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## Analysis of Shooting Ability in Soccer Games of Class V Students of SDI Bontoala, Gowa Regency

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**Abstract.** Shooting ability in football is one of the essential motor skills to be developed since elementary school age, because it is closely related to the game performance and psychomotor development of students. This study aims to analyze the level of shooting ability of grade V students of SDI Bontoala and identify their performance classification based on standardized measurement scores. The method used is a quantitative descriptive approach, with data collection techniques in the form of shooting skill tests given to 17 male students from a total population of 70 students. The data obtained were analyzed using descriptive statistics including average scores, frequency distributions, and classification of ability categories. The results showed that most students (35.3%) were in the "Low" category, while only one student (5.9%) was included in the "Very High" category. The average score of students' shooting ability was 35.5 points, indicating the need for a more effective, structured, and tailored shooting technique learning strategy to the characteristics of individual students. These findings provide an important contribution to the development of Physical Education, Sports, and Health (PJOK) learning at the elementary school level, especially in the aspects of evaluating and coaching basic football technique skills.

**Keywords:** shooting ability, football, elementary school students, motor skills, sports skills evaluation.

### 1 Introduction

Football is a collective sport that demands an optimal combination of physical ability, technical skills, and tactical intelligence of players. At the elementary school level, football not only serves as a means of recreation but also as a medium for character education, motor skill development, and social learning. In the context of learning Physical Education, Sports, and Health (PJOK), mastery of basic game skills is the main focus, one of which is the ability to shoot or kick the ball towards the goal to score a goal. (García-Ceberino, Feu, & Ibáñez, 2019). This skill not only requires precision and strength, but also good body coordination, spatial understanding, and speed in decision making.

Shooting is one of the technical aspects that greatly determines success in a soccer game. For elementary school students, this skill serves as a benchmark for gross motor development and leg muscle explosive power, as well as reflecting the level of active participation in PJOK

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learning. Based on the theory of children's motor development, abilities such as kicking the ball in a directed manner are important indicators of neuromuscular maturity during school age. (Ahmed, 2021). Therefore, learning proper shooting techniques can contribute directly to the overall physical and mental development of children.

In practice, learning shooting techniques in elementary schools often does not receive optimal emphasis. Many PJOK teachers focus more on learning general activities or free play, without a systematic skill learning approach. This results in a low level of mastery of basic soccer techniques among students (Hasyim, Haris, & Ramadhan, 2023) revealed that basic skills such as passing, dribbling, and shooting are still relatively low at the elementary education level, mainly due to the lack of learning media, less innovative approaches, and minimal data-based evaluation.

Furthermore, the development of shooting skills has a significant positive impact on students' self-confidence when playing. When students are able to shoot accurately and in a targeted manner, they will be more motivated to engage in game activities and demonstrate their competence. This is in line with the concept of competency-based learning in PJOK, where students not only understand the theory, but are also able to demonstrate real skills in physical activities. Thus, shooting is not just a technical activity, but also a means of character formation through positive and meaningful learning experiences.

Meanwhile, the literature discussing football skills in school-age children is still dominated by studies conducted on academy players or young athletes (Burhaein, Ibrahim, & Pavlovic, 2020). Research that specifically examines the shooting ability of fifth grade elementary school students in the context of formal learning in elementary schools is still very limited. In fact, the context of formal education has unique challenges and characteristics, such as limited lesson time, varied facilities and infrastructure, and heterogeneity of students' physical abilities and motivations. This gap is the starting point of this study.

This study attempts to answer the need for empirical data on the level of shooting ability of elementary school students, focusing on class V SDI Bontoala as the research subject. This class was chosen because it is at a relatively stable stage of motor development and is beginning to show differentiation in sports interests and competencies. With an evaluative and descriptive approach, this study is expected to be able to describe the actual condition of students' shooting skills objectively, as well as identify contributing factors, such as leg muscle strength, motor coordination, and understanding of basic soccer game techniques..

The main objective of this study is to analyze and evaluate the level of shooting ability in soccer games of grade V students of SDI Bontoala, and to identify the aspects that influence it. This study also aims to fill the gap in literature in the development of PJOK learning based on basic motor skills evaluation at the elementary school level. In addition, the results of this study are expected to be the basis for compiling training modules or adaptive learning approaches that are relevant to the real conditions of students.

Theoretically, this study contributes to academic studies in the field of physical education and sports science, especially in the development of a technical soccer skills evaluation model for school-age children. Practically, the findings of this study can be utilized by PJOK teachers, extracurricular coaches, and school policy makers in designing more effective, measurable, and developmentally appropriate learning strategies for students. Thus, this study has strategic value in efforts to improve the quality of physical education in elementary schools in a sustainable manner.

## 2 Method

This study uses a quantitative approach with a quantitative descriptive research type. Data collection techniques are the most strategic steps in research, because the main purpose of the research is to obtain data. (Sugiyono, 2016). This approach was chosen because the main objective of the study was to obtain an objective picture of the level of students' shooting ability through numerical measurement results that could be analyzed statistically. The population in this study were all male students in grade V of SDI Bontoala, totaling 70 people. From this number, a sample of 17 students was selected through purposive sampling technique, with the following inclusion criteria: (1) students actively participating in PJOK lessons, (2) not having motor disorders, and (3) consistently attending soccer learning sessions. The purposive technique was chosen because it allowed researchers to filter participants who were relevant and in accordance with the specific needs of the study.

The data in this study were collected using a standardized and validated soccer shooting ability test instrument (Santoso & Santoso, 2024). This test measures two main aspects of shooting skills, namely accuracy and power of kicks towards the goal. The test was carried out on the SDI Bontola field, where each student was given a number of opportunities to shoot towards a target that had been given a score. The score obtained reflects the level of success of students in executing shots in a directed and powerful manner.

The test result data were analyzed using descriptive statistical techniques, including calculating the average (mean), standard deviation (SD), and frequency distribution. This analysis aims to describe the distribution of student performance, determine the category of ability level (low, medium, high), and identify dominant tendencies in the group. The analysis process was carried out systematically to ensure the accuracy of the results and the relevance of data interpretation to the research objectives. In addition, the internal validity of the study was maintained through the consistency of the measurement procedure and the implementation of the same test for all participants. The researcher also ensured the reliability of the instrument by using a measuring instrument that had been used in similar studies and had received previous empirical validation. Thus, the results of this study not only describe the factual conditions, but can also be used as a basis for evaluating PJOK learning scientifically and sustainably..

## 3 Result

This study aims to evaluate the shooting ability of male students in grade V at SDI Bontoala in a soccer game. Data were obtained from 17 students who had taken a shooting test with four trials (P1-P4) and the total score (final point) was calculated. The analysis was carried out quantitatively descriptively by presenting basic statistics, frequency distribution tables, and visualization of the results.

Table 1. Descriptive Statistics Results of Football Shooting Ability Scores

Statistical Parameters	Mark
Number of respondents	17 student
Average value	90,00
The highest score	210
Lowest value	45

Median	90
Modus	60
Standard Deviation	39,93
Range (difference)	165

Based on Table 3.1 above, after conducting a quantitative descriptive analysis of the data on the shooting ability scores of class V students of SDI Bontoala, it is known that from the 17 students observed, several statistical values were obtained as a description of the characteristics of the shooting ability index as follows: the average value (mean) is 90.00, the lowest value (minimum) is 45 points, the highest value (maximum) is 210 points, the median is 90, the mode is 60, the standard deviation is 39.93 points, and the total range (difference) is 165 points. These data provide a general description of the distribution and tendency of the shooting ability scores of students who are the subjects of the study.

Table 2. Shooting Ability Frequency Distribution

Category	Score Range	Number of Students	Percentage (%)
Very Low	≤ 60	4	23,5%
Low	61–90	6	35,3%
Currently	91–120	5	29,4%
Tall	121–150	1	5,9%
Very Tall	> 150	1	5,9%
<b>Total</b>	-	17	100%

Based on table 3.2 above on the results of the research on the frequency distribution of shooting ability in the football game of SDI Bontoala students, it appears that out of 17 samples, there is 1 person in the "Very High" category with a percentage of 5.9%, 1 person in the "High" category with a percentage of 5.9%, 5 people in the "Medium" category with a percentage of 29.4%, 6 people in the "Low" category with a percentage of 35.3%, and 4 people in the "Very Low" category with a percentage of 23.5%. Based on the percentage value of the frequency of shooting ability, it can be concluded that the football shooting ability of SDI Bontoala students can be categorized as "Low" with an average percentage of 35.3 points.

#### 4 Discussion

This finding is in line with the results of research by (Santoso & Santoso, 2024) which shows that basic football skills such as shooting in elementary school students are still relatively low and require improvement through structured training. This study also confirms that although some students show good performance, shooting skills are not evenly distributed across all fifth grade students. From a theoretical perspective, shooting is a complex psychomotor skill that involves visual-motor coordination, muscle strength, and good technique. (Nusri, Setijono, Rahayu, & Soegiyanto, 2018). This skill requires intensive practice and direct guidance in the PJOK learning process. The fact that only one student is in the "Very High" category strengthens the assumption that the shooting technique teaching method is not yet fully effective in the classroom. The limitations of this study lie in the relatively small number of samples (n = 17) and its focus only on male students, so it does not reflect the entire population of fifth grade students. In addition, factors such as the training environment, students' daily physical conditions, and differences in the teaching styles of PJOK teachers can also affect the results. The implications of this study are the need for evaluation and development of a more varied, game-based, and adaptive shooting skill learning model with students' ability levels. PJOK teachers can use this data as a basis for developing more personal and effective learning strategies.

## 5 Conclusion

Based on the results of the study conducted on 17 male students in grade V of SDI Bontoala, it can be concluded that the level of students' shooting ability is generally in the "Low" category. Most students (35.3%) showed suboptimal performance, only 1 student (5.9%) reached the "very high" category, and 5 students (29.4%) were classified as "moderate". This shows that shooting skills as part of basic football techniques still need to be developed through a more structured, focused, and adaptive PJOK learning process to the needs and abilities of individual students.

The use of shooting tests as a measurement instrument has proven effective in obtaining objective data related to student performance in kicking skills towards the goal. The results of this analysis also show the importance of periodic motor skill evaluation in the sports learning process in elementary schools, especially in the sport of football.

This study provides a practical contribution for PJOK teachers in developing more targeted training methods. For further development, it is recommended that future research involve a larger sample size, consider additional variables such as coordination, muscle strength, and playing experience, and integrate game-based learning models so that students are more motivated and actively involved.

## References

- Ahmed, M. A. H. (2021). *The activity of an educational field by means of assisting in the development the speed movement and shooting skill of football for youth*.
- Burhaein, E., Ibrahim, B. K., & Pavlovic, R. (2020). The relationship of limb muscle power, balance, and coordination with instep shooting ability: A correlation study in under-18 football athletes. *International Journal of Human Movement and Sports Sciences*, 8(5), 265–270.
- García-Ceberino, J. M., Feu, S., & Ibáñez, S. J. (2019). Comparative study of two intervention programmes for teaching soccer to school-age students. *Sports*, 7(3), 74.
- Hasyim, A. H., Haris, I., & Ramadhan, R. (2023). Basic Soccer Skills: A Cross Sectional Study on Junior High School Students. *Indonesian Journal of Sport Management*, 3(2), 224–229.
- Nusri, A., Setijono, H., Rahayu, T., & Soegiyanto, S. (2018). Developing Instruments to Measure Long Passing and Shooting Skills of the Football School Students of Medan City. *The Journal of Educational Development*, 6(3), 280–290.
- Santoso, N., & Santoso, N. P. (2024). Case study: problem-based learning model for soccer basic movement skills and learning activity. *Retos: Nuevas Tendencias En Educación Física, Deporte y Recreación*, (61), 578–582.
- Sugiyono. (2016). *Metode Penelitian Kualitatif dan R&D*. Alfabeta, Bandung.

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