The Effect of Team-Assisted Individualization on Students' Social Skills in Physical Education

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Abstract: This study aims to determine the effect of the Team-Assisted Individualization model on improving students' social skills in Physical Education. This study used a Randomized Pretest-Posttest Control Group Design. The population in this study were 8th grade students of Adzkia Integrated Islamic Middle School of Sukabumi, totaling 214 people divided into 6 classes. The sampling technique uses cluster random sampling. The sample consisted of 60 people who were divided into the experimental group and the control group, each consisting of 30 people. The experimental group carried out learning using Team-Assisted Individualization, while the control group used Direct Instruction. The research instrument used to measure students' social skills is a questionnaire adapted from the Social Skill Improvement System Rating Skill (SSIS-RS). The results of this study indicate that there is an influence of Team-Assisted Individualization and Direct Instruction on improving social skills. But what is more influential is Team-Assisted Individualization. This research can be used as a guideline for physical education teachers in schools, especially at the junior high school level, so that they can carry out physical education learning using Team-Assisted Individualization to create a learning atmosphere that encourages students to improve their social skills.

Keywords: Team-Assisted Individualization, Social Skills, Physical Education.

INTRODUCTION

In general, social skills can be interpreted as a person's effectiveness in interacting with other people and society in harmony (Dowd, T., & Tierney, 2017; Tsangaridou et al., 2014). This can be demonstrated in various ways, such as listening to others, the ability to see situations from other people's points of view, communicating clearly, and the ability to collaborate (Virtanen & Tynjälä, 2022). Social skills play an important role at different stages of life, such as in the family, at school, various hobbies and other peer groups (Brackett et al., 2011; Greene & Burleson, 2003; Poulou, 2014).

Social skills are the behaviors students need to successfully get along with others in a variety of situations, including in school and society, thus enabling them to achieve social competence. (Samalot-Rivera & Porretta, 2009; Sheridan, 2000). The development of social skills is absolutely necessary through learning physical education in schools (Madrona et al., 2014). In

the physical education learning process there must be interaction between each student, teacher and student, and the environment (Väyrynen et al., 2016).

Many experts argue that the social skills that develop in schools related to learning consist of interpersonal skills and social skills (Brooks JR, 1984; McClelland & Morrison, 2003; Missal & Hojnoski, 2008). Interpersonal skills consist of verbal and nonverbal abilities that are used to start a conversation with someone or a group of people. Social skills in learning at school consist of being obedient to what the teacher orders (Foulks & Morrow, 1989; Missal & Hojnoski, 2008), For example, continuing to do assignments, following directions given by the teacher, and always doing assignments neatly (McClelland & Morrison, 2003).

One of the main goals in education today is the use of social skills in the learning process and improve learning that encourages students to achieve high academic achievement. (Ebrahim, 2010). Social skills can be learned and are very important to a child's success in the classroom and at school (Samalot-Rivera & Porretta, 2009). Social skills need to be taught explicitly. Teachers must plan for certain social skills, such as listening, cooperating, and providing appropriate feedback to each other, to improve students' interpersonal skills. (Sapon & Shevin, 2009). In physical education, social skills are needed because there is an interdependence relationship between the teaching system (learning objectives), managerial (maintaining order), and social tasks (student socialization) (Wallhead & O'sullivan, 2005).

Team-Assisted Individualization learning model combines cooperative learning with individual instruction systems (Metzler, 2005). Research has been conducted to determine the effectiveness of the Team Assisted Individualization learning model on students' attitudes in mathematics. The results of this study indicate that when students take part in learning mathematics using the Team Assisted Individualization model, students' attitudes towards learning mathematics greatly increase. (Awofala et al., 2013). Learning with the Team Assisted Individualization learning model makes students feel more confident thereby reducing students' anxiety about mathematics and making students prefer mathematics. (Sari, 2014; Awofala et al., 2013).

Team-Assisted Individualization is a topic of further research on junior high school students in Nigeria (Nneji, 2011). This study aims to determine the effect of the Team Assisted Individualization learning model on students' achievement in basic natural sciences. The results showed that student achievement increased when students participated in the learning process using the Team Assisted Individualization learning model. This is because every student has the

opportunity to work together in a team, share views and opinions, and be involved in solving problems. Similar research was also conducted by Tarim dan Akdeniz (2008) who tested the Team Assisted Individualization learning model and the STAD learning model on academic achievement. The results show that the Team Assisted Individualization and STAD cooperative learning models are more effective in terms of academic achievement than traditional methods

Team-Assisted Individualization includes a student-centered learning approach. Some of the research described above supports previous research which states that student-centered learning strategies can improve content learning, one of which is mathematics. (Olarewaju & Awofala, 2011). Meanwhile, teacher-centered teaching strategies have a negative effect on students' attitudes towards mathematics (Akay, 2010). Student-centered teaching makes students more reflective and critical in their thinking when compared to traditional teaching methods, teacher-centered teaching strategies (Ige, 2001).

The learning process is one of the factors that can affect student achievement. One way to fulfill student learning achievement is to choose and determine a learning approach that is appropriate and related to learning conditions, such as student characteristics to facilitate learning approaches, and can direct creative thinking (Tilaar, 2014). Students who do not carry out the learning process properly which ultimately affects their achievement, this is generally due to the selection of teaching methods that are not appropriate and ineffective. (Unachukwu, 1990). One of the factors causing the decline in student academic achievement is the continuous use of traditional teaching methods and the lack of innovation to use other teaching methods (Rahman & Ahmar 2016; Olarewaju & Awofala, 2011).

The learning process must make every student able to interact well. For example, communicate well and can work together. The importance of social interaction in the learning process because learning is a process of social construction linked by language and social interaction (Tilaar, 2014). So, in practice the learning process must make students interact socially with other students and also with the teacher. This is the task of a teacher because they have to choose and determine learning strategies that are in accordance with existing conditions so that students can follow the learning process properly.

Several studies have been conducted to determine the development of social skills. Some of these studies include the effect of project-based learning methods on improving the social skills of nursing students (Şenyuva et al., 2014). Furthermore, Team-Assisted Individualization improves social skills and student learning outcomes in computer and network learning (Novalinda et al.,

2020). Subsequent research on the influence of the Sport Education (SE) and Cooperative Learning models on the development of students' motivation, behavior, attitudes, and social skills (Montoya et al., 2020). However, research that specifically compares the effect of Team-Assisted Individualization and Direct Instruction-based learning models in improving junior high school students' social skills in Physical Education learning is still limited, so research is needed that discusses it in depth to add empirical results. Team-Assisted Individualization is a type of cooperative learning model that prioritizes the ability to collaborate, which in turn can affect the improvement of social skills. However, this depends on the management of the learning process. A more in-depth study is needed so that empirical evidence can be strengthened, one of which is by conducting research to find out more about improving students' social skills in Physical Education using Team-Assisted Individualization.

METHOD

Desain

This research is a quantitative descriptive research and the method used is True Experimental. The research design used in this study was the Randomized Pretest-Posttest Control Group Design. In this study, two groups of subjects were used, both groups were measured and observed twice. The first measurement is carried out before the treatment is given or is called the pretest. The second measurement is carried out after the treatment or is called the posttest.

Participants

Population determination is done before selecting the sample. The population is the group that is the interest of the researcher, the group that is the target of the researcher to generalize the research results (Fraenkel et al., 2012). The population in this study were 8th grade students of Adzkia Sukabumi Integrated Islamic Middle School, totaling 214 people with an average age of 13-14 years divided into six classes.

The sample in the study is the group where the information is obtained (Fraenkel et al., 2012). In this study, the sample was taken using the Cluster Random Sampling technique. The selection of the sample using the Cluster Random Sampling technique was based on the fact that this research was conducted in schools and was adjusted to the limitations of the school administration which did not allow individual random sampling in each class. So that the sample selection uses the Cluster Random Sampling technique, namely selecting samples randomly from

the intact class. The steps taken in determining this sample are to give a number to each class 8 which is divided into six classes. Then the numbers are randomized and taken as many as two numbers. The class selected based on the results of the lottery number is then used as the research sample.

Instrumentation

The instrument for measuring students' social skills in this study was adapted from the Social Skill Improvement System Rating Skill (SSIS-RS) developed by Gresham & Elliot (2008). The instrument used is an instrument that has been used in previous research by (Endrianto, 2018). SSIS-RS is a revision of the Social Skill Rating System (Gresham & Elliot, 1990). There are seven components in the Social Skill Improvement System Rating Skill (SSIS-RS), namely Communication, Cooperation, Assertion, Responsibility, Empathy, Engagement, and Self-Control.

The assessment for this instrument uses a Likert scale with scoring categories for positive statements, namely Strongly Agree (SS) with a value of 5, Agree (S) with a value of 4, Undecided (R) with a value of 3, Disagree (TS) with a value of 2, Strongly Disagree (STS) with a value of 1. As for negative statements, namely Strongly Agree (SS) with a value of 1, Agree (S) with a value of 2, Undecided (R) with a value of 3, Disagree (TS) with a value of 4, Strongly Disagree (STS) with a value of 5.

Procedures

This research was conducted in 12 meetings for 4 weeks and each week consisted of 3 meetings, with the intensity of each meeting being 3 x 40 minutes (120 minutes). The reason for the researcher carrying out the treatment for 4 weeks is based on Slavin's opinion which states that for cooperative learning to be effective, the duration of the study must be at least 4 weeks (Slavin, 1995). The pretest was carried out at the first meeting, and the posttest was carried out at the last meeting using a questionnaire instrument to measure students' social skills. So that the total becomes 14 meetings. The learning materials given to the two sample groups were the same, but in the implementation of the learning process there were differences, namely the control group carried out learning using the Direct Instruction model, while the experimental group used Team-Assisted Individualization model. After the data is collected, data analysis is then carried out to test the hypothesis and draw conclusions.

Data Analysis

Data analysis was performed with the help of the Statistical Package for Social Science (SPSS) software. Inferential statistics are used to analyze the data obtained. The first step is to calculate the average value, standard deviation, and variance, then a prerequisite test is carried out, namely by testing the normality of the data using the Kolmogorov-Smirnov, testing the homogeneity of the data using the Levene Test. Then proceed with testing the hypothesis using the Paired sample t-test and Independent sample t-test.

RESULTS

The description of the data on the results of measuring social skills in the group is shown in table 1. Table 1 shows the description of the data from the measurement of social skills in the Team-Assisted Individualization and Direct Instruction groups. Table 2 shows the data normality test from the Team-Assisted Individualization and Direct Instruction groups, where Asymp. Sig. (2-tailed) 0.200 > 0.05, so the data is normally distributed. Homogeneity test using Levene's Test shows that the sig. 0.055> 0.05, so the data obtained is homogeneous.

Table 3 displays the results of the paired t test for the Team-Assisted Individualization and Direct Instruction groups. Students' social skills experienced an increase in both groups as indicated by the sig. 0.00<0.05 in the Team Assisted Individualization group and sig. 0.00<0.05 in the Direct Instruction group. Table 4 displays the results of hypothesis testing using an independent sample t-test. The sig. value is obtained 0.00 <0.05 means that there are differences in the effect of the Team-Assisted Individualization and Direct Instruction learning models on students' social skills.

Tabel 1. Statistic Descriptive

Group		Mean	N	Std Deviation	Std. Error Mean
Team-Assisted Individualization	Pretest	171.1	30	13.234	2.416
	Posttest	226.1	30	12.759	2.329
Direct Instruction	Pretest	173.00	30	9.934	1.814
	Posttest	189.80	30	9.803	1.790

Tabel 2. Normality Tes

Group	N	Asymp. Sig. (2-tailed)
Team-Assisted Individualization	30	.200
Direct Instruction	30	.200

Tabel 3. Paired sample t-test

	Mean	t	df	Sig. (2-tailed)
Team-Assisted Individualization	-55.000	-21.632	29	.000
Direct Instruction	-16.800	-10.362	29	.000

Tabel 4. Independen Sample t-test

	Levene's Test for Equality of Variances		t-test for Equality of Means		
	F	Sig.	t	df	Sig. (2-tailed)
Equal variances assumed	3.822	.055	14.985	58	.000
Equal variances not assumed			14.985	51.031	.000

Picture 1. Comparison of the Pretest and Posttest Averages of the Experimental and Control Groups

DISCUSSION

Based on the findings in this study, this study has answered the hypothesis proposed, that the Team-Assisted Individualization learning model can significantly improve the social skills of junior high school students. This is because in the Team Assisted Individualization learning model students study in small groups to influence individual responsibility and shared group goals (Rahman & Ahmar, 2016; Nneji, 2011; Metzler, 2005). So that each member of the group tries and works together so that the group becomes the best among the other groups. The ability to

communicate is one indicator of social skills (Gresham et al., 2011). In addition to work, communication skills also increase because each student helps each other to solve problems and difficulties encountered. This study supports previous research conducted by Tinungki (2015), the results show that the Team Assisted Individualization cooperative learning model can improve communication skills among students.

Team-Assisted Individualization learning model is more effective for improving students' social skills compared to the Direct Instruction learning model. This is because students who take part in learning using the Team Assisted Individualization learning model can work together with other students who have different levels of ability. (Slavin, 1985). Students who have low abilities and skills, when experiencing difficulties will be assisted by students who have high skills. This results in the formation of cooperation from each member of the group so that group goals can be achieved (Novalinda et al., 2020).

The benefits of the Team Assisted Individualization model allow students to work together with other students who are different so that a positive attitude is created between them (Slavin, 2015). In the Team Assisted Individualization learning model, students have a shared responsibility to make their group the best from other groups. Each group competes with other groups for awards (Huang et al., 2017). This is what triggers each group member to be able to contribute and cooperate with group members so that the group becomes the best. This indirectly encourages students to improve their social skills, including communicating well with fellow group members, caring for group mates who are having difficulties and helping them, sharing knowledge with other groups about the material being studied. Because each group tries to be the best, there is competition that occurs in each group. This results in students learning to compete in a healthy, fair and sportsmanlike manner when facing a competition (José et al., 2015).

Students' communication skills have increased, because in the Team Assisted Individualization type cooperative learning model, students discuss the material being studied, help each other students who experience difficulties, express opinions properly without offending others, exchange ideas to increase their knowledge. (Novalinda et al., 2020). This research is supported by research conducted by (Tinungki, 2015), the results show that the Team Assisted Individualization cooperative learning model can improve communication skills among students. Improved communication skills occur because in a class that uses Team Assisted Individualization, students help each other, discuss and debate together, sharpen their knowledge, and overcome

gaps in understanding between students. This led to an increase in students' communication skills (Awofala et al., 2013; Tilaar, 2014).

CONCLUSION

Based on the results of the study, the researchers concluded that the Team-Assisted Individualization and Direct Instruction learning models both had a positive effect on students' social skills. Team-Assisted Individualization and Direct Instruction have an influence on improving students' social skills. However, when compared to the two models, the Team-Assisted Individualization learning model is more effective than Direct Instruction in improving students' social skills.

Conflict of Interest

There is no conflict of interest in this research.

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