Analysis of Shooting Technique Skills of Football Games at Sandeq Polman FC Football Club

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Abstract. This study aims to determine the level of shooting technique skills of Sandeq Polman FC players. This study uses a quantitative approach with a descriptive method. The population in this study were Sandeq Polman FC players, with a sample size of 20 people selected using a simple random sampling technique. Data were collected through a shooting skill test towards the goal that had been marked with a target number. Data analysis was carried out using descriptive statistics by presenting frequencies in the form of percentages. The results of the analysis showed that the shooting technique skills of players were generally in the "sufficient" category, indicated by 8 people (40%) who were in that category. In detail, the shooting technique skills of Sandeq Polman FC players were classified as follows; very good (1 person or 5%), good (5 people or 25%), sufficient (8 people or 40%), less (5 people or 25%), and very less (1 person or 5%). Thus, it can be concluded that the level of shooting technique skills of Sandeq Polman FC soccer players is in the sufficient category.

Keywords: Shooting Skills, Football.

1 Introduction

Football is one of the most popular sports in the world played and enjoyed by various groups of people, from amateurs to professionals. This sport not only emphasizes the physical aspect, but also demands mature technical and strategic skills from each player. The global sporting phenomenon that captivates billions of fans around the world, not only presents an interesting spectacle tactically and physically, but also demands mastery of a series of qualified individual technical skills from each player involved in it, where the ability to process the ball with the feet, control movement, make accurate passes, to make effective tackles are important foundations for creating a collective and efficient game. One of the basic technical skills that is very important in the game of football is the ability to shoot or kick the ball towards the goal with the aim of scoring a goal. Shooting is the end of the attack process carried out by a team and is the main indicator of success in a match. A player who has good shooting skills can be the determinant of victory in critical situations, especially when the opportunity to score goals is very limited. According to Reilly and Williams (2003), shooting is one of the main components in a player's offensive performance, where accuracy, strength, and decision-making are important factors that support each other.

In the context of the dynamics of modern football competition that increasingly relies on speed, accuracy, and efficiency in every aspect of the game, shooting effectiveness can no longer be viewed as just the ability to release a kick with maximum power, but also involves understanding and mastery of more complex and interrelated technical aspects, such as stable and balanced placement of the supporting foot, coordination of the swing of the foot that

produces optimal accuracy and power, the right point of contact with the ball to produce the desired direction and spin, and the ability to make quick and precise decisions in fast-paced and stressful match situations (Hughes & Franks, 2005), so that a player with well-trained shooting techniques will be able to take advantage of the smallest opportunities in the opponent's defense area, either through a direct kick scheme from outside the penalty box or through the final completion of measured passes in an attack scheme that has been carefully designed by the team.

Modern football training, shooting techniques have become one of the main focuses in training sessions, because the success of scoring goals is greatly influenced by the quality and effectiveness of shooting done by the players. Coaches not only train the physical aspects of players, but also systematically foster shooting skills with a scientific and data-based approach. Evaluation of shooting ability can be done through testing basic technical skills which are then analyzed using statistical methods. Descriptive statistics, in this case, are a very useful tool to describe the overall performance of players, because this technique is able to summarize data into an easily understood form through averages, frequencies, and percentages (Sudjana, 2005). Through this approach, coaches and researchers can identify the weaknesses and strengths of players objectively, so that training programs can be specifically adjusted to improve shooting effectiveness. In Polewali Mandar (Polman) Regency, West Sulawesi, football has developed quite rapidly with the emergence of local clubs that actively compete in various regional and provincial tournaments. One of the most prominent clubs is Sandeq Polman FC, which in recent years has shown significant progress in terms of athlete development and participation in various competitions. However, to improve the overall performance of the club, a deeper understanding of the quality of the basic techniques of the players is needed, especially shooting ability which has a direct impact on the achievement of match results. This study aims to analyze the shooting technique skills of Sandeq Polman FC players using a quantitative descriptive approach which is expected to provide an objective picture of the level of player ability. The results of this study are also expected to be used as evaluation material and consideration in compiling a more focused training program based on player needs.

Sandeq Polman FC Football Club, as a sports entity that actively participates in various levels of football competition, both at the regional level involving competition between teams from the same region and at the national level that demands higher competitiveness, of course has a deep awareness of how vital the quality of shooting techniques possessed by each player in its squad is, considering that the ability to consistently score goals is one of the main indicators of a successful team's performance and will be positively correlated with the achievement of satisfactory final results in every match played. Therefore, efforts to gain a deep and comprehensive understanding of the level of shooting technique skills specifically possessed by Sandeq Polman FC Football Club players are a very important and strategic step in order to objectively evaluate the team's strengths and potential, accurately identify specific areas in training that require further focus and development, and ultimately design a more effective and adaptive game strategy in dealing with various characteristics of different opponents.

2 Method

This study uses a quantitative approach with a descriptive research type, which aims to provide an objective and systematic description of the shooting technique skills of football players at the Sandeq Polman FC club. The quantitative approach was chosen because it is suitable for measuring numerical variables that can be analyzed statistically, so that the results can be used as a basis for decision making or recommendations in the context of football training. This quantitative descriptive research not only describes the phenomenon as it is, but also provides concrete and retestable information about the extent to which players' shooting abilities develop in the context of their routine training (Sugiyono, 2017; Arikunto, 2010). This is in line with Creswell's opinion (2014) that the quantitative approach is very suitable for use when researchers want to know the extent of the relationship between variables or describe the conditions of research subjects quantitatively. This research was conducted at the Sandeq Polman FC training facility located in Polewali Mandar Regency, West Sulawesi, namely on the main football field which is routinely used by the club in carrying out player coaching and development programs. The selection of this location was based on the consideration that the place was the original training environment of the players, so that the test results conducted would better reflect their real abilities in the conditions they usually face every day. The research implementation time lasted for two consecutive weeks, starting on [specify date], and was designed so as not to interfere with the team's regular training schedule, taking into account the physical condition and readiness of the players so that there is no fatigue or decreased performance during the test. Adjusting the right time and place is very important in sports research because it can affect the validity and reliability of the data collected (Baumgartner & Hensley, 2006). The population in this study included all active Sandeq Polman FC players who were members of the main team during the current competition season, totaling 20 players. Given the relatively small population and being homogeneous in terms of age, training level, and playing frequency, the sampling technique used was simple random sampling, which is a simple random sampling method in which each member of the population has an equal chance of being selected as a sample. By using this approach, it is hoped that the research results will be more representative and free from subject selection bias. The sample used in this study was 20 players, who were selected randomly using a name draw, while still considering the physical condition and readiness of each individual. This technique is in accordance with the recommendations of Sugiyono (2017) and is also supported by the opinion of Thomas (2023) who stated that simple random sampling is an ideal method in quantitative research for populations that are uniform in characteristics.

The main instrument used in this study was a shooting skill test towards the goal. This test is designed by providing a target on the goal that is divided into several areas with different values. Players are given the opportunity to shoot five times from the penalty spot or a predetermined point, then the score from each shot is calculated and added up to obtain the final score. This instrument refers to the soccer technique skill test guide used in similar studies (Harsono, 1988; Kurniawan & Ramadhan, 2020).

Data were collected through direct observation and recording of shooting scores when players performed the skill test. Researchers collaborated with club coaches to ensure that the test was carried out objectively and according to procedure. The entire test process was also documented to maintain data accuracy.

The data obtained were analyzed using descriptive statistical techniques. The final score of each player was processed to determine the frequency, average, and distribution of the shooting technique skill category, which was classified into five categories: very good, good, sufficient, lacking, and very lacking. This technique is used to describe the general tendency of the players' shooting abilities (Sudjana, 2005). The results of the analysis are presented in the form of tables and diagrams to facilitate interpretation.

3 Result

Descriptive analysis was conducted on the level of shooting technique skills of Sandeq Polman FC players. Descriptive analysis includes the number, mean, standard deviation, range, maximum, and minimum. These statistics are expected to provide a complete picture of the level of motivation and learning outcomes of students in physical education. The results of the descriptive analysis of each research variable are presented in the following table.

Table 1. Descriptive Analysis Results

Descriptive Statistics	N	Minimum	Maximum	Mean	Std. Deviation
Shooting Value	20	39	91	68,40	13,27

The results of the descriptive analysis show that for the Shooting Value variable, there are 20 samples analyzed. The lowest (minimum) value recorded is 39, while the highest (maximum) value is 91. The average (mean) shooting value is 68.40 with a standard deviation of 13.27, which shows a fairly significant variation in values among samples. Based on the results of the descriptive analysis shown in Table 3, it can be seen that the Shooting Value variable has 20 respondents involved in the measurement, with a minimum value of 39 and a maximum value of 91. This shows that the scores obtained by participants in the Shooting Value test vary quite significantly. The lowest score obtained by participants is 39, while the highest score recorded is 91. The average or mean of the shooting value is 68.40, which means that in general, participants show values that are slightly higher than the average. In addition, the standard deviation value of 13.27 illustrates the existence of a fairly large variation or spread of values among participants. This relatively large standard deviation indicates that some participants scored significantly higher or lower than the average, which may indicate differences in ability levels among them. Overall, the results of this analysis provide a picture of a fairly wide range of scores, with scores concentrated around the average, but with quite high variation between participants.

Table 2. Normality Test Results

Tests of Normality	Kolmogorov-Smirnov	Sig. (2-tailed)
Shooting Value	0,134	0,200

The results of the normality test using the Kolmogorov-Smirnov test show that the Shooting Value data has a significance value (Sig.) Of 0.200. In the normality test, if the significance value is greater than 0.05, then the data can be considered normally distributed. Because the significance value in this case is greater than 0.05, which is 0.200, it can be concluded that the distribution of the Shooting Value data is not significantly different from the normal distribution. This shows that the data obtained meets the assumption of normality, which is an important requirement for conducting further parametric analysis, such as the t-test or regression analysis. The normal distribution of this data also indicates that the variation or distribution of values among the samples follows a pattern similar to the normal distribution, which means that most values are centered around the average, and the frequency of very low or very high values tends to occur less frequently. In other words, the results obtained reflect a reasonable distribution pattern and are in accordance with what is expected in the context of this data analysis. Therefore, we can continue further analysis using statistical techniques that assume a normal distribution without the need to transform the data.

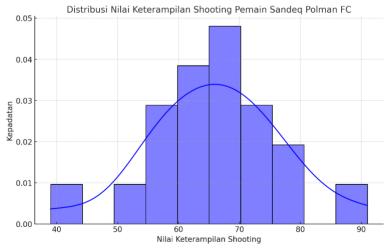
Table 3. Hypothesis Test Results

	Test Value					
	t	df	Sig. (2-	Mean Difference	95% Confidence Interval of the Difference	
			tailed)		Lower	Upper
Keterampilan Shooting	-0.535	19	.599	-1.60	-7.93	4.73

Based on the results of the One-Sample Test hypothesis test conducted on the Shooting Value, the hypothesis tested was whether the average Shooting Value differed significantly from the set test value, which was 70. The results of the analysis showed that the average Shooting Value in the sample was 68.40, with a standard deviation of 13.27, which means that there was quite a large variation among participants in terms of shooting ability. The t-test conducted produced a t-value of -0.535 with a degree of freedom (df) of 19. The p-value obtained was 0.599, which is greater than the significance level set at 0.05. This indicates that there is insufficient evidence to reject the null hypothesis, which states that the average Shooting Value is not significantly different from the test value of 70. Thus, it can be concluded that the average Shooting Value in the tested sample is not significantly different from the set test value (70). This means that based on the available data, there is no significant difference between the average Shooting Value obtained by the participants and the value of 70 as the reference value. Furthermore, the 95% confidence interval for the mean difference between the sample and test values shows a range between -7.93 to 4.73, which includes the value of zero, further supporting the decision not to reject the null hypothesis. Therefore, the results of this hypothesis test conclude that the participants' performance in the Shooting Value test is not statistically significantly different from the established reference value.

Table 4. Percentage Results of Shooting Skills Assessment

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Category	Value Range	Frequency (f)	Percentage (%)			
Very Good	86-100	1	5%			
Good	71-85	5	25%			
Enough	56-70	8	40%			
Poor	41-55	5	25%			
Very Poor	≤ 40	1	5%			
Total		20	100%			



Based on the results of data collection conducted through a shooting technique skill test on 20 active Sandeq Polman FC players, the results of individual scores from five shooting trials were obtained which were then classified into five skill categories, namely very good, good, sufficient, lacking, and very lacking. The results show that the majority of players are in the sufficient category, namely 8 people (40%), while the good category is occupied by 5

players (25%), followed by the lacking category which also includes 5 players (25%). Meanwhile, only 1 player (5%) is in the very good category, and 1 other person (5%) is in the very lacking category. These data indicate a fairly diverse distribution of shooting technique skills among team members, with a dominant tendency to be at the medium or sufficient level of ability.

Descriptively, the average value of the shooting test results for all players is in the score range indicating performance that can still be improved through intensive training and individual technique evaluation. The fairly high variation in scores between players with the highest and lowest abilities reflects a significant difference in mastery of shooting techniques, both in terms of accuracy, kick power, and selection of the right shooting angle. These results also provide an illustration that although most players have a basic understanding of shooting techniques, not all of them are able to execute kicks consistently with high quality.

4 Discussion

The results of this study indicate that the shooting technique skill level of Sandeq Polman FC players is in the sufficient category, which means that in general the team's shooting ability still needs to be improved in order to be more competitive in matches that demand high effectiveness in the opponent's penalty area. This shows that even though the players have received regular training, their shooting quality is not yet fully maximized, both in terms of basic techniques such as foot position when kicking, body balance, and tactical aspects such as decision making when and where to shoot. In line with Harsono's opinion (1988), good shooting technique is not only determined by leg muscle strength alone, but also coordination, concentration, and self-confidence when executing the ball towards the goal.

Another factor that influences these results is the player's level of understanding of the shooting technique itself, which includes choosing the dominant foot, body position when shooting, and accuracy in reading the game situation. In many cases, inaccurate shooting is more due to inaccurate body position and less than optimal timing in decision making, which ultimately causes the ball to miss the target. According to Hughes & Franks (2005), the quality of decision making in a match situation greatly determines the success of shooting, especially under high pressure conditions from opposing players. Thus, coaches are expected to not only focus on repetitive training, but also include decision-making elements in shooting training simulations so that players can get used to thinking quickly in real situations.

In addition, differences in results between individuals can also be associated with factors of playing experience and the frequency of training undertaken by each player. Players who often get the opportunity to play in the position of striker or attacking midfielder tend to have better shooting skills, because these positions interact more often with scoring opportunities. Conversely, players who more often play as defenders or goalkeepers may have lower shooting skills because they are not the main focus of their daily training. This is in line with the views of Weinberg and Gould (2014), who emphasize the importance of position specialization in developing specific skills in team sports, where certain technical training must be adjusted to the tactical role of the player in the team.

In addition to technical aspects and experience, psychological factors such as self-confidence, match pressure, and internal motivation also play an important role in a player's shooting performance. A player who is technically capable of shooting well may fail to execute it in a match due to mental pressure, anxiety, or lack of self-confidence. Therefore, the training program provided by the coach should include a holistic approach that not only develops physical and technical abilities, but also pays attention to the psychological aspects of the players, so that they can display optimal performance in any condition (Weinberg & Gould, 2014).

With results that tend to be in the sufficient category, this study provides a strong signal that the Sandeq Polman FC club still has a lot of room for development, especially in improving shooting technique skills. There needs to be a comprehensive evaluation of the training methods applied, including the use of structured training based on match simulations, video analysis approaches, and periodic individual evaluations. This approach has proven

effective in improving the performance of shooting technique skills as explained in research by Ali (2020), which states that focused technique training carried out consistently with a performance analysis approach can increase shooting accuracy by up to 30% in a three-month training period.

5 Conclusion

Based on the results of data analysis from a study conducted on 20 players who are members of the Sandeq Polman FC football club, it can be concluded that the shooting technique skills possessed by the players are generally in the sufficient category, with the dominance of values in that range reaching 40%, namely 8 players. This finding reflects that most players already have a basic understanding and mastery of shooting techniques, but there are still shortcomings in terms of accuracy, kick power, and consistency in implementing these techniques on the field. The average value or mean obtained was 68.4, which indicates that the overall shooting technique performance is not optimal and is still slightly in the sufficient or moderate category.

This is also reinforced by the standard deviation value of 13.27, which shows that there is a fairly varied distribution of values between individuals, indicating that there is a significant difference in shooting ability between one player and another. Thus, the shooting technique abilities possessed by the players are still classified as average and have not shown extraordinary performance advantages. This gives a signal that although some players are already in the good and very good categories, efforts to improve the quality of shooting skills as a whole still need to be done, especially through a more structured, intensive training approach, and based on periodic evaluation of the development of each individual player's skills.

This study provides an initial overview of the shooting technique skill profile of Sandeq Polman FC players. Further research can be conducted by involving other variables such as playing experience, player position, or shooting biomechanics analysis to gain a deeper and more comprehensive understanding. In addition, evaluating the effectiveness of the applied shooting training program is also important to measure progress and make necessary adjustments.

Overall, the results of this study indicate that the Sandeq Polman FC football club has quite good potential in terms of shooting technique skills, but this potential has not been fully optimized. Therefore, greater attention is needed from coaches and club management to develop a more focused and directed shooting technique training program, for example through intensive shooting training on targets, match simulations involving quick decision making, to the application of video analysis to review the technical deficiencies of each individual. With the support of proper and continuous training, it is expected that the shooting skills of the players can be significantly improved, which ultimately has a direct impact on improving the quality of the team's overall performance in facing increasingly competitive competitions and improving the quality of the players' shooting techniques, it is hoped that the Sandeq Polman FC Football Club can increase goal productivity and achieve better results in the competitions they participate in.

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