0.05. Thus, the data has met the assumption of normality and is worthy of further analysis using linear regression tests.

The linearity test aims to assess whether the relationship between the independent variables, namely the application of the STAD (X) model, and each bound variable (Y_1 creativity, Y_2 initiative, Y_3 motivation, Y_4 learning outcomes) is linear. The analysis was performed by comparing the significance values on the "Deviation from Linearity" component in ANOVA. If *the p> value is* 0.05, then the linearity assumption is fulfilled (Ghozali, 2018). The results show that the relationship of X with Y_1 gives p = 0.975, with Y_2 p = 0.979, and with Y_3 p = 0.819, all above 0.05 so that it is linear. In contrast, the relationship of X to Y_4 was recorded p = 0.035 < 0.05, indicating that the relationship is less linear. Thus, the following equation is obtained:

- For creativity (Y_1): $\hat{Y}$ = 17.63 + 0.78X
- For initiative (Y_2): $\hat{Y}$ = 30.01 + 0.60X
- For motivation (Y_3): $\hat{Y}$ = 29.88 + 0.64X
- For learning outcomes (Y_4): $\hat{Y}$ = 70.60 + 0.066X

These four equations are then used to predict the value of the bound variables based on the STAD implementation score.

Table 5. Summary of Linear Regression Test and Linear Regression Equations.

No.	X → Y Relationship	Deviation from Linearity p	Linearity	Regression equations
1.	Implementation of STAD (X) with Creativity (Y_1)	0,975	Linear	$\hat{Y}$ = 17.63 + 0.78X
2.	Implementation of STAD (X) with Initiative (Y_2)	0,979	Linear	$\hat{Y}$ = 30.01 + 0.60X
3.	Application of STAD (X) with Motivation (Y_3)	0,819	Linear	$\hat{Y}$ = 29.88 + 0.64X
4.	Implementation of STAD (X) with Learning Outcomes (Y_4)	0,035	Less linear	$\hat{Y}$ = 70.60 + 0.066X

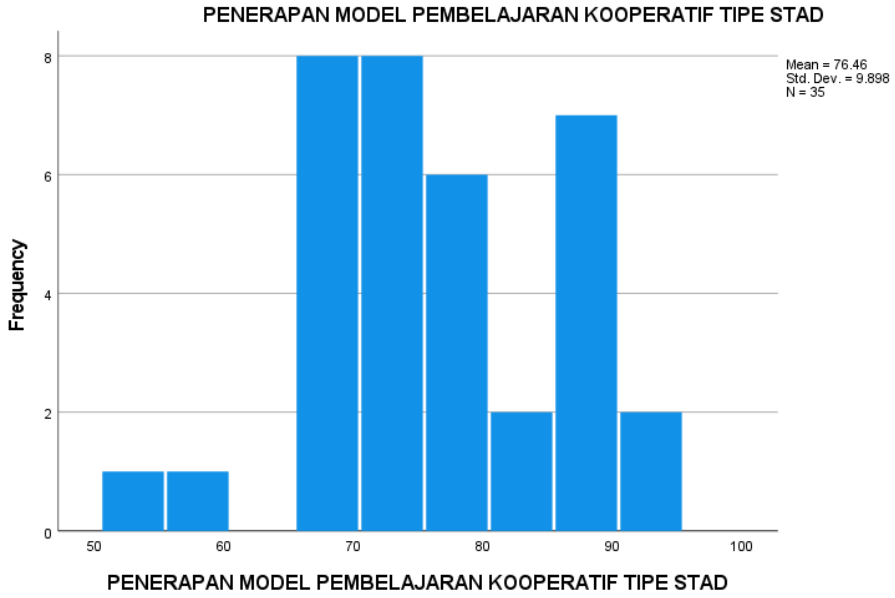
Source: Primary Data Analysis, 2024.

Based on the Table, only the relationship between the application of STAD and learning outcomes requires special attention because it is not entirely linear, while the other three relationships meet the assumption of linearity and can be interpreted directly through the regression equation above.

Application of the STAD *Type Cooperative Learning Model* in SKI Subjects at MTs Rejang Lebong.

The application of the STAD-type cooperative learning model at MTs Rejang Lebong was measured through five dimensions: group cooperation, awarding, individual development, healthy competition, and material completeness. Implementation was carried out by dividing students into heterogeneous groups of 4–5 members, followed by structured discussions, individual quizzes, and evaluation based on learning progress. This model is implemented systematically, starting from the delivery of core material by teachers, structured group discussions, to quiz-based individual evaluations. Based on data processing from 35 respondents (teachers), the average score for implementing STAD reached 76.46 with a standard deviation of 9.90. The score distribution showed the highest concentration in the range of 66–80 (74.3% of respondents), where a score of 71 became the mode with a frequency of 14.3%. As many as 5.7% of teachers recorded scores below 60 (53 and 59), while 25.7% of teachers achieved scores above 80, the highest of 95. In the significance test of the application of the STAD-type cooperative learning model using the $t = \frac{Mx - \mu 0}{\frac{S}{\sqrt{n}}}$ formula to produce a value of t calculated = 0.87, lower than t table = 2.46 at a

significance level of 1% (dk = 34). So, H0 is accepted, and Ha is rejected. This indicates that the implementation of STAD has not experienced statistically significant changes compared to baseline ($\mu_0 = 75$) but has practically reached the good category. The relatively high variation in standard deviation (9.90) reflects disparities between schools, especially in remote areas, where some teachers have difficulty managing discussion time and adjusting Islamic value-based SKI materials with group activities. However, the reward system mechanism (rewards for outstanding groups) succeeded in increasing student participation, as can be seen from the highest average learning motivation score (78.60) compared to other variables.



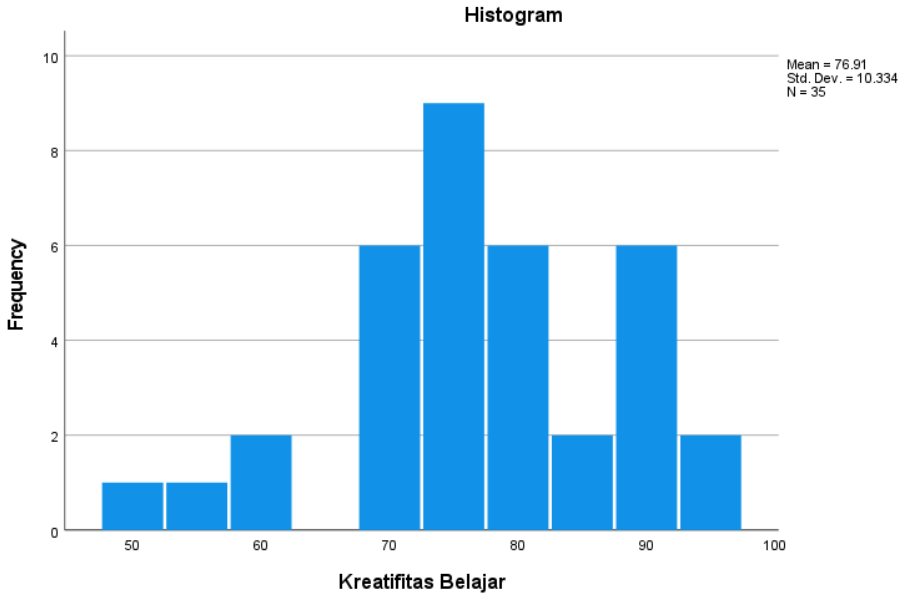
Picture 1. Histogram of the Implementation of the STAD Type Cooperative Learning Model.

Based on the results of the above analysis, it can be concluded that the implementation of the STAD-type cooperative learning model in MTs in Rejang Lebong Regency is going well. In addition, the creativity, initiative, motivation, and learning outcomes of students in SKI subjects are also at a good level. The findings that STAD has a positive effect on student learning outcomes are in line with previous studies conducted by (Slavin, 2015).

The Influence of the Implementation of the STAD Type Cooperative Development Model on Student Learning Creativity in SKI Subjects at MTs Rejang Lebong Regency.

Learning creativity in the context of SKI is defined as the ability of students to explore original ideas, connect Islamic historical values with contemporary contexts, and come up with innovative solutions. Creativity is measured through six dimensions: curiosity (asking and seeking resources), diligent learning (reading consistency), confidence (task independence), openness to novelty (innovation), courage to take risks (decision-making), and divergent thinking (diverse solutions).

Based on data analysis from 35 students, the average learning creativity score reached 76.91 with a standard deviation of 9.90, showing a significant variation in abilities between students. The distribution of scores followed a positive distribution pattern, where 25.7% of students (9 people) recorded high scores (83–96), while 20.0% (7 students) were in the range of 78–80. The largest group was concentrated at a score of 72–74 (22.9% or 8 students), with four students (11.4%) still below a score of 70 (lowest: 50 and 57). This pattern illustrates that many students are able to develop creativity adequately, despite disparities between individuals.



Picture 2. Histogram of Learning Creativity.

The relationship between the application of the STAD model and learning creativity was analyzed using the correlation of Product Moment with the formula:

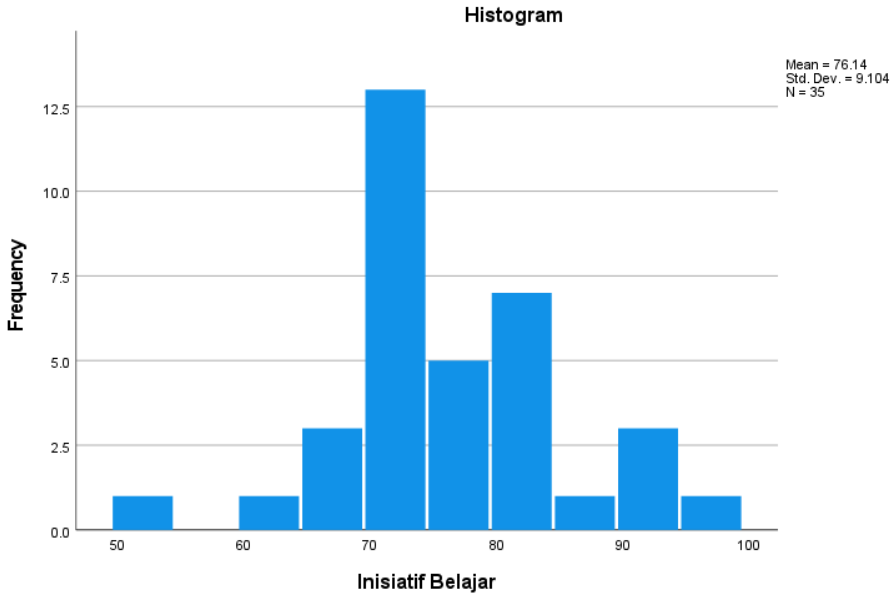
$$r = \frac{\Sigma N\{\Sigma XY\}-\{(\Sigma X)(\Sigma Y1)\}}{\sqrt{\{\Sigma N(\Sigma X^2)-(\Sigma X)^2\}\{\Sigma N(\Sigma Y1^2)-(\Sigma Y1)^2\}}}$$

The value of R is calculated = 0.743 which is greater than the critical value of R of the table = 0.334 at a significance level of 5%. These results confirm the existence of a positive and significant relationship between the STAD model and student creativity. The magnitude of the influence was determined through the determination coefficient (D=r2×100), resulting in a contribution of 55.2%. This means that more than half of the increase in student creativity was triggered by the implementation of STAD, while the remaining 44.8% was influenced by other factors not studied in this study.

Based on the results of the analysis, it can be concluded that H0 is rejected, and Ha is accepted. So, there is a positive relationship between the application of the STAD-type cooperative learning model and student learning creativity. In other words, the application of the STAD model has been proven to have a positive effect on increasing student learning creativity. This finding is in line with one of the advantages *Cooperative Learning* revealed by Jarolimek & Parker (Isjoni, 2009), i.e. provide opportunities for students to express pleasant emotional experiences. A relaxed and fun learning atmosphere, as well as positive interactions between students and teachers, can create an environment conducive to the development of creativity. Students feel more comfortable expressing their ideas, actively participating in discussions, and trying new approaches to problem-solving (Johnson & Johnson, 2021; Wijaya et al., 2025).

The Influence of the Implementation of the STAD Type Cooperative Learning Model on Student Learning Initiatives in SKI Subjects at MTs Rejang Lebong Regency.

The learning initiatives in this study include four dimensions: proactivity (activeness in discussion), persistence (work without instructions), curiosity (self-exploration), and imagination (contextual visualization). Based on the analysis of data from 35 students, the average learning initiative score reached 76.14 with a standard deviation of 9.10, showing a measurable variation in abilities between students. The score distribution showed that many students (68.6%) were concentrated in the range of 70–82, with peak frequencies in scores of 70–72 (8.6% per score) and 80–82 (14.3%). A total of 11.4% of students (4 people) recorded scores below 70 (lowest: 52 and 63), while two students (5.7%) achieved the highest score above 90.



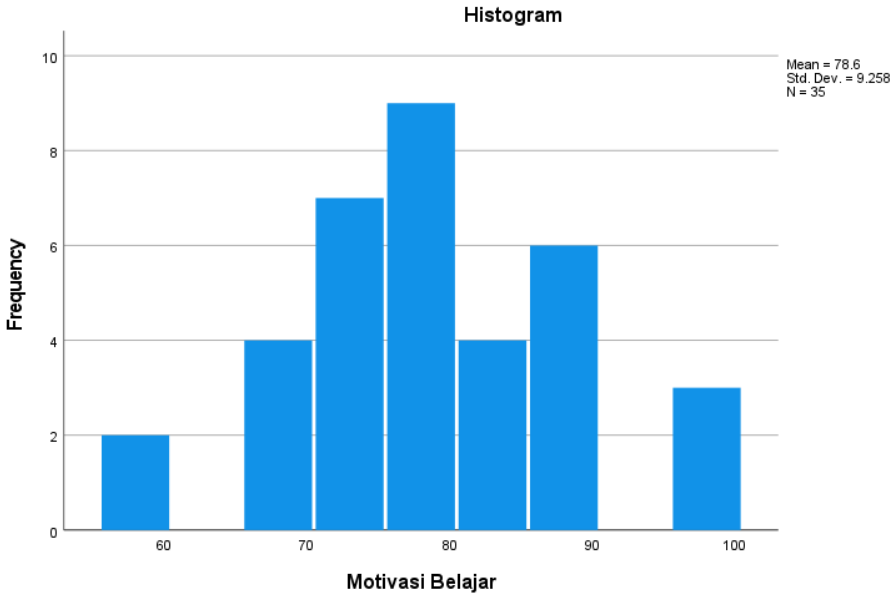
Picture 3. Histogram of Learning Initiatives.

The relationship between the implementation of STAD and learning initiatives was analyzed using Product Moment correlations, resulting in a calculated r value = 0.656, which is greater than the critical value of the table r = 0.334 at a significance level of 5%. The determination coefficient ($D=r^2\times100$) of 43.03%, it was seen that almost half of the increase in student initiative was influenced by the STAD model, while the remaining 56.97% came from external factors such as family support, independent learning habits, or the influence of the social environment.

Based on the results of the analysis, it can be concluded that: H0 is rejected, and Ha is accepted. Thus, there is a positive relationship between the implementation of the STAD-type cooperative learning model and student learning initiatives. Thus, the application of the STAD model has been proven to have a positive effect on student learning initiatives in SKI subjects at MTs Rejang Lebong Regency. This is in accordance with the basic principle cooperative learning which emphasizes individual and group responsibility, where each student is responsible for his or her own work and the group is responsible for achieving a common goal (Johnson & Johnson, 1987). The STAD model provides opportunities for students to take initiative in learning, either through active participation in group discussions, helping their peers, or finding solutions to the problems given. A supportive learning environment and positive interactions in groups can encourage students to be more independent and proactive in student learning in the classroom.

The Influence of the Application of the STAD Type Cooperative Development Model on Student Learning Motivation in SKI Subjects at MTs Rejang Lebong Regency.

Learning motivation is measured through intrinsic (interests, talents, internal needs) and extrinsic (environmental support) dimensions. The group reward system in STAD, such as giving appreciation based on individual progress, has been successful in increasing collective motivation. Based on the data of 35 students, the average learning motivation score reached 78.60 with a standard deviation of 9.26, showing variation between students that is still within moderate limits. The score distribution indicated the highest concentration in the range of 77–80 (17.1%), followed by the score groups of 81–87 (14.3%) and 90–97 (8.6%). Only two students (5.7%) recorded scores below 70 (lowest: 58 and 68), while the majority (80%) were above 75, illustrating that the STAD model manages to build strong learning motivation in most classes.



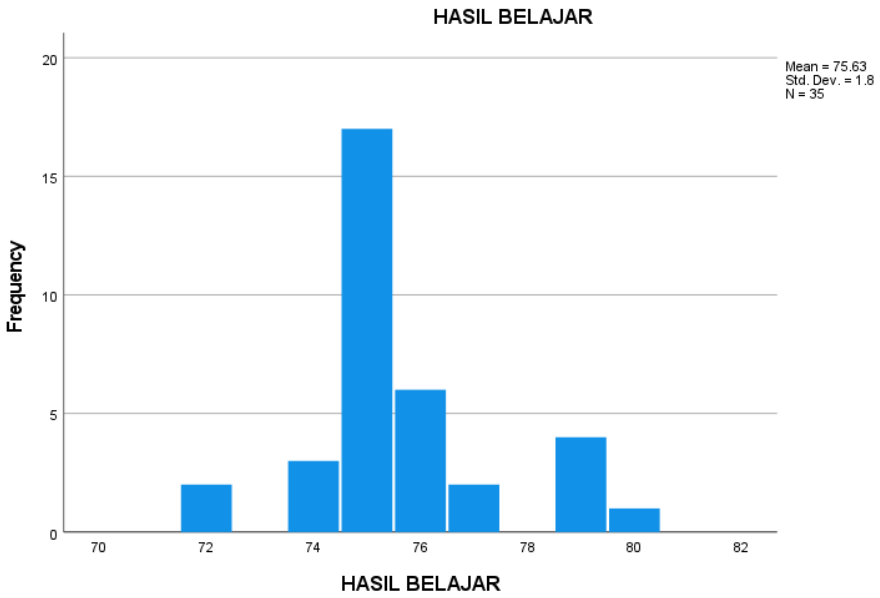
Picture 4. Histogram of Learning Motivation.

The Product Moment correlation analysis yielded a value of r calculated = 0.681 greater than the critical value of r of the table = 0.334 at a significance level of 5%. The determination coefficient ($D=r^{2\times100)}$ showed that almost half of the increase in student motivation was influenced by the implementation of STAD, while the remaining 53.6% was related to external factors such as family support, personal interest in Islamic history, or reinforcement methods from teachers.

Based on the results of the analysis, it can be concluded that H0 is rejected, and Ha is accepted. So, there is a positive relationship between the application of the STAD-type cooperative learning model and student learning motivation. Thus, the application of the STAD model has been proven to have a positive effect on students' learning motivation in SKI subjects at MTs Rejang Lebong Regency. These findings are in accordance with various studies that have been carried out Motaei (2014), that cooperative strategies can improve student learning achievement. The increase in learning motivation generated by the implementation of STAD can be one of the factors that contribute to the increase in learning achievement.

The Influence of the Application of the STAD Type Cooperative Development Model on Student Learning Outcomes in SKI Subjects at MTs Rejang Lebong Regency.

Learning outcomes were assessed through three domains: cognitive (chronological understanding, cultural impact analysis), affective (internalization of values), and psychomotor (presentation skills). Based on the data of 35 students, the average learning outcome score reached 75.63 with a relatively small standard deviation, showing the consistency of achievement between students. The distribution of scores was strongly concentrated in the range of 72–80, where 48.6% of students (17 people) recorded scores exactly at 75, being the mode of distribution. Scores of 74 and 76 were obtained by 8.6% and 17.1% of students, respectively, while only 5.7% (2 students) were below 73. On the high side, a score of 79–80 was achieved by 14.3% of students (5 people), with one student achieving the highest score of 80.



Picture 5. Histogram of Learning Outcomes.

The Product Moment correlation analysis yielded a calculated r value = 0.361 greater than the critical value r of the table = 0.334 at a significance level of 5%. The determination coefficient (D=r2×100) indicated that the implementation of STAD contributed a small amount of 13.1% to the improvement of learning outcomes, while the remaining 86.9% was influenced by other factors such as the background of initial knowledge, the intensity of independent training, or the effectiveness of teacher evaluation.

Based on the results of the analysis, it can be concluded that H0 is rejected and Ha is accepted. So, there is a positive relationship between the application of the STAD-type cooperative learning model and student learning outcomes. Thus, the application of the STAD model has been proven to have a positive effect on student learning outcomes in SKI subjects at MTs Rejang Lebong Regency. These findings support the research findings of Fong (2007), Newman and Thompson (1987), and Slavin (2005) which showed that cooperative strategies, including STAD, can improve student learning achievement. This improvement in learning outcomes can be attributed to several characteristics of STAD that support an effective learning process.

DISCUSSION

The application of the STAD Type Cooperative Learning Model to SKI subjects at MTs Rejang Lebong faces specific challenges related to heterogeneous group dynamics, where differences in students' abilities in one group significantly affect the interaction and learning process. Groups of four to five students with different backgrounds of abilities and characteristics create rich and diverse social interactions, but they also pose difficulties in managing group discussions, especially when there is dominance by certain students or a significant difference in understanding of the material. Teachers play an active role in overcoming these conflicts and difficulties by providing clear division of tasks and facilitating discussions so that each member can contribute in a balanced manner. The management of discussion time is an important aspect that must be strictly regulated so that the learning process remains effective, especially in adapting SKI materials based on Islamic values with group activities that require space for exploration and reflection. The five main dimensions of STAD, namely group cooperation, awards, individual development, healthy competition, and material completeness, are manifested in SKI learning practices. Group cooperation is enhanced through structured discussions that force students to exchange ideas and take responsibility for group outcomes, while the reward system mechanisms implemented in this model motivate students to compete in a healthy manner and increase their enthusiasm for learning. This award

is not only material, but also recognition of the efforts and achievements of the group, which strengthens the sense of responsibility and togetherness in achieving learning goals (Odutayo & Fonseca, 2024). In addition, STAD also has no effect on gender, which suggests that this model is inclusive and fair for all students. Individual development is monitored through continuous evaluations that allow teachers to identify each student's progress and difficulties so that interventions can be made in a timely manner. Healthy competition is reflected in increased enthusiasm for learning without creating negative pressure, and completeness of the material is pursued through gradual mastery supported by quiz-based individual discussions and evaluations. Concrete examples of classroom dynamics can be seen in group discussion activities where students ask each other critical questions and provide creative solutions to the historical problems they face, as well as in students who show a significant improvement in understanding of SKI material after participating in the learning cycle with the STAD model. The average model implementation score of 76.46 and the highest learning motivation score of 78.60 reflect the success of the implementation of STAD in creating a conducive and participatory learning environment. Factors such as students' diverse educational backgrounds and parental support also influence these outcomes, with students with stronger support likely to show higher motivation and engagement. Theoretically, these dimensions of STAD strengthen the learning process and student learning outcomes in accordance with the theory Slavin (2015) which emphasizes the importance of positive dependency and individual responsibility in cooperative learning, so that students do not only learn passively but actively contribute in groups. This success is also supported by the findings Mendo-Lázaro et al. (2022) highlighting the importance of strong cooperation between group members, as well as Motwani et al. (2022) which shows that cooperative learning such as STAD is able to improve students' critical thinking skills and creativity through heterogeneous group discussions.

The measurement of creativity is carried out through six dimensions, namely curiosity that encourages students to actively ask questions and seek sources of information, diligence in learning which is reflected in the consistency of reading and repeating material, confidence that shows independence in doing tasks, openness to new things that spur innovation, courage to take risks in decision-making, and divergent thinking skills that allow students to come up with various solutions alternative. The application of the STAD Type Cooperative Learning Model has a significant influence on students' learning creativity in SKI subjects at MTs Rejang Lebong Regency, which is measured through six dimensions, namely curiosity that encourages students to actively ask questions and look for sources of information, perseverance in learning which is reflected in the consistency of reading and repeating material, confidence that shows independence in doing assignments, openness to new things that spur innovation, courage to take risks in decision-making, and divergent thinking skills that allow students to come up with a variety of alternative solutions. The STAD model encourages creativity through heterogeneous group discussions that provide space for students to exchange diverse ideas and perspectives, rewards that motivate students in generating new ideas, and create a learning environment conducive to the expression of creative ideas (Chakyarkandiyil & Prakasha, 2023). Example Mulyati (2019) found that the application of the STAD method in a Buddhist Sunday School succeeded in significantly increasing students' learning creativity, where more than 80% of students showed improved ability to generate original ideas and dare to express their ideas. This happens because STAD encourages active interaction and responsibility within the group, creating a dynamic learning atmosphere and supporting the development of creativity. Silva et al. (2022) concludes that a structured cooperative learning (CL) model can meaningfully improve students' creative thinking skills. Bukit et al. (2022) also reported an increase in the percentage of student creativity from 55% to 79.8% after two cycles of implementing STAD in elementary school year V learning, which confirms that a learning structure that prioritizes cooperation and heterogeneous group discussions is able to stimulate students to think creatively and critically. Johnson & Johnson (2021) emphasizing that promotive interactions in cooperative learning encourage students to ask each other questions and build mutual understanding, which in turn improves critical and creative thinking skills. Moreover Ibrahim & Adnan (2019) highlights that organized group discussions in STAD facilitate divergent

thinking, i.e. students' ability to come up with alternative solutions to a problem. Promotive interactions between students in groups encourage constructive exchange of ideas and build mutual understanding, which ultimately enhances students' creativity and critical thinking skills. The contribution of STAD to student learning creativity stands at 55.2%, which suggests that more than half of the increase in creativity can be explained by the application of this model. This is very important in SKI learning which requires a deep understanding as well as innovation in connecting historical values with today's life. Creativity theory Guilford (1967) which emphasizes the importance of interaction and diversity of experiences in developing creativity is very much in line with the implementation of STAD, where a learning structure that places students in heterogeneous groups allows them to exchange different ideas and perspectives, as reflected in the results of this study.

Student learning initiatives in SKI subjects at MTs Rejang Lebong Regency have received a significant positive influence from the implementation of the STAD-type cooperative learning model. This learning initiative is measured through four dimensions, namely proactivity that reflects students' activeness in group discussions, persistence that is seen from students' ability to do assignments without direct instruction from the teacher, curiosity that encourages independent exploration of the material, and imagination that allows students to visualize the learning context creatively. These four dimensions together form the attitudes and behaviors of students who are active and independent in the learning process. The implementation of STAD encourages intense social interaction in heterogeneous group discussions and clear division of tasks, so that students are encouraged to help each other and share knowledge. This directly stimulates creativity as well as student learning initiatives. Examples of behaviors that reflect increased initiative are students who are more actively participating in group discussions, working on assignments without direct direction, and independently seeking additional sources of information to deepen their understanding of SKI material. Johnson & Johnson (2021) emphasizing that in cooperative learning, promotive interaction between students is essential to encourage learning initiatives. These interactions create an atmosphere where students ask each other questions, provide feedback, and build mutual understanding. Thus, students not only passively receive information, but actively engage in the learning process that fosters a sense of responsibility and a desire to contribute. Ibrahim & Adnan (2019) highlighted that a clear division of tasks within the STAD group facilitates individual responsibility as well as collaboration. This makes students encouraged to take the initiative in completing their assignments without always having to wait for the teacher's direction. They also found that a supportive and heterogeneous group atmosphere increased students' motivation to actively seek solutions and share knowledge. Meanwhile, Motwani et al. (2022) revealed that cooperative learning such as STAD is able to increase students' persistence in learning. Hill et al. (2020) also shows that structured collaborative learning such as STAD increases students' readiness and activeness in taking roles in the learning process independently and in groups. With social support from peers and a sense of responsibility towards the group, students are more motivated to persevere and complete tasks despite difficulties. The familiar classroom atmosphere and direct communication without intermediaries make students more engaged in real discussions and struggle with ideas, thus providing opportunities for students to expand and develop their thinking more than conventional methods (Trinova & Dalena, 2017). Pawattana et al. (2014) adding that positive interaction and a sense of unity in cooperative learning groups fosters social strength that allows students to develop competencies and understand the content of lessons better. This research also shows that a collaborative learning environment strengthens students' confidence in taking the initiative. The contribution of STAD to student learning initiatives reached 43.03%, which suggests that almost half of the variation of learning initiatives can be explained by the application of this model. This is very influential in the SKI learning process which requires students to be active and independent in understanding the material. The theory of learning motivation that emphasizes the importance of a learning environment that supports student initiative and responsibility is very much in line with the implementation of STAD, where promotive interaction and positive dependency between group members are the main drivers.

Thus, the application of STAD not only improves the cognitive aspect, but also builds an essential proactive and independent attitude in SKI learning.

Student learning motivation in SKI subjects at MTs Rejang Lebong Regency has increased significantly through the application of the STAD-type cooperative learning model, which is measured through two dimensions, namely intrinsic motivation which includes students' interests, talents, and internal needs, as well as extrinsic motivation related to environmental support such as family, school, and community. A group reward system that provides appreciation based on individual and group progress successfully builds strong collective motivation, creating a learning environment conducive to building confidence and learning satisfaction. Examples of student behavior that reflect increased motivation are higher enthusiasm in following the learning process, activeness in expressing opinions during group discussions, and increased confidence in doing assignments. Husamah & Pantiwati (2014) found that the integration of STAD with project-based learning can improve all components of student motivation in an integrated manner, from attention, relevance, confidence, to learning satisfaction. This shows that the implementation of STAD not only motivates students externally, but also strengthens their intrinsic motivation. Bećirović (2023) states that collaborative learning predicts increased motivation because students feel social support and shared responsibility, which reinforces a sense of attachment and commitment to learning. These findings are in line with the meta-analysis Motwani et al. (2022) which shows the positive influence of cooperative learning on students' motivation and learning attitudes in general. The SKI learning model that requires a deep interest in the history of Islamic culture, STAD which provides group challenges and individual rewards is able to encourage higher learning motivation than conventional methods. Research Yang et al. (2024) emphasizes that learning conditions that support social relationships and competence will increase students' intrinsic motivation, while Slavin (2015) emphasizes that positive social interaction and mutual appreciation for group success create a conducive learning climate. The motivationist perspective also highlights that task motivation is highly influential in the learning process, where reward structures and group goals are the main drivers (Slavin, 1995, 2015). Study Wardani & Sandy (2016) show that students feel more confident and motivated because of peer support when facing difficulties, whereas STAD characteristics such as individual accountability, healthy competition, and collaboration increase students' enthusiasm for learning (Ibrahim & Adnan, 2019). Johnson & Johnson (1987) also predicts increased motivation-to-learn after the implementation of STAD, which is supported by empirical findings Tite & Lantu (2024) which reported an increase in student motivation of up to 40.1%. Jamaludin & Mokhtar (2018) adding that acknowledging students' roles in the group makes them more focused and motivated. There has been a significant increase in motivation indicators, such as the proportion of students who actively express their opinions and do assignments on time reaching more than 90% in the final cycle (Ibrahim & Adnan, 2019). This increase is also reflected in the increase in the number of students who stated "happy to learn SKI" in the motivation questionnaire.

The data from the guide teachers indicated that students' positive emotions and sense of responsibility were stronger during the group process, so that their motivation to learn remained higher than before the implementation of STAD. In addition, motivation is significantly correlated with problem-solving confidence, as stated by Yang et al. (2024), showing that this confidence can encourage students to help friends study. This study confirms the relationship between motivation theory and empirical results in the context of SKI at MTs Rejang Lebong. Its main contribution is to prove that STAD, which has been shown to increase motivation in various subjects, is also effective in strengthening students' learning motivation in the field of religion and Islamic cultural history. This is in line with the results of the research Parmono (2024) in MTs in Bontang which showed almost perfect motivation after using STAD. Contextually, relatively dry SKI requires a collaborative touch to make students feel motivated, and this study shows that STAD is able to add both intrinsic and extrinsic motivational factors. Thus, these findings confirm that the cooperative learning model can be relied upon to generate motivation in the SKI classroom situation at Madrasah Tsanawiyah.

The magnitude of the influence of the application of the STAD Type Cooperative Learning Model on student learning outcomes in SKI subjects at MTs Rejang Lebong Regency can be seen from three domains, namely the cognitive realm which includes chronological understanding and cultural impact analysis, the affective realm related to the internalization of values, and the psychomotor realm which includes presentation skills. Each of these domains is significantly influenced by the implementation of STAD. In the cognitive realm, structured group discussions allow students to exchange ideas and understand the material more deeply, thereby improving conceptual understanding and analytical skills. The affective realm is built through the internalization of Islamic historical and cultural values supported by positive social interaction and appreciation within the group, which strengthens students' attitudes and motivation to learn. Meanwhile, the psychomotor realm develops through presentation skills as a result of group discussions that are trained on an ongoing basis, so that students are able to communicate their understanding better. The STAD model also facilitates ongoing evaluations that monitor individual student development, allowing teachers to provide appropriate feedback and tailor learning as needed. Awards given based on individual and group progress also motivate students to achieve optimal learning goals. Examples of learning outcomes that show improvement include an increase in exam scores that reflect a better understanding of the material, students' ability to present the results of group discussions in a more confident and structured manner, and an increase in the ability to connect Islamic historical values with the context of contemporary life in a critical and creative way. STAD's contribution to student learning outcomes reached 13.1%, which although smaller than other variables, still had a significant positive impact on the quality of SKI learning. This is very important considering that SKI learning requires a deep understanding as well as innovation in associating historical values with contemporary life. In addition, other studies show that students' material mastery increases rapidly to reach a full mastery level after several cycles of STAD use.

This is in line with the widespread finding that cooperative learning consistently has a positive effect on academic achievement compared to individualistic methods (Damkuviene et al., 2023). With the mechanism of teaching each other in teams, STAD strengthens the mastery of the concept of SKI due to repeated explanations by peers. However, it should be noted that the heterogeneous grouping that characterizes STAD can have different effects on high-achieving and low-achieving students (Baer, 2003). The theory of learning outcomes that emphasizes the importance of material mastery, internalization of values, and presentation skills is very much in line with the application of STAD, as explained by Slavin (2012, 2015) which emphasizes the role of cooperative learning in strengthening the cognitive and affective aspects of students. Bukit et al. (2022) also supports that the STAD method is able to significantly improve presentation skills and material comprehension. In addition, the research Parmono (2024) at MTs Bontang shows that the implementation of STAD contributes positively to improving overall student learning outcomes. In cooperative pedagogy theory, positive interdependence and cooperation are believed to increase material mastery because students teach each other and strengthen mutual understanding (Ibrahim & Adnan, 2019). The STAD method is designed to improve learning outcomes through periodic individual quizzes and team scores (Slavin, 1995). Johnson & Johnson (2021) arguing that competition between teams and team achievement responsibilities spur learning efforts, so that students are motivated to be more active. An increase in social studies learning outcomes after STAD cooperative learning can occur (Slagle, 2009; Widhyastika, 2017). Conceptually, learning outcomes improve because students who work together tend to help each other understand the material and consult before the test. Research Yang et al. (2024) also showed an increase in the knowledge of nursing students who used STAD for 18 weeks. The application of the STAD model at MTs Rejang Lebong has made a positive contribution to improving the quality of SKI learning through strengthening the cognitive, affective, and psychomotor domains. This model not only improves material mastery, but also builds better social attitudes and learning motivation, so that students can learn more effectively and funly.

This study implies that the consistent and effective implementation of the STAD Type Cooperative Learning Model in MTs Rejang Lebong Regency has a significant influence on

students' creativity, initiative, motivation, and learning outcomes in SKI subjects. Based on statistical analysis, the contribution of the STAD model to learning creativity reached 55.2% ($r = 0.743$; $\rho < 0.05$), which suggests that more than half of the variation in students' creativity can be explained by the application of this model. A positive influence was also seen in learning initiatives with a contribution of 43.03% ($r = 0.656$), although there were challenges in the form of dominance of certain group members that caused some students to remain passive. Learning motivation increased with a contribution of 46.4% ($r = 0.681$), although a small percentage of students needed additional strategies to increase motivation. Meanwhile, learning outcomes showed a smaller but significant increase with a contribution of 13.1% ($r = 0.361$), where most students achieved an upper-middle score. These quantitative implications confirm that STAD is not only a learning method, but also a strong predictor in improving students' cognitive, affective, and psychomotor aspects. Therefore, the implementation of STAD needs to be supported by adaptive strategies such as role rotation in groups and holistic assessments to optimize learning outcomes and overcome obstacles that arise. Overall, the results of the t-test and determination provide a strong empirical basis for teachers and institutions to adopt this model as an effective learning approach in the context of SKI. Thus, the implementation of STAD is also in line with the demands of 21st century education which emphasizes the development of 4C skills (critical thinking, creativity, collaboration, communication), so that it can help madrasas produce a generation of Muslims who not only master the material, but are also able to adapt and compete globally in accordance with the character of Pancasila Students.

CONCLUSION

Based on descriptive analysis ($\bar{X}$=76.46; SB=9.90) and t-test (t count=0.87; t table=2.46), the STAD-type cooperative learning model was applied consistently and effectively in MTs of Rejang Lebong Regency, with frequency distribution showing that 74.3% of teachers achieved a score of ≥66 and a moderate standard deviation reflecting the variation in implementation between schools, although a small number still had low scores. The application of this model proves a significant contribution to the improvement of students' learning creativity, as shown by a high correlation ($r=0.743$; $\rho<0.05$) and a determination coefficient of 55.2%, with an average creativity score ($\bar{X}$=76.91) and 74.3% of students achieving a score of ≥72, indicating their ability to generate original ideas during group discussions. In addition, the STAD model was shown to be effective in improving student learning initiatives with a correlation ($r=0.656$) and determination of 43.03%, although observations showed that 31.4% of students were still passive due to the dominance of certain group members, as reflected by the standard deviation of 9.10 which showed variations in individual responses. Students' motivation to learn also increased with a correlation ($r=0.681$) and determination of 46.4%, as well as an average score of 78.60, but 14.3% of students with a score of ≤74 required an adjustment strategy for motivation optimization. Finally, although the contribution of STAD to learning outcomes is relatively low ($r=0.361$; D=13.1%), average score of 75.63 and strong concentration in the range of 72–80 (48.6% of students recorded a score of 75 as a mode) proved effective in helping students achieve minimum competency standards, although the need for the integration of other approaches for holistic improvement. Overall, the study confirms that STAD can create a collaborative environment that supports the development of creativity, initiative, and motivation to learn, although its implementation needs to be refined to accommodate the heterogeneity of students' abilities and strengthen long-term academic impact.

Based on the findings and conclusions of the research, some recommendations that can be applied to increase the effectiveness of the STAD model in MTs in Rejang Lebong Regency are as follows. First, schools need to design professional training programs for teachers that focus on managing group dynamics and integrating Islamic values into learning activities. This is important considering the limitations of the implementation of STAD in connecting SKI material with the context of Islamic historical values in depth, as identified in the discussion. Second, teachers are advised to develop project-based activities or case studies that challenge students to explore ideas creatively and critically, such as the analysis of Walisongo's da'wah strategies through discussion simulations or the creation of visual media, so that creativity

(which contributes 55.2%) can be optimized through holistic assessment. Third, the implementation of the division of rotating roles in groups (such as discussion leaders, note-takers, or presenters) needs to be implemented to reduce the dominance of certain members which causes 31.4% of students to remain passive, while strengthening the active participation of all students in building learning initiatives. Fourth, the reward system in STAD should be designed to be more inclusive by combining group and individual appreciation based on relative improvement, given that 14.3% of students with a motivational score of ≤74 require additional incentives to maintain enthusiasm for learning. Fifth, to improve learning outcomes, which contribute only 13.1% of STAD, this model needs to be combined with other approaches such as *problem-based learning* or analytical tasks that emphasize deep understanding, along with advanced research to identify external factors (such as learning environment, family support, and learning style) that may affect academic performance. These steps are expected to strengthen the impact of STAD comprehensively, both on the cognitive, affective, and psychomotor aspects of students, while answering the challenges of 21st century education that emphasizes the development of 4C skills.

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