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# Application of Problem Solving Method in Improving Learning Participation through Futsal Games

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## ABSTRACT

This study aims to determine and evaluate the effectiveness of implementing the problem-solving method in increasing student participation in futsal learning activities. The research was conducted using the Classroom Action Research (CAR) approach, adopting a qualitative design to capture dynamic changes in student behavior during the intervention process. The population in this study consisted of students enrolled at the RR Futsal Academy in Seremban city, Malaysia, with a purposively selected sample of 20 participants. Data collection was carried out using an observation sheet designed to assess levels of student learning participation, categorized into three classifications: poor, moderate, and good. The research was conducted in three stages pre-cycle, Cycle I, and Cycle II to observe the progression of student involvement over time. The findings showed a clear and consistent increase in student participation across the cycles, indicating that the application of problem-solving strategies within futsal learning contexts can significantly enhance engagement. Data were analyzed using Microsoft Excel 2010 for tabulation and interpretation. Based on the results, it can be concluded that the integration of problem-solving methods into futsal learning sessions is an effective pedagogical approach for fostering active participation, critical thinking, and learner-centered engagement. This study provides a valuable reference for coaches and physical education instructors aiming to develop more interactive and student-focused training environments in sports education.



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## 1. INTRODUCTION

Education is the most important thing in shaping personality. Education does not always come from formal education such as school or college. Informal and non-formal education also have the same role in shaping personality, especially children or students. In the National Education System Law No. 20 of 2003 we can see three different models of educational institutions. education the (Rea & Masefield, 2016). According to (Cabrera et al., 2001) "describe participation as Wrong one of the most tangible measures of actual performance is the instructor own relatively to method others in assessing Students because of its focus on behavior" Participation connotes involvement, sharing, and simply taking part, all desirable attributes especially for the social dimension of the classroom.

Problem Solving Method ( *PROBLEM SOLVING* ) This style is considered as the main style that is centered on the Student as a whole, because in this process the role of the teacher is limited to a minimum. In addition, this style is very broad in providing opportunities to make decisions independently. Education family And environment in the form of independent learning activities (Aljaberi, 2015). To achieve the goals of physical education, a teacher must own knowledge from various models, approaches, methods and strategies that vary. So that in the implementation of the learning process can adjusted to conditions, situations, learning objectives, characteristics of learning activities, skills and abilities of students and facilities and infrastructure. In essence, it is the task of a teacher to determine the type of learning that is appropriate to the conditions and characteristics of students. Thus, the accuracy of the teacher in choosing a model is very important in determining the occurrence of effective learning so that educational goals are achieved (Casey & MacPhail, 2018).

## 2. METHODS

### 2.1 Procedures

According to, PTK is practical research, aimed at correcting deficiencies in classroom learning by carrying out actions.

| No | Amount | Mark | Classification Participation |
|---|---|---|---|
| 1. | 15 – 26 | 30 – 59 | Lack of Participation |
| 2. | 27 – 36 | 60 – 80 | Sufficient Participation |
| 3. | 37 – 45 | 81 – 100 | Participation Good |

### Population

stated that "population is a generalization area consisting of objects/subjects that have certain qualities and characteristics that are determined by researchers to be studied and then draw conclusions". The population in this study is player ACADEMY FUTSAL RR consisting of 50 people. With this population, it is also used as a subject in this study.

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### 2.2 Design or Data Analysis

Data analysis techniques are carried out by using qualitative data analysis techniques. In general, data analysis techniques are carried out in the following stages:

1. Review all over data Which has collected
2. Calculation/processing data
3. Description results data
4. evaluation of data results. In general, data analysis activities are carried out with the following steps:

A. Review all over data Which has collected

Review done with count data from observation sheets, as well as supported by field notes and reinforced with evidence in the form of photographic documentation.

B. Calculation/processing data

The observation data obtained were then calculated to determine the percentage increase.

## 3. RESULTS & DISCUSSION

Based on the results of observations that have been carried out, there has been an increase in participation. Study student on precycle, cycle I, and cycle II. There are several things that need to be considered when implementing the problem solving teaching method in futsal game learning, including the emphasis on the movement tasks carried out by students, here as students must explain clearly and firmly regarding what movement tasks students will do, so that when the learning process takes place students immediately work on the tasks motion Which has assigned. According to (Rahmani & Sadeghi, 2011), Besides Apart from that, there is one more thing that needs to be considered when implementing this teaching method, namely the need to emphasize individual note-taking tasks related to the material that they have obtained in terms of their own conceptual understanding, as proven during the learning process. When students are given pressure in the form of movement tasks and individual note assignments, students become more serious and earnest during the learning process.

Student learning participation is said to be good if students get a score of 27-47. On this occasion, the researcher got the pre-cycle percentage according to the classification made with a classification of less than 12 people with a percentage of (60.00%), a classification of sufficient there are 5 people with a percentage of (25.00%), and a classification of good as many as 3 people with a percentage of (15.00%). From the presentation of the percentage above, it can be concluded that student participation student moment beginning or on pre-cycle shows a lack of enthusiasm due to when making observations beginning majority student classified as classification not enough with prone to the value obtained is 15-26.

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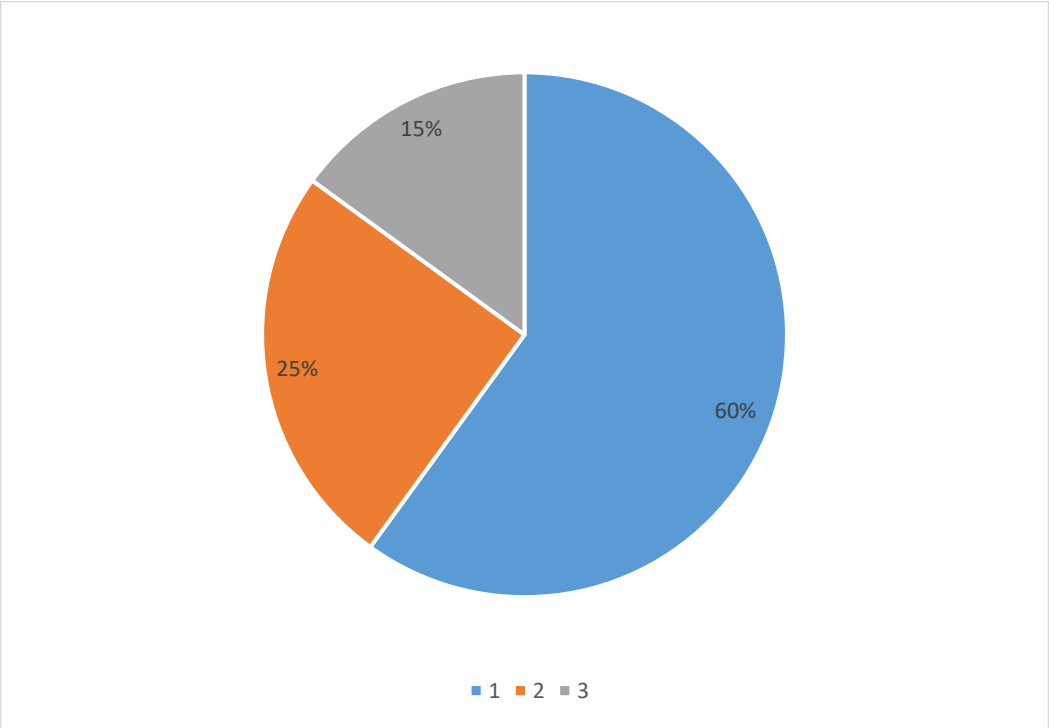
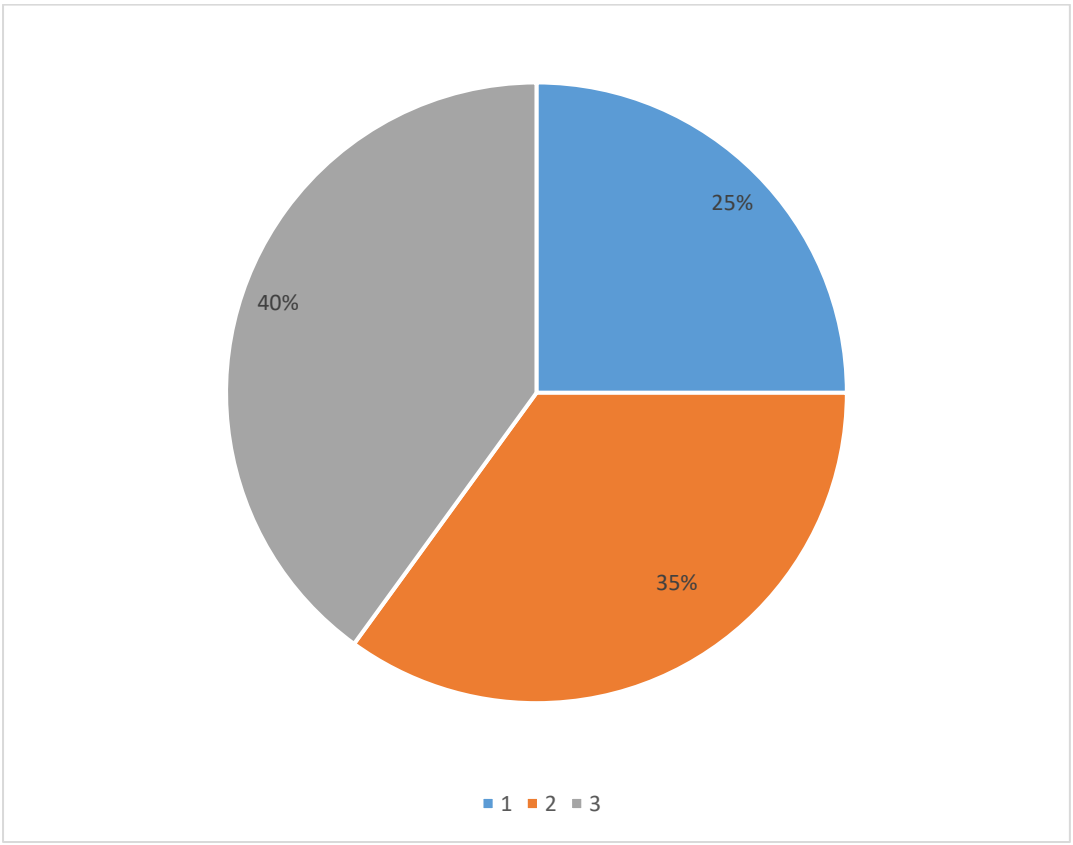



In the first cycle of action, 1 student was classified as less than 7 people with presentation as big as (35.00%), there were 8 people in the sufficient classification with a percentage of (40.00%), and there were 5 people in the good classification with a percentage of (25.00%). From the presentation of the percentages above, there was an increase, although not significant, and it can be concluded that that in cycle I, action I, there are still many students who are classified as not enough because of student new get to know the process of experience Study new.

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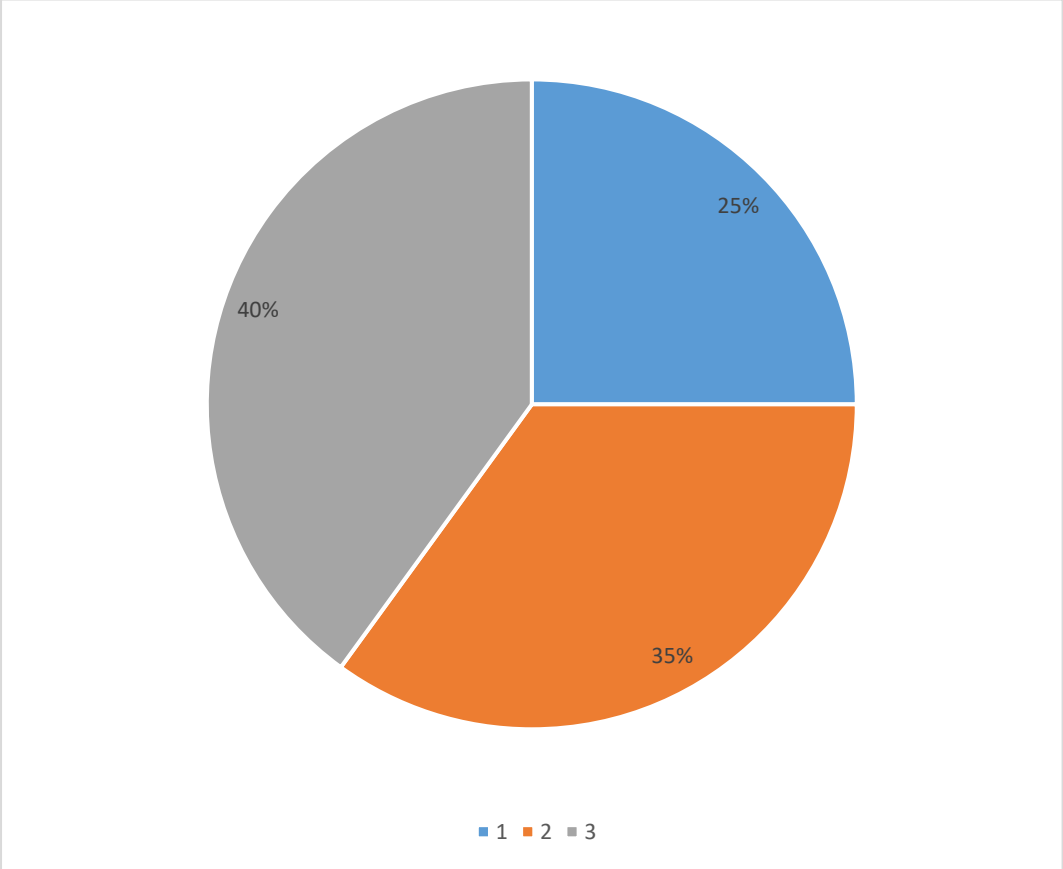
Whereas in cycle I, action II in classification was lacking 5 students with a percentage of (25.00%), 7 students with a sufficient classification of (35.00%), and 8 students with a good classification. people with a percentage of (40.00%). From the presentation of the percentage above, it can be concluded that participation in cycle I action II showed an increase in participation shown by students, seeing the participation Which shown get The value is quite significant compared to when the pre-cycle was carried out. In this cycle I, students began to be able to follow the new learning process with a sense of responsibility that students showed as evidenced during the learning process. in progress majority student show attitude participation Study classified sufficient and classification Good.




In cycle II action I, there were 4 students in the less classification with a percentage of (20%), 4 students in the sufficient classification with a percentage of (20.00%), and 12 students in the good classification with a percentage of (60.00%). From the presentation of the percentage above, it can be concluded that participation in cycle II action I showed an increase in participation shown by students, seeing that the participation shown received a fairly significant value compared to when cycle I was carried out. In cycle II action I, students began to get used to following the new learning process with a sense of responsibility. the answers that students show with proven on moment learning process in progress majority student show attitude participation Study classified Good .

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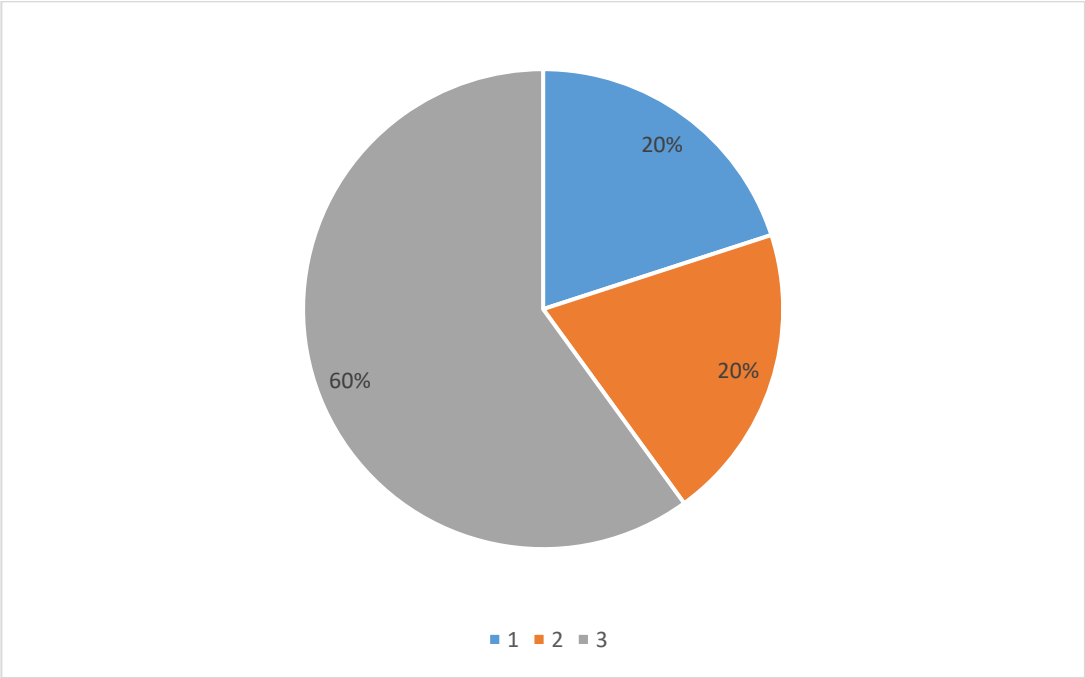
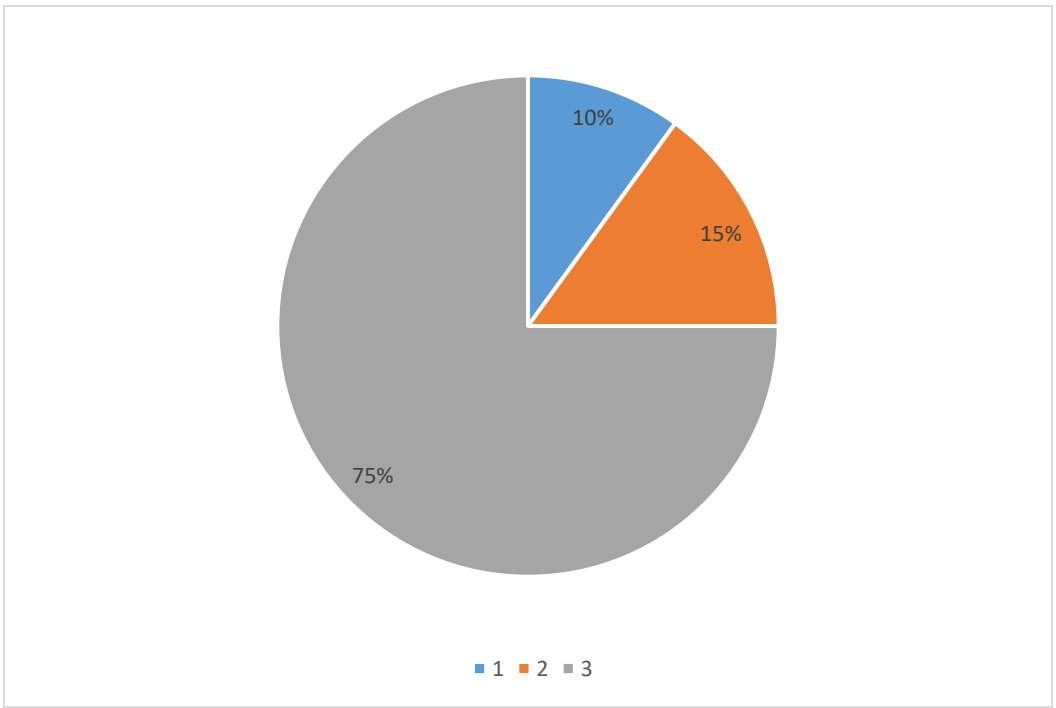



Meanwhile, in cycle II action II, there were 2 students in the less classification with a percentage of (10.00%), in the sufficient classification there were 3 students with a percentage of (15.00%), and in the good classification there were 15 students with a percentage of (75.00%). From the presentation of the percentage above, it can be concluded that participation in cycle II action II showed an increase in participation shown by students, seeing the participation Which shown get The value is quite significant compared to when cycle I was carried out. In cycle II, students began to get used to following the learning process. the new one with a sense of responsibility that students demonstrate is proven during the learning process in progress majority student show attitude participation Study classified Good .

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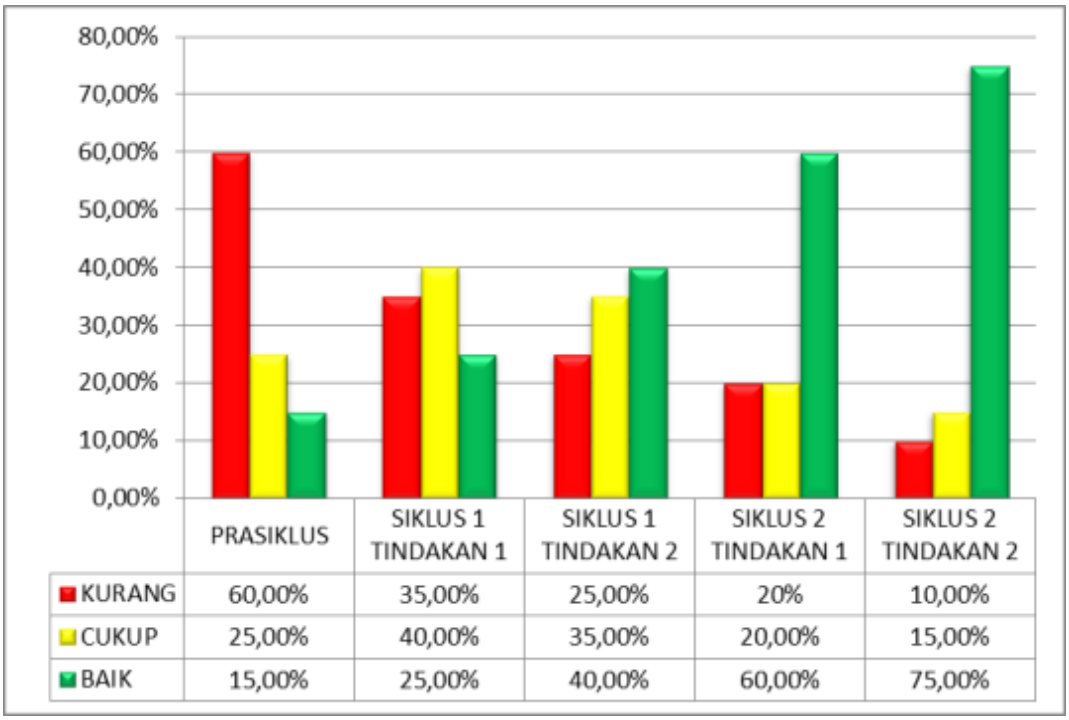


| | PRASIKLUS | SIKLUS 1 TINDAKAN 1 | SIKLUS 1 TINDAKAN 2 | SIKLUS 2 TINDAKAN 1 | SIKLUS 2 TINDAKAN 2 |
|---|---|---|---|---|---|
| KURANG | 60,00% | 35,00% | 25,00% | 20% | 10,00% |
| CUKUP | 25,00% | 40,00% | 35,00% | 20,00% | 15,00% |
| BAIK | 15,00% | 25,00% | 40,00% | 60,00% | 75,00% |

## 4. CONCLUSION

Based on the results of the research and data analysis conducted in accordance with the stated action hypothesis, it can be concluded that the application of the problem-solving method in futsal learning has a positive and significant effect in increasing student learning participation. This conclusion is supported by the progressive improvement observed across the pre-cycle, Cycle I, and Cycle II, with students demonstrating higher levels of engagement, initiative, and active involvement in learning activities. The study was conducted on a sample of 20 students from RR Futsal Academy in Seremban City, selected through purposive sampling based on their active participation in futsal training. The findings suggest that incorporating problem-solving strategies into physical education—particularly in team sports like futsal—not only enhances students' technical understanding of the game but also promotes the development of critical thinking, cooperation, and self-directed learning. These results highlight the potential of learner-centered pedagogical approaches in transforming traditional sports instruction into more interactive and participatory experiences. Therefore, educators and coaches are encouraged to integrate such methods to foster a more engaging and reflective learning environment in sports education settings.

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