

## **COOPERATIVE LEARNING THROUGH TGT TO ENHANCE STUDENT'S BEHAVIOURAL ENGAGEMENT IN AN INCLUSIVE SCHOOL IN YOGYAKARTA**

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**Abstract:** In an inclusive school context, students' behavioural engagement is important since it accommodates all students toward diversity and enhances students' participation in the class activity. This research deals with Teams-Games-Tournament (TGT) as one of the cooperative learning methods implemented in an inclusive school. The research aimed to examine the student's behavioural engagement using the TGT in SMP Taman Dewasa Ibu Pawiyatan Yogyakarta. The research used classroom action research as the method proposed by Kemmis and McTaggart in 1998. Through classroom action research, this study attempts to answer: To what extent does the cooperative learning in this classroom action research enhance the students' behavioural engagement in an inclusive school? The research was conducted in two cycles of classroom action research and an interview to validate the result. The participants were 21 students in grade VIII. The research instruments were class observation sheets, the score of students' psychological barrier sheets, questionnaires, and interviews. Finally, the TGT as one of learning the methods in cooperative learning was able to enhance the students' behavioural engagement and there was an increase in the students' behavioural engagement from 3.02 to 3.2.

**Keywords:** behavioural engagement; inclusive education; cooperative learning; Teams-Games-Tournament (TGT)

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### **INTRODUCTION**

To provide access for all children, UNESCO proposed inclusive education with the tagline "Education for all" (UNESCO, Rieser, 2012). Rieser (2012) adds that "inclusive education seeks to address the learning needs of all children, young people, and adults, with a specific focus on those who are vulnerable to marginalization and exclusion" (p. 43). Furthermore, inclusive education accommodates diversity among students (Wiyono, 2011). Inclusive education makes it possible for regular and special needs students to learn together in one school. Through inclusive education, special needs students, who are frequently marginalized because of their disability, can get a chance to socialize with the other students and interact with each other.

The data from the Ministry of Education in 2017 shows that the number of special needs students in Indonesia is about 1.6 million students. Therefore, in 2000, the government of Indonesia established inclusive schools aimed for the special needs students to learn together with the regular students. An inclusive school is a school where it gives a chance to the students who have disabilities to have the same right to learn in a normal school with the regular students. As a result, the boundaries which separate general education and special education are

becoming significantly blurred because of the emergence of inclusive education (Daniel & King, 1997). This is also happening in Indonesia as a country which implements the inclusive educational system since 2003 by Surat Edaran Dirjen Dikdasmen No. 380/C.C6/MN/2003 (Wiyono, 2011).

According to the Ministry of Education of Indonesia (2009), until 2017 there are only about 18% of the special needs students have got the chance to school. That 18% of the special needs students are divided into two categories; 115 thousand special needs students are in the SLB (Sekolah Luar Biasa) and 299 thousand of the special needs students are in the inclusive school who are spread in 32 thousand schools in Indonesia, one of which is SMP Taman Dewasa Ibu Pawiyatan Yogyakarta.

Based on the researchers' observation in one of the classes at SMP Taman Dewasa Pawiyatan Yogyakarta, the special needs students were not learning as well as the regular students in the class. This condition caused those special needs students to be unable to manage themselves to blend with the other students in class in the learning process. Moreover, in doing the task, some special needs students tended to work on their work alone rather than working with others. As a result, students with special needs seem to perform more poorly than their same-grade students without special needs. Thus, as both the special needs and the regular students were unable to manage themselves to participate and to blend in the learning activities, the researchers intended to use the TGT method. The TGT method as one of the cooperative learning methods is chosen to enhance the students' behavioural engagement in an inclusive school.

Cooperative learning is the instructional technique in which the students work in small groups to help one another to learn the academic material (Slavin, 1991). Manning and Lucking (1993) assert that in cooperative learning, all the students are engaged since this cooperative learning assists them to improve their intergroup and interpersonal relationships in multicultural situations and promote culturally diverse students' self-esteem and academic achievement. Manning and Lucking (1993) also explain that in cooperative learning situations, the culturally diverse students are assigned to groups and they are given an equal identity. Furthermore, Johnson, Johnson, and Holubec (1993) as cited in Li and Lam (2013, p. 1) state that "in cooperative learning, students can maximize their own and each other's learning when they work together".

Furthermore, this research is addressed to examine the student's behavioural engagement in class. The researchers choose the student's behavioural engagement because if a student is behaviourally engaged, they will be easily participating in the class activity and it will ease the teacher to teach both types of students in the class. In conducting the research, the researchers

implemented the TGT (Teams-Games-Tournament) method as one of the cooperative learning methods by using the Spiral model classroom action research proposed by Kemmis and McTaggart (1988). The researchers expect that the TGT learning method will bridge the two types of students in the class to learn. Thus, it is hoped that the treatment can enhance the students' engagement in an inclusive school at SMP Taman Dewasa Ibu Pawiyatan Tamansiswa Yogyakarta by applying cooperative learning in the learning process. The researchers aim to study further about how cooperative learning specifically the TGT (Teams-Games-Tournament) will be able to enhance the students' engagement. Moreover, this research is conducted as it is expected to fill the gap about the research in cooperative learning and the students' engagement in which it focuses on the students' behavioural engagement in an inclusive school.

## **METHOD**

This research used the classroom action research method. The classroom action research method was chosen since the nature of this method saw the problems that happened in class and found the solutions to those problems. According to Burns (1999, p. 24), the major focus on conducting action research was on concrete and practical issues of immediate concern to particular social groups or communities. Since it was an action research, it should be naturally conducted based on settings and primarily using qualitative research (Nunan, 1992; McKernan, 1996) as cited in Burns (1999, p. 24). Another definition of action research was also stated by Burns (1994, p. 293) in which it was stated that "action research is the application of fact-finding to practical problem-solving in a social situation to improve the quality of action within it, involve the collaboration and co-operation of researchers, practitioners, and laymen." This study is a small-scale study, involving a group of students in a class at an inclusive junior high school in Yogyakarta. In this research, the researchers used some research instruments to collect the data. They were observation tables which consisted of a class observation table and students' psychological barriers observation table, a close-ended questionnaire, and an interview sheet. This research was conducted at SMP Taman Dewasa Ibu Pawiyatan Tamansiswa Yogyakarta. the study involved 21 students of the 8th grade class C at SMP Taman Dewasa Ibu Pawiyatan Tamansiswa Yogyakarta. The students are in two types in one class. They are the regular students and the special needs students. Moreover, based on the school report, those special needs students experience slow learning, mental retardation, and autism.

## **FINDING AND DISCUSSION**

In this part, the researchers tried to calculate and draw the conclusion of the students' behavioural engagement from the questionnaires. The researchers also used the interview result to support the questionnaires' statements. To ease the reader, the researchers provided a table to

show the compared average scores of the 1<sup>st</sup> and 2<sup>nd</sup> cycles. Additionally, charts were provided to explain the table further.

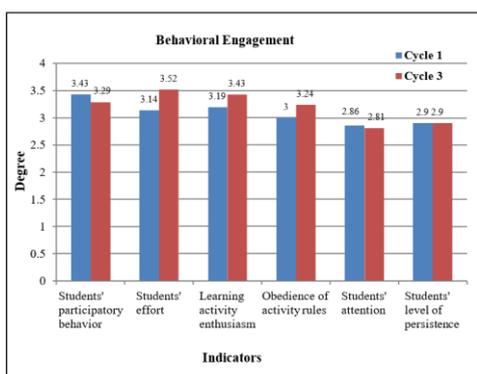


Figure 1: Results of the Students' Behavioural Engagement

According to Fredricks et al. (2004, p. 62), behavioural engagement is defined in three ways. The first definition is to entail positive conduct (Finn, 1993; Finn, Panozzo & Voelkl, 1995; Finn & Rock, 1997) as cited in Fredricks et al. (2004, p. 62). The second definition is concerning involvement in learning and academic tasks and incorporating behaviour such as persistence, concentration, effort, attention, class discussion contribution, and asking questions (Birch & Ladd, 1997; Finn et al., 1995; Skinner and Belmont, 1993) as cited in Fredricks et al. (2004). Involving in the participation in the school activities (Finn, 1993; Finn et al., 1995) as cited in Fredricks et al. (2004). Moreover, Markowitz (2017) also added that the measurement of behavioural engagement was constructed to estimate students school participation and school-based activities.

By reviewing the chart, there were some findings regarding the behavioural engagement of the students in class. In this students' behavioural engagement table, there were six points that the researchers tried to analyse which are the students' participatory behaviour, students' effort, students' learning activity enthusiasm, students' obedience to the activity rules, students' attention, and students' level of persistence.

In calculating the results, each answer would be timed, calculated, and divided by the total of the students who had participated. The result would be in the form of the average result.

a. Students' participatory behaviour

Fredricks et al. (2014) mentioned that one of the scales to measure students' behaviour engagement focuses on the students' participatory behaviour. Ansong et al. (2017) also stated that students learning and participation in academic tasks are included in behavioural engagement. In this research, the researchers tried to ask the students about their level of participation when they dealt with the TGT activity in class. The first aspect of the behavioural

engagement point was whether the students actively participated in the class activity and discussion.

In the first cycle, the researchers tried to obtain the average score from the Likert-scale surveys completed by the students. The score was 3.43 out of 5 which meant that the number of responses was quite big for the first time of the TGT (Teams-Games-Tournament) implementation in class. However, the chart's value for the second cycle was decreasing to 3.29. At this point, a decrease in the mean score was 0.14.

In the interview, one of the regular students, F7 stated that the TGT triggered the students to participate actively in the activity. Janke (1978) as cited in Slavin (1995) found that the TGT implementation increased student attendance in class. Referring to the statement, the researchers also found that the participation of the students in class towards this TGT was also active.

However, sometimes, there was a disturbance that made the students could not participate actively towards the TGT; such as the class situation, which was not under control sometimes, and the media to support the activity. F7, for example, addressed her freight when F8, who was a special needs student, was trying to escape from the class.

After analysing the result of the questionnaire and interpreting the result to the theory, the researchers conclude that the TGT as one of the learning methods of cooperative learning could invite the students to participate more actively in class activity even though the result of the second trial there was no significant increase compared to the first cycle of TGT implementation.

#### b. Students' effort

Effort is the amount of energy that is released in a learning process (Mih, 2013; Zimmerman & Risemberg, 1997) as cited in Mih et al. (2015). As the second point was about students' effort in playing the TGT. It was about whether the students worked hard for the group where they belonged. Skinner and Pitzer (2012) also mentioned that the students' exertion reflected the students' behavioural engagement in class.

As seen in the graph, there was an increased point between the two cycles. This second point was discussing students' effort in participating in the TGT activity in class. This point in the questionnaire was increased from 3.14 at the first cycle to 3.52 at the second cycle. The increase of the mean score of this aspect was 0.38 and it was quite big as the previous cycle discussing students' participation.

Cooperative encouragements motivate students to try to get each other to do academic work, and therefore, it gets the students to realize that their classmates want them to do their best (Coleman, 1961; Brookover, Beady, Flood, Schweitzer, and Wisenbaker, 1979) as cited in Slavin (1995). In line with the statement, the researchers also found that the TGT as one of the

cooperative learning methods in the research had a significant impact on the students' effort in participating in the activity.

The finding was also supported by the interview results of two students who were F7 as the regular student and F4 as the special needs student. Those two students worked hard for their group. Additionally, the statements showed as well that they tried to do their best in participating in the TGT by answering the question cards provided.

c. Students' learning activity enthusiasm

The third aspect of the students' behavioural engagement was students' learning activity enthusiasm. Stipek (2002) as cited in Fredricks et al. (2004) added that behavioural engagement could be assessed using observation techniques which one of the contents contains the students' enthusiasm in the learning activity. Thus, the researchers also used observation to assess the students related to the research.

Regarding this aspect, there was an increase in the mean score discussing the students' enthusiasm towards the learning activity given in class, which was TGT (Teams-Games-Tournament). As seen in the chart, the first mean score from the questionnaire was 3.19. Yet, then, it increased to 3.43, so that the increased score of this part was 0.24. The students found that the activity (TGT) was amusing. It gave a chance for the students to experience a different quiz form if it was compared to other mainstreamed quizzes.

Slavin (1995) revealed that when the students are asked whether they were fond of working cooperatively, the students would enthusiastically say that they would. In conducting the research, the researchers found as well that the students found themselves were enthusiastic about playing the TGT. This finding was supported by the statement of the students, F7 and F4. In addition, the researchers conducted the TGT twice. In the first cycle of the TGT, the researchers discovered that the students were enthusiastic, even though most of them had not understood the instructions of the game yet. However, when the researchers conducted the TGT in the second cycle, the students were enthusiastic enough to join the activity, including the special needs students who liked to watch the video given. This enthusiasm remained until the last cycle of the TGT implementation.

d. Students' obedience to activity rules

As stated in Fredricks et al. (2014, p. 65), following the rules and adhering to classroom norms entails positive conduct towards behavioural engagement. Based on this statement, the researchers tried to formulate a question about the students' obedience to activity rules.

Regarding the students' responses to obey the rules and instructions of the activity, there was an increase of the average score from the questionnaire which was 3, at the first cycle of the TGT implementation to 3.24 at the second cycle. The increase of the mean score of this aspect was

0.24. The increased point happened since, in the first cycle, the students did not really understand the instructions explained by the researchers. On the other hand, after the students experienced the TGT quite often, they started understanding the rules and instructions of the activity.

Based on the interview results, both the regular and special needs student tended to understand the rules and instructions. The regular student stated that they followed the rules at the first and second meetings in particular. Yet, in the third meeting, they tried to bend the rules although overall the rules are still obeyed. It reflected that the TGT as one of the cooperative learning methods could assist the students in enhancing their behavioural engagement.

e. Students' attention

Fredricks et al. (2004) mentioned that attention and concentration work on the involvement of the learning activity and academic tasks. In the research, the researchers tried to analyse the students' attention and concentration of their contribution to the TGT. Skinner and Pitzer (2012) added about students' attention and focus belonged to the students' behavioural engagement.

The fifth point was whether the students concentrated well during the TGT activity in class. The questionnaires results noted that there was a decreased score of this part. As the first cycle, the mean score of students' focus was 2.86. However, in the second cycle, the students' concentration decreased to 2.81. The decrease in the mean score of the students' attention and concentration was 0.5.

Slavin (1995, p. 64) also added that "cooperative learning is hypothesized to increase time-on-task by engaging students' attention." However, on the other hand, by reviewing the result of this point which decreased 0.5 point, from the interviews, the researchers found some causes that lead to the not-optimal TGT implementation in class. The first was because of the students' short-term attention ability. They often found difficulty in focusing on things longer. The second was that some of the students in the groups tended to talk to each other while other groups were working on the TGT. The last was that the temptation of smartphones really worked on them. Thus, the researchers concluded that TGT did not work well among the students regarding their focus and attention due to some reasons.

f. Students' level of persistence

The last point of the students' behavioural engagement was whether the students were able to be persistent to deal with difficult assignments. Persistence refers to the continuous effort in learning especially when the students are confronted with some obstacles or barriers (Mih, 2013; Zimmerman & Risemberg, 1997) as cited in Mih et al. (2015). Fredricks et al. (2004) also added that the measurement of persistence is used to assess work-related behaviour.

Further, the researchers tried to optimize the implementation of the TGT as one of the cooperative learning methods. It was since cooperative encouragements motivated students to try to get each other to do academic work, and therefore, it gets the students to realize that their classmates want them to do their best (Coleman, 1961; Brookover, Beady, Flood, Schweitzer, and Wisenbaker, 1979) as cited in Slavin (1995).

However, on the contrary, the chart displayed that there was not an increase or decrease of this point. The questionnaire results of both cycles were 2.9 due to no change at both cycles. The results of the interview showed different answers from both students. The regular student, F7, stated that she could only be persistent for the first two meetings. Yet, in the last meeting, she could not manage to be persistent in participating in the activity and class discussion due to some disruptions because of the lure to play with smartphones. Another response from F4 revealed that she could manage herself in following the activity. Based on the researchers' observation as well, all the special needs students could manage themselves in participating in the whole cycles of the TGT.

As the final report, some points were significant to be highlighted regarding the students' behavioural engagement. Among those six aspects, the highest increased point was about the mean score of the students' effort to deal with the activity of TGT in class namely 0.38. Then, the lowest score of the mean score was the students' participatory behaviour namely (-0.14), since the chart displayed a decreased mean score from the first to the second cycle. Further, there was an aspect of the students' behavioural engagement where the mean score did not display either an increase or a decreasing number, there was no change. It was the students' persistence towards the TGT activity given in class which the mean score was the same namely 2.9. To sum up, the TGT as one of learning the methods in cooperative learning was able to enhance the students' behavioural engagement and there was an increase in the students' behavioural engagement from 3.02 in the first cycle to 3.2 in the second cycle of the study.

## **CONCLUSION**

TGT (Teams-Games-Tournament) as one of the cooperative learning methods is proposed by the researchers to enhance the students' behavioural engagement in an inclusive school named SMP Taman Dewasa Ibu Pawiyatan Yogyakarta through classroom action research. The research has shown that in the inclusive school, the TGT can improve the students' behavioural engagement between the regular and special needs students. There are six aspects the researchers measured, namely students' participatory behaviour, students' effort, students' learning activity enthusiasm, students' obedience to the activity rule, students' attention and students' level of persistence. Among those six aspects, the students' effort showed the highest

level of improvement, followed by their obedience to the activity rule and students' learning activity enthusiasm.

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