

# Interest in learning 8-10 years old towards ball modification in the sport of Petanque

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## ABSTRACT

Interest in learning is an important factor in student learning success. This research aims to determine the level of learning interest of children aged 8-10 years towards modified petanque balls at SDN Pantai Batung. It is hoped that this modification can increase the potential for training and introduce students to the sport of petanque without reducing their enthusiasm and interest in learning. The method used was quantitative descriptive with a population of SDN Pantai Batung students and a sample of class IV students of 26 students. Sampling used purposive sampling technique. The instrument used in this research was a questionnaire. Based on the results obtained from data analysis, students' interest in modification tools is in the medium category with a percentage of 38.46%, the factors that really influence are intrinsic factors in the interest indicator 38.46% and extrinsic factors in the school indicator 42.31%. These results can be concluded that from the 26 students who were the research sample, it shows that the interest of children aged 8-10 years in modified petanque balls at SDN Pantai Batung is in the medium category.

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## Abstrak

Minat belajar merupakan faktor penting dalam keberhasilan belajar siswa. Penelitian ini bertujuan untuk mengetahui tingkat minat belajar anak usia 8-10 tahun terhadap modifikasi bola petanque di SDN Pantai Batung. Modifikasi ini diharapkan dapat meningkatkan potensi latihan dan pengenalan olahraga petanque kepada siswa tanpa mengurangi semangat dan minat belajar. Metode yang digunakan deskriptif kuantitatif dengan populasi siswa SDN Pantai Batung dan sampel siswa kelas IV sebanyak 26 siswa. Pengambilan sampel menggunakan Teknik sampling purposive. Instrumen yang digunakan dalam penelitian ini adalah angket atau kuisioner. Berdasarkan hasil yang diperoleh dari analisis data, bahwa minat siswa terhadap alat modifikasi masuk dalam kategori sedang dengan persentase 38,46%, faktor yang sangat mempengaruhi adalah faktor intrinsik dalam indikator tertarik 38,46% dan faktor ekstrinsik dalam indikator sekolah 42,31%. Hasil ini dapat disimpulkan bahwa dari 26 peserta didik yang menjadi sampel penelitian menunjukkan bahwa minat anak usia 8-10 tahun terhadap modifikasi bola petanque di SDN Pantai Batung dalam kategori sedang.

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## INTRODUCTION

Learning interest plays a major role in determining student learning outcomes. Students' interest in learning becomes their motivation to learn, interest in learning needs special attention because interest is one of the factors that support successful learning. With students' interest and attention to the lessons

given, the content of the lessons will be absorbed well. (Rejeki, 2024). Interest is not only described through questions that show students' preferences for something, interest can also be realized through children's participation, perseverance, curiosity, creativity, and motivation. (Supiati et al., 2021).. The selection of interest in the development of sports talent is in accordance with the talent possessed, so that effective sports talent development can be achieved. (Pribadi et al., 2023). Students who are interested in focusing on their lessons in order to have good concentration. Not realizing the importance of learning at school will be difficult towards their best achievements (Maspa, 2023).

Physically, children aged 8 to 10 years have physical characteristics such as body composition and skills in the form of speed, strength, and endurance. In order to achieve appropriate sports performance goals, physical characteristics developed from an early age are the basic foundation. The characteristics of sports training must start early, be continuous and pay attention to the child's condition or adapt to his world. Physical sports activities are adapted to the characteristics of children at a good physical, mental, and emotional stage. Infrastructure adapts to the growth and development of children. At the age of 8 to 10 years, children are still happy to exercise and want to try new things. The age of 8 to 10 years is called the period of approach or gaining knowledge where their observations are accepted without criticizing everything they hear, see, feel will be imitated. (Pangesti, 2019).

Sport is a form of physical activity that is designed and organized, consisting of repetitive body movements, which aims to improve physical fitness. The fitness that a person has will have a positive influence on the productivity of work or study. (Indah et al., 2021). Sport is also a means to stimulate physical, mental, and social growth and development. Effective collection, identification and analysis of sports information is the key to smart sports, which can help athletes improve their skills and build scientific training plans and competition strategies. (Pratiwi et al., 2024)At present, the role of science and technology is very important, so that a person's ability will be known if he has good physical and spiritual health. Currently, the role of science and technology is very important in the development of a country's sports. (Pangesti, 2019). Along with technological advances and understanding, people must be ready to overcome problems to grow and maintain physical fitness. (Atieka & Budiana, 2019)..

Petanque is a sport originating from France that has existed since 1907 and almost most of the French people play this sport. (Pribadi et al, 2023; Nurfatoni & Hanief, 2020). The goal of the petanque ball game is to approach a wooden ball using an iron ball by throwing it but both feet remain in the circle when shooting. (Hariansyah, Septi, 2020) . Petanque is one of the sports that has a major contribution to the development of sports and has received high appreciation at the national and international levels. This sport requires agility in throwing a metal ball to approach a wooden ball target. Petanque is played on a field measuring 4m x 15m on hard ground or grass. (Nurfatoni & Hanief, 2020).

Petanque is a ball throwing game whose main objective is to throw an iron ball to get as close as possible to a wooden ball, and both feet are in a circle. The circle size is a minimum of 7.05 cm and a maximum of 8.00 cm and the weight of the iron ball is around 650 grams to 800 grams according to the Federation International de Petanque et jeu Provençal (FIPJP) standards. These requirements

include ball weight, size, material, brand, and serial number. (Juhanis et al., 2019). However, children aged 8-10 years still do not have maximum standards and abilities in throwing petanque balls. Children aged 8-10 years are called the early stage, at this stage the focus is on developing basic skills thoroughly and having fun with low-intensity training through concept games (games). The physical abilities possessed become the foundation and personality of each person in the process of developing their abilities. The abilities and needs of children in each sport are different so that sports must be developed by modifying. So a petanque ball with modifications for children aged 8-10 years is made from tamarind wood weighing 80-110 grams and 65 mm in diameter under the Federation International de Petanque et jeu Provençal (FIPJP) standard but still paying attention to the feasibility of modifying the petanque ball.

Many obstacles hinder sports learning to be enjoyed by students, one of the common problems in the field is the limited facilities and infrastructure that are inadequate. This causes the physical education process to not run optimally (Warni et al., 2020). As prospective physical education teachers, creativity must be developed and improved by trying to change (modify) sports equipment. As prospective physical education teachers must develop more teaching skills that are supported by students so that they can overcome teacher problems in the learning process. Improving the physical education learning process which in turn can improve students' understanding and initial movement skills, including modifying learning facilities. (Arianto et al., 2023).

Modification from the word change which means changing from the original form into a new attractive form. Advancing quality and limitations in schools means making changes to game modifications (Sahabuddin et al., 2022). Modifications made to physical education learning are an alternative to improving training abilities or for the introduction of learning. The learning approach applied by the teacher plays an important role in learning at school. (Amirudin, 2018). The limitations of sports facilities and infrastructure in schools are not an obstacle to not presenting material without reducing the determination of enthusiasm and interest in learning, so a modified petanque ball for ages 8-10 years is made from tamarind wood weighing 80-110 grams and 65 mm in diameter under the *Federation International de Petanque et jeu Provençal (FIPJP)* standard but still paying attention to the feasibility of modifying the petanque ball. Modification is one of the efforts made by a teacher or coach to be able to pay attention to changes in the abilities of students or athletes and be able to encourage changes in the learning and training process. (Saputra, 2015)

In Hulu Sungai Tengah district, South Kalimantan province, petanque is still considered a minority game among students and little is known to the public that the main target of petanque game development is educational institutions. The purpose of this study was to determine the level of interest of students aged 8-10 years in learning about the modification of the petanque ball at SDN Pantai Batung to increase the potential of training or just to introduce. The existence of limited sports facilities at school is not an obstacle not to provide or explain the material to students. By utilizing modified

facilities, it is hoped that students can still achieve maximum learning results without reducing enthusiasm and desire to learn. Improving the teaching and learning process of physical education which can ultimately foster understanding and initial movement skills from students, including modifying learning facilities/media. (Pai et al., 2023).

## **METHODS**

This research method is quantitative descriptive method research (Fauzan et al, 2023; Waruwu, 2023). The purpose of this study is to describe the level of interest in the application of modified facilities in petanque sports game learning efforts on student learning interest in a quantitative descriptive manner. The sampling technique uses purposive sampling technique, purposive sampling is a sampling technique with certain considerations. (Sugiyono, 2014). The population in this study were students of SDN Pantai Batung then a sample of 26 students was taken from the age criteria of children aged 8-10 years in class IV. This type of research data is a type of quantitative data in the form of data from a Likert scale questionnaire of student interest in learning.

This study uses an instrument in the form of a student learning interest questionnaire, a questionnaire is a data collection technique by giving a draft question or written statement to the respondent so that he answers it. (Mashuri, 2019). The instrument in the form of a student interest questionnaire was made to make statements according to indicators of student interest in learning according to the theoretical research study. In the student interest questionnaire, researchers categorize it into 2 factors (internal and external), which in internal factors consists of indicators of interest, attention, activity and external factors including indicators of family, school, community environment. So that the questionnaire contains 48 statements with 35 positive statements and 13 negative statements, with a reliability of 0.9588. The positive statement learning interest category used in the questionnaire is a modification of the *Likert* scale and the category format consists of four choices, namely: strongly agree (4), agree (3), and disagree (2), and strongly disagree (1). (BatuBara et al., 2021) For negative statement items, the opposite score is used for positive statements.

This research data analysis technique uses descriptive data analysis techniques. Descriptive statistical calculations use percentage descriptive statistics. The purpose of descriptive analysis is to determine the high interest in learning students aged 8-10 years in the modification of petanque balls at SDN Pantai Batung. The calculation technique for each item in the questionnaire uses the percentage formula (Kartini & Putra, 2020).

Upon completion, the results of the data analysis were categorized using the mean and standard deviation. To determine the score criteria using Norm Reference Assessment (PAN) (Pangastuti & Munfa'ati, 2018) as follows:

**Table 1.** Assessment Norms

No.	Interval	Category
1	$X > M + 1.5 SD$	Very High
2	$M + 0.5 SD < X \leq M + 1.5 SD$	High
3	$M - 0.5 SD < X \leq M + 0.5 SD$	Medium
4	$M - 1.5 SD < X \leq M - 0.5 SD$	Low
5	$X \leq M - 1.5 SD$	Very Low

Description:

M : mean (average)

X : total answers of respondents

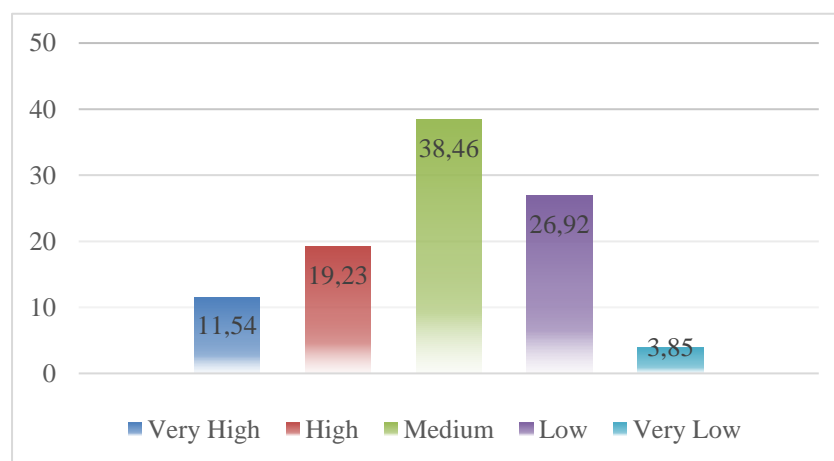
SD : standard deviation

## RESULTS AND DISCUSSION

This study aims to determine the level of interest in the modification of the petanque ball in order to increase the potential for training or just an introduction to the petanque sports game. Based on the results of data research related to students' interest in petanque ball modification at SDN Pantai Batung class IV, the results of the number of statements in the 48 questionnaire are grouped into 2 factors (internal and external), which in internal factors include indicators of attention, interest, activity and external factors include indicators of family, school, community environment.

**Table 2.** Frequency Distribution of 8-10 Year Old Learning Interest Survey towards Ball Modification in Petanque Sport

Category	Interval	F	%
Very High	$x > 174,19$	3	11,54%
High	$165,88 < X < 174,18$	5	19,23%
Medium	$157,58 < X < 165,88$	10	38,46%
Low	$149,27 < X < 157,58$	7	26,92%
Very Low	$< 149,27$	1	3,85%
Total		26	100%

**Figure 1.** Diagram of the Research Results of the 8-10 Year Old Learning Interest Survey on Petanque Sports Ball Modification

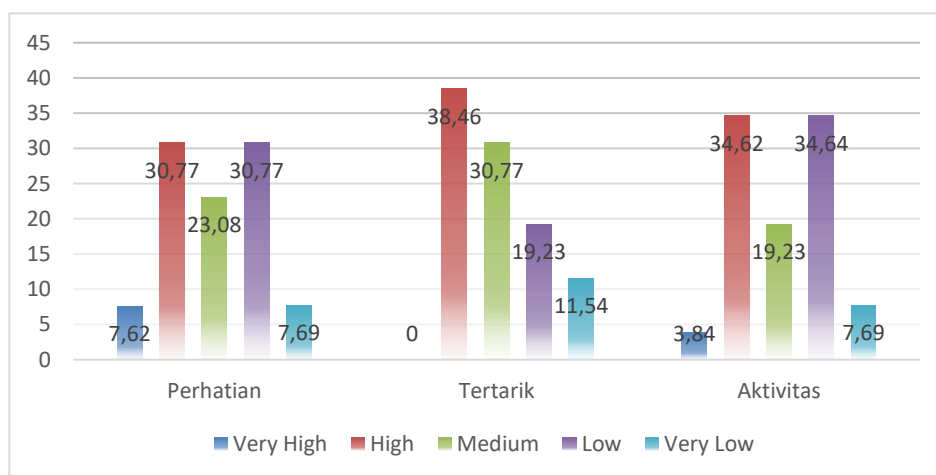
Based on the results of the overall research, the Survey of 8-10 Years Student Learning Interest in Ball Modification in Petanque Sports at SDN Pantai Batung has the highest presentation in the medium group of 38.46%, while the other categories are very high category 11.54%, high category 19.23%, low category 26.92%, very low category 3.85%.

**Intrinsic Factors**

Factors that influence students' interest in petanque ball modification are intrinsic factors which have several indicators: attention, interest, and activity.

**Table 3.** Research Results of Intrinsic Factors

Category	Attention	Interested	Activities
Very High	7,69%	0%	3,84%
High	30,77%	38,46%	34,62%
Medium	23,08%	30,77%	19,23%
Low	30,77%	19,23%	34,62%
Very Low	7,69%	11,54%	7,62%



**Figure 2.** Diagram of Research Results on Intrinsic Factors Indicators of Attention, Interest, Activity

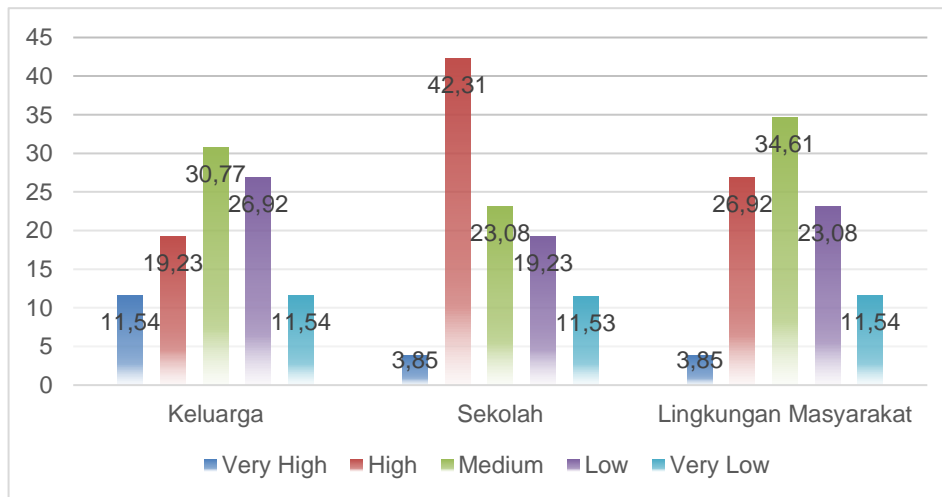
Based on the frequency distribution of the table above, the intrinsic factors surveying 8-10 year old learning interest in petanque sports ball modification at SDN Pantai Batung have the highest presentation in the high category interested indicator 38.46%, the highest group of attention indicators is in the high category of 30.77%, interested indicators are in the high category of 38.46%, the highest group of activity indicators is in the high category of 34.62%.

**Extrinsic Factors**

Factors that influence the 8-10 Year Old Learning Interest Survey towards Ball Modification in Petanque Sports are extrinsic factors which have several indicators: attention, family, and activity.

**Table 4.** Research Results of Intrinsic Factors

Category	Family	School	Community Environment
Very High	11,54%	3,85%	3,85%
High	19,23%	42,31%	26,92%
Medium	30,77%	23,08%	34,61%
Low	26,92%	19,23%	23,08%
Very Low	11,54%	11,53%	11,54%

**Figure 3.** Diagram of Research Results on Extrinsic Factors Indicators Family, School, Community Environment

Based on the frequency distribution of the table above, the extrinsic factors of the 8-10 Year Old Learning Interest Survey on Ball Modification in Petanque Sports at SDN Pantai Batung have the highest presentation in the moderate category family indicator of 30.77%, the highest group of school indicators in the high category of 42.31%, and the community environment indicator in the moderate category of 34.61%.

Based on the results of data processing conducted on a survey of students' interest in learning 8-10 years of age on the modification of the petanque ball which is an alternative to getting to know the petanque sports game at SDN Pantai Batung in the medium category in the percentage of 38.46%. In this study, students were very enthusiastic in participating in learning activities and even interested in petanque sports in the high category of 38.46% and participated in practical learning in the field together with a high category of 34.62%. Students are so happy when playing petanque even though they don't really understand how the basic techniques of throwing are correct.

This study found that the original petanque ball made of iron weighing 650-800 grams was too heavy for children aged 8-10 years, this made it difficult for them to use the ball because it was not suitable for the age of 8-10 years. The modified petanque ball for children aged 8-10 years is made of tamarind wood weighing 80-110 grams and 65 mm in diameter under the *Federation International de Petanque et jeu Provençal* (FIPJP) standard but still pays attention to the feasibility of modifying the

petanque ball that the ball is appropriate for children aged 8-10 years because the weight when grasped is in accordance with elementary school age children. (Irawan & Pangesti, 2020). After making modifications, students find it easier to use the modified ball. Of the 26 students who became the research sample, several students showed interest in ball modification because of its lighter weight than the original petanque ball with the aim of making it easier for children aged 8-10 years to play, practice, and get to know petanque sports games.

In the results of this study in line with the results of research (Arianto et al., 2023) which states the results or findings that with the modification of the interest of students who take part in sports learning activities is very good even though it does not use appropriate media, meaning that modification has a positive impact on learning interest that affects interest such as the delivery of learning materials that are less interesting with limited facilities teachers can use modification as an alternative way to create learning conditions that are fun and not boring.

The results of this study are in line with the results of research (Irawan & Pangesti, 2020) which states the results or findings that the modification of the petanque ball (bokavia) can be used as a substitute for the petanque ball that can be used by elementary level children because this bokavia is declared suitable for playing petanque for ages 8-10 years referring to the actual rules.

In this study in line with the results of research (Afidah et al., 2022) That modification is one of the teacher's efforts to reflect DAP learning, including *body scaling* or adjusting the body size of students who are learning and taking a modified *wooden discs* approach to facilitate maximum material.

In this study in line with the results of research (Safitri et al., 2022) the role of the teacher is very important because the teacher should make learning interesting, creative, effective, and efficient in order to generate interest in learning. Interest is an interest, willingness in activities without coercion but rather their own desires and students' attention to learning so that educational goals can be achieved.

In the results of this study in line with the results of research (Sahabuddin et al., 2022) which states the results or findings of the approach to using archery methods using pipes need to be developed by paying attention to the material, characteristics so that the lack of facilities and infrastructure can be overcome to fulfill learning activities.

## **CONCLUSIONS**

Based on the results of the research and discussion that has been described, it can be concluded that of the 26 students who were the research sample that students' interest in modified equipment was in the moderate category in a percentage of 38.46%, the factors that greatly influenced the high interest were intrinsic factors in the indicator of interest 38.46% and extrinsic factors in the school indicator 42.31%. It can be concluded that of the 26 students who became the research sample, it shows that the interest of children aged 8-10 years in the modification of the petanque ball at SDN Pantai Batung is in the moderate category.



As for the suggestions that researchers can convey, it is hoped that the modified petanque wooden ball can be used as an alternative in delivering learning material for petanque sports games and can help teachers be more creative, innovative and can increase student activeness and be more interested in participating in learning petanque sports games and suggestions for further research are expected to be able to solve the problem of lack of facilities in schools by modifying other sports.

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