

## STUDENTS LEARNING OUTCOMES DIFFERENCES ON AKIDAH AKHLAK: A STUDY OF COOPERATIVE LEARNING MODELS ON JIGSAW-TYPE AND STAD-TYPE OF KALAM SCIENCE MAIN TOPIC AT CLASS XI IN MADRASAH ALIYAH NEGERI 1 POLEWALI MANDAR

Mustamin<sup>1</sup>, Ilyas Ismail<sup>2</sup>, Wahyuni Ismail<sup>3</sup>

Student of Postgraduate Islamic Religious Education Study Program UIN Alauddin, Indonesia<sup>1</sup>  
Alauddin State Islamic University of Makassar, Indonesia<sup>2,3</sup>

Email: [mustamin90@gmail.com](mailto:mustamin90@gmail.com)<sup>1</sup> (Corresponding author)

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**Abstract:** This study examines the learning outcomes of students in moral academia subjects using jigsaw and STAD-type cooperative learning models in MAN 1 Polewali Mandar. This research is a pseudo-experiment. The samples were class XI IPA 1 and class XI IPS 2, both given treatment (treatment). Class XI IPA 1 was given the treatment of the jigsaw-type cooperative learning model, and class XI social studies two was given the treatment of STAD type cooperative learning model. In data collection, researchers used tests, observations, and documentation. The data obtained were then processed using an independent test formula of the t-test sample, with the help of the SPSS version 25 application. The results of the study obtained in the two groups through descriptive statistical analysis, the average learning outcomes of akidah akhlak using the jigsaw type learning model were = 81.25. In contrast, the average learning outcomes of Akidah akhlak using the STAD-type cooperative learning model were = 79.60. The results of the data homogeneity analysis showed that the F-value =  $1.343 \leq F_{table} = 4.10$  expressed the sample data as homogeneous. For the Hypothesis test, the t-test showed that what was obtained was calculated as  $1.76 < table 1.991$ , this shows that  $H_0$  is accepted and  $H_1$  is rejected, so it can be concluded that there is no difference in learning outcomes in classes taught with the jigsaw-type and the STAD-type cooperative-learning model class XI science one and class XI IPS 2 in MAN 1 Polewali Mandar.

**Keywords:** Learning Outcomes; Jigsaw; STAD Type

### I. INTRODUCTION

National education based on Pancasila and the 1945 Constitution of the Republic of Indonesia serves to develop capabilities and shape the character and civilization of a dignified nation to educate the nation's life. Therefore, to develop this function, the government formulated a central education system as stated in the Law of the Republic of Indonesia Number 10 of 2003 concerning the National Education System. In the Act, it is explained that:<sup>1</sup>

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<sup>1</sup>Law of the Republic of Indonesia Number 20 of 2003 concerning the National Education System Chapter II Article 3.



*National Education aims to develop the potential of students to become human beings who have faith and devotion to God Almighty, have a noble character, are healthy, knowledgeable, capable, creative, independent, and become democratic and responsible citizens.<sup>2</sup>*

The realization of the goals of National education is indeed very much needed for the professional performance of an educator in reconstructing the learning process so that students can learn actively (active learning). As a teacher or educator, teachers are one of the determining factors for the success of every educational effort. That shows how urgent the role of teachers or educators is in the world of education. Similarly, to teach students, educators are intended to have multiple roles in creating effective and enjoyable learning conditions. Educators are always intended to be motivators in learning so that students never feel bored learn.

Learning is a reciprocal interaction between educators and students in education. Therefore, in learning, high patience, tenacity in teaching, and transparency of the ability to manage the learning process are needed. Therefore, educators are also expected to be able to build a passion for learning with students.<sup>3</sup> Therefore, an educator must master various learning models and methods to create practical, engaging, and fun learning so that students' attention to the lesson increases and, in the end, a spirit of learning produces satisfactory grades. Therefore, one of the ways to improve the quality of education is that it is necessary to improve the quality of learning. Thus, it is also necessary to design various learning methods that are effective, efficient, and have attractiveness.<sup>4</sup> That shows that advancing the quality of education is not an easy matter but a complex matter which requires hard work, tenacity, and cooperation with various parties.

Students in learning moral creeds are expected to be able to achieve values and attitudes that meet the competency standards of graduates, which are judged by the abilities that students have, namely being able to understand the terms of akidah, principles, streams, and methods of improving the quality of akidah and improving the quality of faith through understanding and living al-Asmaul husna and the application of anchored behavior in life. Understand the terms of morals and Sufism, apply methods of improving moral quality, get used to commendable behavior, and avoid despicable behavior.

In answering this problem, one of the steps that must be taken is for researchers to choose a learning model to find the influence that is able to improve student learning outcomes is the Cooperative Learning model, with its various types. This learning model is widely discussed by education observers these days. Therefore, we take the initiative to research learning outcomes in the cooperative learning model.

Cooperative learning is one of the group learning models that have specific rules. The basic principle of cooperative learning is that learners form small groups and teach each other to achieve common goals. Through cooperative learning, students considered to have little mastery of the material can teach students who do not

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<sup>2</sup>Undang-Undang Republik Indonesia Nomor 20 tahun 2003 Tentang Sistem Pendidikan Nasional Bab II Pasal 3.

<sup>3</sup>Slameto, *Belajar dan Faktor-faktor yang Mempengaruhinya* (Cet. I; Semarang: CV. IKIP, 1998), h. 45.

<sup>4</sup>Hidayanto, *Belajar dan Pembelajaran* (Cet. I; Semarang: CV. IKIP, 1998), h. 45.

understand the material without feeling disadvantaged. Learners lacking understanding can learn in a pleasant atmosphere because many friends help and motivate them. Learners who were previously accustomed to being passive, however, after using cooperative learning, will be forced to actively participate in order to be accepted by their group members.<sup>5</sup>

Then in cooperative learning has several types, but prospective researchers choose jigsaws and STADs as alternative solutions because prospective researchers think these types can improve student learning outcomes. Looking at relevant previous research. Nurul Rahmah, through his research, stated that the STAD type of cooperative learning model effectively improves student learning outcomes in moral akidah subjects.<sup>6</sup>

Based on the facts in Madrasah Aliyah Negeri 1 Polewali Mandar, according to one of the teachers that there are still students whose morals and behaviors show commendable behavior, as well as the learning outcomes of students in the subject of moral akidah, namely based on data that the scores obtained by students are in the category between 60-70, some get below 60. So that the student must repeat to meet the KKM.

Based on these considerations from this background, the problem in this study is how the difference in the learning outcomes of the moral creeds of students who will be taught using the Jigsaw-type cooperative learning model and the STAD-type cooperative learning model on the subject matter of class XI kalam science in Madrasah Aliyah Negeri 1 Polewali Mandar?

## II. THEORETICAL REVIEW

### a. Cooperative Learning Model

A cooperative learning model is a guideline or instruction of teaching strategies designed to achieve a learning objective. This guideline contains the responsibility of educators in planning, implementing, and evaluating learning activities. One of the objectives of using the learning model is to improve the ability of students to learn.<sup>7</sup>

The cooperative learning model is widely used to realize student-centered learning activities (student-oriented), especially to overcome problems in the learning process, including students who cannot work together with others.<sup>8</sup>

Anita Lie mentioned cooperative learning with cooperative learning, a learning system that provides opportunities for students to collaborate with structured tasks.<sup>9</sup>

Cooperative learning contains the notion of a typical attitude or behavior in working or helping each other in an orderly cooperative structure in a group. The

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<sup>5</sup>Made Wena, *Strategi Pembelajaran Inovatif Kontemporer, Suatu Tinjauan Konseptual Operasional* (Cet. 9; PT Bumi Aksara: Jakarta, 2014), h. 189.

<sup>6</sup>Nurul Rahmah, "Meningkatkan Hasil Belajar dalam Mata Pelajaran Akidah dan Akhlak dengan Menggunakan Model *Student Teams Achievement Division* (STAD) di Madrasah Aliyah Negeri 1 Banjarmasin" *Jurnal PTK dan Pendidikan* 3, no. 2 July-December (2018): p. 141.

<sup>7</sup>Trianto, *Model-Model Pembelajaran Inovatif Berorientasi Konstruktivistik: Konsep, Landasan Teoretis Praktis dan Implementasinya* (Jakarta: Prestasi Pustaka, 2007), p. .5.

<sup>8</sup>Isjoni, *Cooperative Learning Mengembangkan Kemampuan Belajar Berkelompok* (Cet. I; Bandung: Alfabeta 1997), p. 18.

<sup>9</sup>Anita Lie, *Cooperatif Learning* ( Jakarta: Grasindo, 1994 ), p. 23.

involvement of each group member dramatically influences the success of the group. Cooperative learning can also be interpreted as a structure of everyday tasks in togetherness among fellow group members.<sup>10</sup>

Cooperative learning is a learning model using a grouping system or small teams, which is between four-six people with different (heterogeneous) academic ability backgrounds, genders, races, or ethnicities. The grading system is carried out against groups. Each group will receive an award (reward) if the group can show the required achievements.<sup>11</sup> Thus each member of the group will have a positive dependence. Such dependence will further give rise to the individual's responsibility to the group and the interpersonal skills of each group member.

### 1. Jigsaw Type Cooperative Learning Model

Jigsaw-type cooperative learning is one type of cooperative learning that encourages students to be active and help each other in mastering learning materials to achieve maximum learning outcomes. In this learning model, there are stages in its implementation.<sup>12</sup> This jigsaw has been developed and tested by Elliot Arosen and friends from the University of Texas and adopted by Slavin and friends at Jhon Hopkins University.<sup>13</sup> Jigsaw-type cooperative learning consists of several members in a group who are responsible for mastering part of the learning material and can teach that part to other members in the group. Thus, jigsaw-type cooperative learning is one type of cooperative learning that encourages students to be active and help each other in mastering the subject matter to achieve maximum learning outcomes.

Jigsaw-type cooperative learning is a type of cooperative learning consisting of several members in a group who are responsible for mastering part of the learning material and can teach the part to other members of their group.<sup>14</sup> The jigsaw-type cooperative learning model is a learning model that emphasizes learners learn in small groups of 4-5 people heterogeneously and work together with positive interdependence, and are responsible for the completeness of the part of the subject matter that must be studied and convey the material to other group members.<sup>15</sup> Jigsaws are designed to increase students' sense of responsibility for their learning as well as the learning of others. Learners not only learn the material given but must also be ready to give and teach the material to other group members. Thus, learners are interdependent with each other and must work together cooperatively to study the assigned material.

In the jigsaw-type cooperative learning model, there is a group of origin and a group of experts. The origin group, which is the parent group of students consisting of

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<sup>10</sup>Etin Solihatin, *Cooperative Learning. Analisis Model Pembelajaran IPS* (Cet. III; Jakarta: Bumi Aksara, 2008), p. 4.

<sup>11</sup>Wina Sanjaya, *Strategi Pembelajaran Berorientasi Standar Proses Pendidikan* (Cet. VII; Jakarta: Kencana, 2010), p. 242.

<sup>12</sup>Trianto, *Mendesain Model Pembelajaran Inovatif-Progresif: Konsep Landasan dan Implementasinya pada Kurikulum Tingkat Satuan Pendidikan*, p. 58-59.

<sup>13</sup>Trianto, *Mendesain Model Pembelajaran Inovatif-Progresif: Konsep Landasan dan Implementasinya pada Kurikulum Tingkat Satuan Pendidikan*, p. 73.

<sup>14</sup>Arends, *Learning to Teach* (New York: Graw Hill Companis, 1997), p. 13.

<sup>15</sup>Nurhadi & Agus Gerrad Senduk, *Pembelajaran Kontekstual (Contextual Teaching and Learning/CTL) dan Penerapannya dalam KBK* (Malang: UM PRESS, 2003), p. 64.

students with diverse abilities, origins, and family backgrounds, this group is also called the home team.<sup>16</sup> The original group is a combination of several experts. Expert group and/or expert group, which is a group of learners consisting of members of different groups of origin who are assigned to study and explore a particular topic and complete tasks related to their topic to be then explained to members of the original group.

The learning process with a jigsaw-type cooperative model aims to provide stimulus and arouse the potential of students optimally in a learning atmosphere in small groups that vary in ability and gender. In this learning model, students, when learning in groups, will develop an open learning atmosphere in the dimension of peelage or personal relationships that need each other, as well as a democracy between educators and students, students, and learners so that it is possible to develop values, attitudes, morals, and social skills. The jigsaw-type cooperative learning model supports students in learning. Group work can provide opportunities for students to use questioning skills to discuss a problem, motivate students who are still shy to be active, can create a pleasant learning atmosphere, develop discussion leadership, interact with students more information is obtained, and the conclusions obtained can be Accounted for.

In preparation for the implementation of jigsaw-type cooperative learning, the main steps are compiled as follows; (1) division of tasks, (2) division of expert sheets, (3) holding discussions, (4) holding quizzes. The sequence of steps of educator behavior with a cooperative learning model is described by Arends, which is curated in Isjoni as shown in the following table:

**Tabel 2.1**  
Syntax of the Jigsaw-type Cooperative Learning Model

Phase	Indicator	Teacher Activities
1	Clarify the goal and establishing the set	The teacher explains the learning objectives to be achieved in the lesson and motivates the learners to learn, as well as establishing sets.
2	Presenting information	The teacher presents information to the learners verbally or with text.
3	Organizing learners into learning teams	The teacher explains to the learners the procedure for forming learning teams and helps the group make an efficient transition.
4	Forming teamwork and learning	Teachers help teams learn as they work on their assignments
5	Test different materials	The teacher tests the learners' knowledge of various learning materials, or each group presents the results of its work.
6	Giving awards/recognition	Teachers look for ways to acknowledge individual and group learning efforts and outcomes. <sup>17</sup>

<sup>16</sup>Nurhadi & Agus Gerrad Senduk, *Pembelajaran Kontekstual (Contextual Teaching and Learning/CTL) dan Penerapannya dalam KBK*.

<sup>17</sup>Trianto, *Mendesain Model Pembelajaran Inovatif-Progresif: Konsep Landasan dan Implementasinya pada Kurikulum Tingkat Satuan Pendidikan*, h. 75-78.

Cooperative learning begins with educators informing the learning objectives and motivating learners to learn. This phase is followed by presenting information in text instead of verbal. Then continued, the learners' steps are brought to the guidance of educators working together to solve interdependent tasks. The latest phases of cooperative learning include presenting the group's final product or testing what the learners have learned and introduced the group and individual efforts.

Anita Lie stated that in the application of jigsaw-type cooperative learning, systematic steps are needed in its application which includes: "orientation, grouping, formation and coaching of expert groups, discussion (exposure) of expert groups in groups, tests (assessments), and group recognition."<sup>18</sup>

## 2. STAD type Cooperative Learning Model

According to Slavin, STAD is one of the simplest methods of cooperative learning and is the best model for starters for educators who are new to using a cooperative approach.<sup>19</sup>

The STAD (student teams achievement divisions) type of cooperative learning model was developed by Slavin at John Hopkin University of the United States and is the simplest. The STAD-type cooperative learning model is a cooperative learning model where students are placed in a learning team of 4-5 students, a mixture according to achievement level, gender, and ethnicity.<sup>20</sup>

According to Richard L. Arends, In the STAD model, learners in heterogeneous teams help each other by using a variety of cooperative learning methods and various quiz procedures.<sup>21</sup>

According to Miftahul Huda, this method developed by Slavin involves "competition" between groups. Learners are grouped variously by ability, gender, race, and ethnicity. First, learners study the material with their groupmates, and then they are tested individually through quizzes. Each member's quiz score earns determines the score earned by their group. So, each member should try to get the maximum score on the quiz if their group wants to get a high score.<sup>22</sup>

According to Jamil Suprihatiningrum, the Student Team Achievement Division (STAD) is the most straightforward cooperative approach. STAD refers to group study learners, presenting new academic information to learners each week using verbal or text presentations. Learners in a particular class are divided into groups of 4-5. Each

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<sup>18</sup>Anita Lie, *Cooperatif Learning*, h. 55.

<sup>19</sup>Robert E. Slavin, "*Cooperative Learning: theory, research and practice*, terj. Narulita Yusron, *Cooperative Learning: Teori, Riset dan Praktik*" (Cet. XVII; Bandung: Nusa Media, 2016), h. 143.

<sup>20</sup>Syahril Lukman, et.al, "*Pengaruh Model Pembelajaran Kooperatif Tipe Jigsaw dan STAD Terhadap Hasil Belajar Geografi Ditinjau Dari Motivasi Belajar Siswa Kelas VIII SMP Negeri 1 Jatinom Klaten Tahun Pelajaran 2013/2014*", p. 3.

<sup>21</sup>Richard L. Arends, "*Learning To Teach*, terj. Helly Prajitno Soetjipto dan Sri Mulyantini Soetjipto, *Learning To Teach Belajar untuk Mengajar* ", p. 13.

<sup>22</sup>Miftahul Huda, *Cooperative Learning Metode, Teknik, Struktur dan Model Penerapan* (Cet.X; Yogyakarta: Pustaka Pelajar), p. 116.

group must be heterogeneous, consisting of men and women from different tribes, having high, medium, and low abilities.<sup>23</sup>

STAD type Cooperative Learning Steps:

- a) Goal delivery and motivation
- b) Group division
- c) Presentations from educators
- d) Learning activities in teams (teamwork)
- e) Quizzes (evaluation)
- f) Team achievement awards

### **b. Learning Outcomes**

Learning outcomes are the goal of implementing learning activities in schools. Learning outcomes can be improved through conscious efforts, leading to positive changes, which are then called the learning process. The end of the learning process is the acquisition of learning outcomes for students. The learning outcomes of students in the classroom are collected in the set of classrooms learning outcomes. All these learning outcomes result from an interaction of learning and teaching actions, commonly called learning. Meanwhile, from the student side, learning outcomes are the learning process's end and the learning process's peak. The learning outcomes that the researchers mean are the number of values obtained by students given by the teacher after learning in one semester.

In Indonesian language dictionary, result is defined as something that is made (made, made, and so on) by effort.<sup>24</sup> Thus the result is something that arises or is the result of an effort made. The notion of learning has been widely put forward by psychologists, including educational psychologists. The definition of learning proposed by Slamet is as follows:

*“Learning is a process of effort made by a person to obtain a new change in behavior due to his experience interacting with his environment.”*<sup>25</sup>

According to Gegne, as Hosnan quoted, learning is a complex activity; after learning, people will have skills, knowledge, attitudes, and values. Thus, learning is a set of cognitive processes that change the attitude of stimulation of the environment, passing through the alteration of information into new capabilities.<sup>26</sup>

From the above opinions, it can be concluded that the learning outcome is the ability of skills, attitudes, and skills that the learner acquires after he receives the treatment given by the teacher to construct that knowledge in everyday life.

The learning process primarily determines learning outcomes, a good learning process using the right approach or method and an atmosphere that invites a sense of comfort is conducive to realizing the expected learning outcomes. The characteristics of learning include the following:

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<sup>23</sup>Jamil Suprihatiningrum, *Strategi Pembelajaran Teori & Praktik* (Yogyakarta: Ar RuzzMedia, 2013), p. 202-203.

<sup>24</sup>Depdikbud, *Kamus Lengkap Indonesia* (Cet. IV; Jakarta: Balai Pustaka, 1989), p. 300.

<sup>25</sup>Slameto, *Belajar dan Faktor-Faktor yang Mempengaruhinya*, P. 2.

<sup>26</sup>Hosnan, *Pendekatan Saintifik dan Kontekstual dalam Pembelajaran Abad 21* (Bogor: Ghalia Indonesi, 2014), P. 182.

1. Changes that occur consciously
2. Changes in learning are functional
3. In learning are positive and active
4. Changes in learning are not temporary
5. Changes in purposeful or purposeful learning
6. Change covers all aspects of behavior

### **III. RESEARCH METHODOLOGY**

This research is a type of quasi-experimental research with a quantitative approach. Experimental research is a study whose subject is given treatment (Treatment) and then measured due to that treatment on the subject. The location of the study chosen in this study is in MAN 1 Polewali Mandar. The research design used was the Two Group Pre and Post Test Design which revealed a causal relationship involving two experimental groups. The population determined in this study was all class XI students in MAN 1 Polewali Mandar, which amounted to 418 students. The research sample was 80 students of class XI science 1 (Experiment 1) and class XI IPS 2 (Experiment 2). Research instruments use tests, and data processing and analysis techniques use descriptive statistics and inferential statistics.

### **IV. RESEARCH RESULTS AND DISCUSSIONS**

In experimental class 1, a jigsaw-type cooperative learning model was applied. The number of class members is 40 people. Students are grouped into eight groups of 5 members. Each member has a different number. Then the students with the same number gather to form an original group that will discuss the problems given by the teacher. Based on research conducted in class XI science one, which was taught with a Jigsaw-type cooperative learning model for 6 (six) meetings. After the researchers processed the data that had been obtained from the test results in the form of multiple-choice questions, as many as 20 numbers were used as a test of the ability to find out the learning outcomes of students as well as the level of mastery of the student's material, the researchers tested a descriptive statistical analysis pre-test obtained the highest score of 75, the lowest score of 30 and an average of 55.7 and a standard deviation of 11.382. Then the post-test obtained the highest score of 95, the lowest score of 60, the average score of 81.25 and a standard deviation was 9.9. From these data, it can be concluded that the learning outcomes of Akidah Akhlak students in class XI IPA 1 who use the Jigsaw-type cooperative learning model are relatively good in improving student learning outcomes. The increase that occurs in student learning outcomes is due to the application of the Jigsaw-type cooperative learning model, which is a learning model that requires students to work more together and take full responsibility for understanding the learning material individually and in groups and helping to understand about something subject matter to their classmates. Theoretically, it can be understood that the Jigsaw-type Cooperative learning model is to emphasize learners learning and working in small groups collaboratively so that it can provide a stimulus for learners to be more passionate about learning. Cooperative learning means working together to achieve common goals. In cooperative activities, learners look for favorable outcomes for all group members. The strength of the Jigsaw-type cooperative learning model is that although it applies to learning in groups, it can improve the abilities of each group member individually. In addition, learners prevent aggressiveness in the



system of competition and alienation in individual systems without compromising cognitive aspects. The jigsaw-type Cooperative Learning Model can also develop the ability to verbally express ideas or ideas in words and compare them with the ideas of others, then help learners respect others, be aware of all their limitations, and accept all differences. Learning uses a jigsaw-type suitable method both in activating students and providing opportunities for students to express their individual opinions, improving learning outcomes. Initially, students were not conducive to implementing the jigsaw-type cooperative learning model because they had not felt the jigsaw-type cooperative method after it was implemented.

Furthermore, students have understood that learning can be carried out correctly, and students have begun to issue their own opinions and maintain answers that are considered correct. With the teacher forming the origin group and the expert group, learners think together, and each learner knows the answers to be given to all learners in the class. The teacher and the learners conclude with the final answer to all questions about the material presented.

Meanwhile, class XI IPS 2 is taught with a STAD-type cooperative learning model for 6 (six) meetings. After the researchers processed the data that had been obtained from the test results in the form of multiple-choice questions, as many as 20 numbers were used as a test of the ability to find out the learning outcomes of students as well as the level of mastery of the student's material, the researchers conducted a pre-test descriptive statistical analysis test obtained the highest score of 65, the lowest score of 30 and an average of 48.55 and a standard deviation of 16.323. Then the post-test obtained the highest score of 95, the lowest score of 60, the average score of 79.6 and a standard deviation was 9.17. The data on student learning outcomes in the classroom that applies the STAD-type cooperative learning model (experimental class 2) is good in improving student learning outcomes. The increase in student learning outcomes is because learning using this model promotes active and positive interaction and the cooperation of group members. In addition, it helps learners to acquire more cross-racial friendship relationships. Then make the role of the teacher more active and more focused as a facilitator, mediator, motivator and evaluator.<sup>27</sup> In addition, the findings in this study align with what was written by Robert Slavin, that the STAD type is the most widely applied in some subjects, including non-exact subjects.<sup>28</sup> There is an increase in learning outcomes after the STAD-type cooperative learning model is applied because the STAD type can make students active in finding and exploring material in a group atmosphere that can trigger students to share knowledge and skills.

For the hypothesis test, the difference between the post-test value of the experimental class 1 (XI IPA 1) and the experimental class 2 (XI IPS2), a calculated t-value of 1.76 and a t-table value of 1.991 based on the provisions of the hypothesis testing criteria, "if the t-count >t of the table, then H0 is rejected and H1 is accepted". Based on the analysis results of the value-count data < the t-table, namely (1.76<1,991). Thus, H0 is accepted, and H1 is rejected, meaning that it can be concluded that there is no significant difference between the learning outcomes of Akidah Akhlak class XI IPA 1 and class XI IPS 2MAN 1 Polewali Mandar who were taught with a jigsaw-type cooperative learning model and a STAD type cooperative learning model as evidenced

<sup>27</sup>Isjoni, *Cooperative Learning Efektifitas Pembelajaran Kelompok*, h. 62.

<sup>28</sup>Robert Slavin, *Cooperatif Learning teori Riset dan Praktek*, (Bandung Nusamedia, 2010), h. 143.

by statistical data showing that the average scores of the two groups did not experience significant differences. In experimental group 1 (XI IPA 1), which was taught using the Jigsaw-type cooperative learning model, the average score of student learning outcomes was 81.25 at the high category level, while the experimental group 2 (XI IPS 2), which was taught using the STAD type cooperative learning model, the average score of student learning outcomes was 79.60 which was also at the high category level. In conclusion, it can be said that the learning outcomes of students who are taught using the Jigsaw-type cooperative learning model do not experience significant differences from the learning outcomes of students who are taught using the STAD-type cooperative learning model. However, the average learning outcomes of students obtained from the Jigsaw-type cooperative learning model are slightly higher, namely 81.25 out of 79.6, which is the average learning outcome of students after the STAD-type cooperative learning model is carried out, but the difference is very slight and insignificant as evidenced by the difference test that the t-count is  $1.76 < 1,991$ .

The researcher stated that there is no difference because this model is sourced from the same model whose syntax is also almost the same so that both can make students creative in group learning, comfortable and happy in carrying out the tasks given to the teacher so that learning outcomes also increase as expected by the teacher.

It was found that there was no significant difference in learning outcomes between the Jigsaw-type cooperative learning model and the STAD-type cooperative learning model in this study, in line with the results of a study conducted by Nurul Hanifah with the title Differences in Elasticity Material Learning Outcomes Through Jigsaw Type Cooperative Learning Models and Student Achievement Division (STAD) Class X Students of SMA Negeri 5 Banda Aceh which in the results of his research found that t-count (2.32) which obtained smaller than t-table (2,042) which means that there is no significant difference in learning outcomes from after the application of the two types of learning, namely the Jigsaw type and the STAD type.<sup>29</sup>

Also, in line with the research by Brother Hamka, "comparison of learning outcomes of Islamic religious education using the STAD type cooperative learning model and jigsaw type in SAM 2 Polewali" stated that there was no significant difference in the learning outcomes of Islamic religious education using the STAD type cooperative learning model and the jigsaw type. The comparison of Islamic religious education learning outcomes using the STAD and jigsaw-type cooperative learning models obtained test calculations independent t-test, i.e. sig value. 2 tailed 0.986 is more significant than 0.05, which means that the comparison of learning outcomes of Islamic religious education using the STAD and jigsaw-type cooperative learning models is not significantly different or both can improve PAI learning outcomes.<sup>30</sup>

The research says that jigsaw-type cooperative learning models are more likely to improve learning outcomes than STAD. In this case, Brother Sugianto, "the difference in the application of jigsaw and STAD type cooperative learning models in terms of reasoning and mathematical communication abilities of high school students in

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<sup>29</sup>Nurul Hanifah, "Perbedaan Hasil Belajar Materi Elastisitas Melalui Model Pembelajaran Kooperatif Tipe Jigsaw dan Student Archievement Division (STAD) Siswa Kelas X SMA Negeri 5 Banda Aceh", *Jurnal Ilmiah Mahasiswa (JIM) Pendidikan Fisika*, Vol 1, no. 3 (Juli 2016), p. 72.

<sup>30</sup>Hamka, "perbandingan hasil belajar pendidikan agama islam menggunakan model pembelajaran kooperatif tipe STAD dengan jigsaw di SMAN 2 Polewali". *Thesis*. Makassar: Islamic Education Study Program Postgraduate UIN Alauddin, 2020.

Binjai" in his research stated that through data analysis, it was carried out by variance analysis (ANOVA). The main result of this study is that overall students learning with a jigsaw-type cooperative learning model is significantly better at improving the efficacy of mathematical reasoning and mathematical communication than students who learn with THE STAD type. With this the average increase in mathematical reasoning of students who obtained jigsaw-type cooperative learning was 0.75 and students who obtained cooperative learning tipe STAD 0.46.<sup>31</sup>

Therefore, the researchers implied that there was no significant difference in student learning outcomes between experimental class 1 (using the Jigsaw-type cooperative learning model) and experimental class 2 (using the STAD-type cooperative learning model) because the two types of learning came from the same learning model, namely the cooperative learning model. Jigsaw and STAD types emphasize the achievement of learning outcomes through group activities and distinguish only in the steps.

## V. CLOSING

The improvement of student learning outcomes in moral academia subjects after the pretest and posttest in experimental class 1 is 81.25, and in experimental class 2 is 79.60. After hypothesis testing, there is an insignificant difference between the learning outcomes of students in the subject of moral akidah in Madrasah Aliyah Negeri 1 Polewali Mandar, which is taught using a jigsaw-type cooperative learning model and a STAD-type cooperative learning model.

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