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COMPARING HIGH LOB AND ROLL POINTING IN SOUTH SULAWESI PETANQUE ATHLETES

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ABSTRACT

This study aims to determine the comparison of high lob and roll pointing techniques among South Sulawesi Petanque athletes at distances of 6, 7, 8, and 9 meters. This study employs a quantitative research design with a descriptive approach. Data collection techniques include observation, pointing skills tests, and documentation. At a distance of 6 meters, the research yielded results. The Mann-Whitney test yielded a result of 0.080, surpassing the significance level of 0.05. This result led to the acceptance of H0, indicating that the athletes' abilities did not differ between the pointing high lob and pointing roll techniques. At a distance of 7 meters, the Mann-Whitney test yielded a result of 0.508, surpassing the 0.05 level, indicating that the athletes' abilities do not differ between the Pointing High Lob and Pointing Roll techniques. At a distance of 8 meters, the result of the Mann-Whitney test is 0.817, which is a value greater than the 0.05 level, so at this distance, there is no comparison of athletes' ability to throw using the Pointing High Lob and Pointing Roll techniques. At a distance of 9 meters, the result of the Mann-Whitney test is 0.000, which is a value smaller than the 0.05 level, so at this distance, there is a comparison of athletes' throwing abilities between using the Pointing High Lob and Pointing Roll techniques.

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1. INTRODUCTION

In the realm of sport, we find small examples of life where social interactions occur between participants, such as competing athletes. This reflects the social dynamics that occur in society in general (Day et al., 2012). Various age groups can enjoy petanque, a sport that focuses on concentration, precision, and accuracy, at an affordable cost due to its flexible location and playing schedule (Anwar et al., 2022).

Players can compete in single, double, or triple mode with the appropriate number of players on hard surfaces like sand or gravel (Pelana et al., 2021; Setiakarnawijaya et al., 2021). Each participant attempts to place as many of their metal balls, called "boules," as close as possible to small wooden balls called "jacks" or

"cochonnets," either by throwing or shooting. The match ends when one of the teams or players scores 13 points first or has a higher score at the specified time (Pelana, 2020). The main objective in the game is to throw the ball with a slight backspin so that it lands closer to the opponent's small ball (cochonnet) or direct our ball to attack and displace the opponent's puck.

Participation in the SEA Games in Palembang in 2011 introduced petanque to Indonesia (Okilanda, 2018). To play petanque, you need a field measuring 6 meters by 12 meters and use iron and wooden balls. The balls used have a diameter of between 70 and 90 mm and a weight of between 650 and 850 grams (Laksana et al., 2017). Petanque has several competition categories, including men's and women's singles, men's and women's doubles, men's and women's triples, and shooting (Agustina & Priambodo, 2017; Irawan et al., 2022).

Individuals or teams use pointing as a strategy to precisely place the ball towards their intended target (Juhanis & Nur, 2018). Meanwhile, Pelana (2020) states that pointing ability has a significant impact in a game because it requires a high level of accuracy to place the boss in the appropriate position. Therefore, this technique is very important when playing petanque. As previously mentioned, there are three methods for pointing: squatting, half-squatting, and standing.

The high lob technique involves throwing the ball quite high to achieve the desired point without rolling it further. In the sport of petanque, the high lob technique involves lifting the ball high into the air and letting it fall at a steep angle towards the desired target (Setiakarnawijaya et al., 2021). When there is an obstacle in front of or between the opponent's balls that a pointing roll cannot easily avoid, players often choose this technique. To execute a high lob successfully, skills are required in managing the strength and angle of the throw so that the ball lands accurately near the intended target (Ana, 2020).

In the context of petanque, the pointing technique is the key to approaching the target with a wooden ball closer than your opponent's iron ball (Perdana et al., 2022; Nurhasan et al., 2024). To ensure precision in the throw reaching the target, athletes must master this technique with clenched palms without gaps between the knuckles. Athletes can develop their pointing skills by using various training models like rolls, soft lobs, and high lobs (Lubis et al., 2021). However, the research findings show that South Sulawesi petanque athletes' pointing skills are still not optimal or by existing theory after reviewing field phenomena (Sitorus, 2022).

Observations by the researcher during the training sessions of South Sulawesi petanque athletes at the Faculty of Sports and Health Sciences, Makassar State University, revealed that the athletes' training lacked focus due to their studies, resulting in restricted training time. The athletes still only practice games like game point 11, and the absence of training programs like pointing rolls, semi rolls, and high lobs poses a significant challenge. The duration of technical training remains limited, often not exceeding 2 hours, and there is a lack of awareness among South Sulawesi petanque athletes about the importance of beginning training. Therefore, many South Sulawesi petanque athletes are less consistent in their pointing.

The researchers conducted this comparison based on the training sessions of South Sulawesi Petanque athletes, who require special attention to pointing skill techniques such as high lobs and rolls. The aim is to enhance the performance of these athletes, thereby influencing the game's quality and strategy. Researchers conducted a comparison between high lobs and rolls, with a particular focus on South Sulawesi Petanque athletes, as they necessitate specific attention to pointing techniques for the development of their skills. While conducting this comparison, the researcher aims to identify both advantages and disadvantages, with the goal of enhancing the pointing skills of South Sulawesi Petanque athletes.

2. METHOD

This research uses a survey method with a quantitative approach (Sugiyono, 2019) to determine the high lob and roll pointing skills of South Sulawesi Petanque athletes. We conducted skill tests on 30 petanque athletes from South Sulawesi. We will conduct the research in February 2024. The research will involve conducting high-lob and roll skill tests in the sport of Petanque on athletes from South Sulawesi. Figures 1 and 2 below show the circle-pointing and box-pointing test instruments.

Figure 1. Circle Pointing Test Instrument

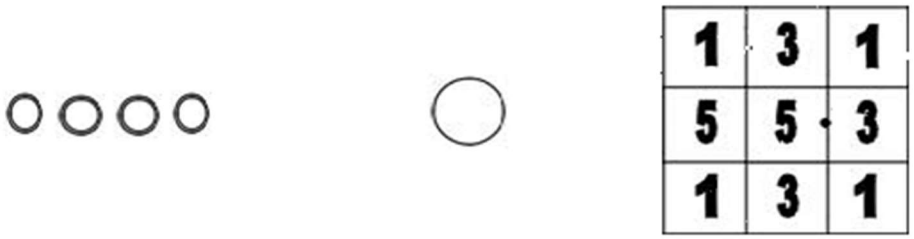

Figure 2. Box Pointing Test Instrument

This research refers to high lobe pointing, which measures the accuracy of South Sulawesi petanque athletes in performing the pointing technique in a circle at distances of 6, 7, 8, and 9 meters, as measured using a pointing test instrument. This research refers to the pointing roll, which measures the accuracy of South Sulawesi petanque athletes in performing the pointing technique in a circle at 6, 7, 8, and 9 meters using a pointing test instrument.

Researchers will use descriptive analysis in this research, including the presentation of tables, diagrams, and statistical calculations such as mean, median, mode, standard deviation, variance, minimum value, and maximum value using SPSS (Statistical Package for the Study) statistical software. Social Sciences). The Mann-Whitney test

can serve as an alternative when the conditions for using the t test in parametric statistics are not satisfied. Two necessary formulas in the testing process calculate the U value (Mann-Whitney) to determine the test results (Prasetyo & Jannah, 2006).

3. RESULTS AND DISCUSSION

3.1. Results

The results of the petanque test with the pointing high lob technique at distances of 6 meters, 7 meters, 8 meters, and 9 meters demonstrate a player's performance and consistency in mastering this technique. By using the pointing high lob method, 30 players try to throw the ball at a high angle so that the ball can fall vertically close to the target ball.

Description of High Lob Pointing Technique Results

Table 1. Descriptive Statistics Pointing Hight Lob

Variable	High Lob Pointing Technique	Distance 6 m	Distance 7 m	Distance 8 m	Distance 9 m
N	30	30	30	30	30
Range	0	5	5	5	5
Minimum	1	0	0	0	0
Maximum	1	5	5	5	5
Sum	30	55	46	57	63
Mean	1.00 .000	1.83 .259	1.53 .266	1.90 .323	2.10 .347
Std. Deviation	.000	1.416	1.456	1.768	1.900
Variance	.000	2.006	2.120	3.128	3.610

The results from Table 1 above are an illustration of high-lob pointing technique skills from 30 samples. At a distance of 6 meters, the average value (mean) is 1.83; at a distance of 7 meters, the mean is 1.53; at a distance of 8 meters, the mean is 1.90; and at a distance of 9 meters, the mean is 2.10. Then, the variance value at a distance of 6 meters is 2,006, the variance value at a distance of 7 meters is 2,120, and at a distance of 8 meters, the variance value is 3,128. At a distance of 9 meters, the variance value is 3,610. The maximum value obtained using the high-lobe point technique is 5, and the minimum value is 0. Also, at a distance of 6 meters, the sum value is 55; at a distance of 7 meters, it is 46. At a distance of 8 meters, the sum value obtained is 57 and At a distance of 9 meters, the sum value obtained is 63.

Description of the Results of the Pointing Roll Technique

Table 2. Descriptive Statistics Pointing Roll

Variable	Pointing Roll Technique	Distance 6 m	Distance 7 m	Distance 8 m	Distance 9 m
N	30	30	30	30	30

Variable	Pointing Roll Technique	Distance 6 m	Distance 7 m	Distance 8 m	Distance 9 m
Range	0	5	5	5	1
Minimum	2	0	0	0	0
Maximum	2	5	5	5	1
Sum	60	73	53	52	3
Mean	2.00 .000	2.43 .223	1.77 .274	1.73 .262	.10 .056
Std. Deviation	.000	1.223	1.501	1.437	.305
Variance	.000	1.495	2.254	2.064	.093

We got 30 samples to look at Table 2, which shows how good people were at the high-lob pointing technique. The average score at 6 meters was 2.43, the average score at 7 meters was 1.77, and the average score at 8 meters was 1.73. At a 9-meter distance, the average value is 0.10. Then, the variance value at a distance of 6 meters is 1.495, the variance value at a distance of 7 meters is 2.254, and at a distance of 8 meters, the variance value is 2.064. At a distance of 9 meters, the variance value is 0.093. The maximum value obtained using the high-lobe point technique is 5, and the minimum value is 0. At a distance of 6 meters, the sum value is 73, and at a distance of 7 meters, it is 53. Meanwhile, at 8 meters, the sum value obtained is 52, and at 9 meters, the sum value obtained is 3. The sum value significantly changes at a distance of 9 meters.

Table 3. Test Statistics Pointing Roll

Test Statistics[a]				
	Distance 6 m	**Distance 7 m**	**Distance 8 m**	**Distance 9 m**
Mann-Whitney U	342.500	407.500	435.000	157.500
Wilcoxon W	807.500	872.500	900.000	622.500
Z	-1.752	-.662	-.232	-4.908
Asymp. Sig. (2-tailed)	.080	.508	.817	.000

a. *Grouping Variable: Teknik_Pointing*

Table 3 reveals that the Mann-Whitney test's significance (2-tailed) at a distance of 6 meters is 0.080. This value surpasses the significance level of 0.05, leading to the acceptance of H0, indicating a lack of comparison between the athletes' abilities in the hight lob and pointing technique pointing roll. At a distance of 7 meters, the Mann-Whitney test's significance (2-tailed) is 0.508, surpassing the 0.05 level, indicating no comparison in athletes' abilities between the Pointing High Lob and Pointing Roll techniques. At a distance of 8 meters, the Mann-Whitney test's significance (2-tailed) is 0.817, which is a value greater than the 0.05 level, so there is no comparison of athletes' ability to throw using the Pointing High Lob and Pointing Roll techniques. At a distance of 9 meters, the significance value (2-tailed) is 0.000, which is smaller than the 0.05 level, so at this distance, there is a comparison of athletes' throwing abilities between using the Pointing High Lob and Pointing Roll techniques.

3.2. Discussion

Comparison of the Pointing Hight Technique and the Pinting Roll Technique at a Distance of 6 Meters

The results showed that at a distance of 6 meters, the score most often obtained by athletes in the pointing roll technique was 3, with a total of 18 athletes achieving that score, while in the pointing high lob technique, the score most often obtained was 3, but with a slightly lower number of athletes, namely 14 athletes. Even though there is a difference in the number of athletes who achieved the same score between the two techniques, the Mann-Whitney statistical test shows that the significance (2-tailed) of the comparison of the two techniques is 0.080. This value is greater than the generally used significance level, namely 0.05. This means that there is no significant difference between the athletes' abilities in applying the pointing high lob and pointing roll techniques at a distance of 6 meters.

The data reveals that throws at a distance of 6 meters, utilizing both the pointing high lob and pointing roll techniques, exhibit the highest accuracy when compared to other distances. The most likely cause is that during training, there is more emphasis on the 6-meter distance and lower anxiety at that distance.

These results are consistent with several previous studies, which illustrate that the two techniques have relatively equivalent effectiveness in achieving desired results in these sports. Smith et al. (2018) conducted a study and found no significant difference in performance results between the pointing high lob and pointing roll techniques at a distance of 6 meters. These findings indicate that other factors, such as concentration, accuracy, and strategy, significantly influence athlete success in pointing sports. The most likely cause is that during training, athletes place more emphasis on the distance and experience less anxiety at that distance.

Comparison of the Pointing Hight Technique and the Pinting Roll Technique at a Distance of 7 Meters

The results of the research show that at a distance of 7 meters, there is a trend that is almost the same as at a distance of 6 meters in terms of the scores obtained by athletes. In the pointing high lob technique, a score of 3 is still the most frequently obtained score, namely by 11 athletes. However, interestingly, there is a slight difference with the value 0, which is the second choice, and the number of athletes is only one different from the value 3, namely 10 athletes. A score of 3 was also the most frequently obtained by 11 athletes in the pointing roll technique. This shows variation in grade preferences among athletes, although grade 3 remains the most common. Meanwhile, in high-lob shooting, only one athlete achieved a score of 5 at this distance, and in the pointing roll technique, only two players achieved a score of 5. This suggests that achieving perfect performance at 7 meters may be more difficult than at the previous distance of 6 meters. Athletes' value choices may vary depending on factors like their shooting technique, mental state, prior experience, and throwing position. This agrees with Irawan et al. (2022) theory that this distance has a lower level of accuracy than the previous distance.

However, even though there are variations in athletes' scores at a distance of 7 meters, the results of the Mann-Whitney test show that the significance (2-tailed) of this test is 0.508. This value, such as at a distance of 6 meters, is also greater than the generally used significance level, namely 0.05. Therefore, we can conclude that there is no significant difference in the athletes' ability to apply the pointing high lob and pointing roll techniques at a distance of 7 meters. The results of this non-parametric test are directly proportional to the description of the data obtained, where at a distance of 7 meters, the pointing high lob and pointing roll techniques both describe a value of 3 as the highest value obtained by 11 athletes. The two techniques yielded the lowest value of 5, with only one athlete using the pointing high lob technique and two athletes using the pointing roll technique. This means that there is no significant comparison between the high-lob pointing technique and the pointing roll technique at a distance of 7 meters.

Comparison of the Pointing Hight Technique and the Pinting Roll Technique at a Distance of 8 Meters

The results of the research at a distance of 8 meters show differences in the value choice patterns between the pointing high lob and pointing roll techniques. In the pointing high lob technique, value 1 is the highest value obtained by 11 athletes. Meanwhile, in the pointing roll, only eight athletes received a 1. Conversely, the pointing roll technique dominates the athlete's score with a value of 3, whereas the pointing high lob only yielded a value of 3 for 7 athletes. Five athletes achieved a score of 5 in the pointing high lob, whereas only one athlete achieved it in the pointing roll technique. This shows that there is variation in value preference between the two techniques at this distance, with the pointing roll technique tending to get a value of 3 and the pointing high lob tending to get a value of 1.

However, even though there are differences in the pattern of obtaining values between the pointing hight lob and pointing roll techniques at a distance of 8 meters, the results of the Mann-Whitney test show that the significance (2-tailed) of the test is 0.817. This value is greater than the generally used significance level, namely 0.05. Therefore, we can conclude that athletes' abilities in applying the pointing hight lob and pointing roll techniques at a distance of 8 meters do not significantly differ. Although there are variations in the pattern of value obtained between the two techniques at a distance of 8 meters, the general conclusion shows that the difference between the pointing high lob and pointing roll techniques is not significant at this distance.

Smith et al. (2018) conducted a related study that investigated factors influencing athlete performance in shooting sports, including technique and value preferences. This research highlights the complexity of understanding the factors that influence athlete success in shooting sports and the importance of considering multiple variables, including distance, technique, and race conditions. According to Ramadhan et al. (2023), there are three phases in shooting, including the back swing phase, swing phase, and release phase. Each of these phases has different characteristics of angle, time, speed, distance, and height of the ball. These characteristics will influence muscle strength and hand touch, as well as the ball's maximum height and final speed over a

certain distance, resulting in a shot that meets its goal. Thus, further studies considering these psychological aspects may also provide valuable insight into the comparison between different techniques in shooting sports at similar distances.

Comparison of the Pointing Hight Technique and the Pinting Roll Technique at a Distance of 9 Meters

The research results at a distance of 9 meters revealed a significant difference in the choice of values between the pointing high lob and pointing roll techniques. In the pointing hight lob technique, scores 0 and 3 were the most common choices, with each taken by 9 athletes, followed by a score of 5 obtained by 6 athletes. However, in the pointing roll technique at the same distance, almost no athlete managed to achieve a certain score, except for three people who got a score of 1. This shows that the pointing roll technique may be less effective than the pointing high lob at a distance of 9 meters.

The Mann-Whitney test's significance (2-tailed) at a distance of 9 meters is 0.000, which is much smaller than the generally used significance level, namely 0.05. This low significance value indicates that there is a significant difference in the athlete's ability to apply the pointing hight lob and pointing roll techniques at a distance of 9 meters. Thus, these results suggest that the pointing high lob technique may be more effective or preferred by athletes in this context compared to the pointing roll. According to Johnson et al. (2020) previous research, the pointing high-lob technique tends to yield higher scores than the pointing roll in various competition conditions. This study highlights the relative superiority of the pointing high-lobe technique in achieving better results at certain distances in shooting sports.

Furthermore, research by Wang et al. (2017) found that the pointing high lob technique was often considered more effective in certain race situations than the pointing roll, especially at longer distances. This shows the importance of considering the relative merits of different techniques in shooting sports, especially when selecting the technique that best suits the competition conditions and distance at hand.

4. CONCLUSION

Based on a comparison of various distances between the pointing hight lob and pointing roll techniques in the sport of Petanque,

1. At 6 meters

The athlete's ability to apply the two techniques did not significantly differ, as indicated by the Mann-Whitney test value of 0.080, which exceeded the significance level of 0.05. The results of statistical tests show that the differences between the techniques are not significant at these distances.

2. At 7 meters

The athlete's ability to apply the two techniques did not significantly differ, as indicated by the Mann-Whitney test value of 0.508, which was greater than the significance level of 0.05. The results of statistical tests show that the differences between the techniques are not significant at these distances.

3. At an 8-meter distance

Just like at distances of 6 meters and 7 meters, there is no significant difference between the pointing high lob and pointing roll techniques. The Mann-Whitney test result was 0.817, which was higher than the significance level of 0.05. The statistical test results confirmed that the difference between the two techniques was not significant at 8 meters.

4. At 9 meters

The Mann-Whitney test result is 0.000, which is less than the significance level of 0.05. This means that there is a significant difference in the choice of values between the two techniques. The results of the Mann-Whitney test show that the pointing high lob technique is more effective or preferred by athletes compared to the pointing roll at this distance.

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