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The Effect of Shooting by Petanque Athletes of Bima Regency on the Achievement of Provincial Sports Week

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Abstract

Study purpose. This study aimed to determine the extent to which the effect of shooting training using obstacles on athletes of the Petanque Training Center (TC) of Bima Regency could improve performance at the NTB Provincial Sports Week in 2023.

Materials and methods. This research was a pseudo-experimental study with a "one group pretest and posttest design". The research instrument for petanque athletes was a pretest shooting at a distance of 8 meters, while the treatment was shooting practice using obstacles at distances 6, 7, 8, and 9 and throwing bosi at a distance of 10 throws each. The posttest was conducted to measure the ability of petanque athletes to shoot at a distance of 8 meters. The subjects in this study were Bima Regency petanque athletes who participated in the 2023 NTB Provincial Sports Week TC, totaling 10 people.

Results. Based on the t-test statistical test, the pretest shooting results were obtained with an average value of 9.70, while the post-test shooting results with an average value of 16.10, with an average difference of 6.400. The final result of the T-Test obtained a significance value of <0.001, with a significance level of 0.05.

Conclusion. There was an influence of shooting practice using obstacles on the performance of Bima Regency petanque athletes, this was evidenced by the achievement of winning 6 medals at the NTB Provincial Sports Week championship in 2023. However, in this study, shooting practice is not the only variable that affects the performance of petanque athletes.

Keywords: Petanque Shooting, Achievement Improvement, Athletes

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Introduction

Petanque is one of the sports competed at regional, national, and international levels. Petanque is a sport that originated in France. In Indonesia, the Indonesian Petanque Sports Federation (FOPI) was established in 2011. FOPI Indonesia participated in the XXVI SEA GAMES in 2011, while FOPI Bima Regency was formed in 2019. Through fast steps and work,

the board moved to develop Petanque Sports at the regional level in 2021 and 2022, by successfully organizing the West Nusa Tenggara Province Regional Championship, petanque is a newly developed sport in Indonesia. The sport of petanque is a game that has just developed in Indonesia, but many people are starting to like this game. This is evidenced by the number of clubs that began to emerge both on campus and in several areas in South Sulawesi, especially in the city of Pare-Pare. Petanque sports are very practical to play anywhere and do not take up much space and energy, so both children and adults still have the potential to be involved in petanque games (Sahrani et al., 2022).

Another problem faced by petanque sports is the athlete's ability to shoot, this can be seen when participating in regional championships. Shooting accuracy that is still not hitting the target of the opponent's boss will allow the opponent to steal points and win the match. Shooting ability in petanque sports is very important besides pointing, namely throwing bosi to get closer to the boka. So the description of the treatment applied to petanque athletes is shooting practice using obstacles with a distance of 6,7,8,9 and throwing bosi with a distance of 10 throws each.

The distinctive feature of Petanque lies in the accuracy of throwing iron balls towards the target. What factors affect the success of throwing (shooting) in petanque sports are not yet known (Nurfatoni & Hanief, 2020). Petanque is a form of sports game whose goal is to throw an iron ball close to a wooden ball (Khofifah et al., 2021). The steps of playing petanque include the following; 1) Petanque can be played 1 vs 1, 2 vs 2, and 3 vs 3 male / female or mixed (no age limit). When playing 3 balls are held unless playing 3 vs 3 2 balls. The game starts with a "throw", the winner is allowed to throw the boka from inside the circle on one side of the court. 2). Throwing distance of 6 meters or more than 10 meters, 3 chances are given, if failed then the opponent takes over. 3). After the boka (wooden ball) is thrown, the winner of the toss throws the bosi as close as possible to the boka (wooden ball). 4) Then it is your opponent's turn to throw. You can either approach the boka (wooden ball) or hit your opponent's bosi away from the boka (wooden ball). 5). The team whose ball is farthest from the bosi (wooden ball) is the team that continues to play until the ball runs out or approaches the opponent's bosi. 6). The number of points is extrapolated to 13 points, and the first team to reach 13 points is the winner (Permadi et al., 2020). The character values contained in the sport of petanque include religion, honesty, tolerant, disciplined, hard work, creativity, independence, democratic, curiosity, national spirit, love for the country, respect for achievement, friendly/communicative, peace-loving, fondness of reading, environmental care, social care, and responsible (Pratiwi et al., 2023)

The value Character building as a form of increasing discipline in athletes, because this is a fundamental thing to apply to athletes before applying shooting to athletes, especially during the West Nusa Tenggara Province sports week training camp needs to be done because shooting is one of the powerful weapons in winning the match. Shooting is a type of throw to repel the opponent's boss from the target ball. The types of shooting are Shooting on the iron, and shooting directly at the opponent's boss without touching the ground first. Short Shoot shoots the opponent's bosi by first touching the ground about 20 to 30 cm from the opponent's bosi. Ground Shoot shoots the opponent's bosi by first touching the ground about 3 or 4 meters and rolling to hit the opponent's bosi. Some shooting mechanics include ball grasp, body alignment with respect to the target, foot placement, low body alignment and forward lean, ball relaxation, and follow through (Juhani et al., 2019).

Shooting practice using barriers is more effective than shooting practice without barriers in increasing 7-meter distance shooting in Sragen Regency Petanque athletes. Namely the percentage increase in shooting using a barrier of 60.7% and the percentage increase in shooting practice without a barrier of 39.2% (Lubis & Permadi, 2020). It can be concluded that arm muscle strength training has a more significant effect on the results of shooting throws

compared to accuracy training, as seen from the large increase in the value obtained from the arm muscle strength experimental group (Badaru et al., 2021). First, there is an effect of imagery training on improving the shooting game ability of Undikma petanque athletes with a pretest average score of 4.7143 increasing to 13.000. Second, there is an effect without imagery training on improving the shooting game ability of Undikma petanque athletes with an average pretest score of 3.4286 increasing to 10.0000. Third, there is a difference in the effect of imagery training and without imagery training on improving the shooting game skills of Undikma petanque athletes (Lubis & Permadi, 2020). The results of previous studies show that there is a significant effect on shooting using various training methods, but this study will focus on shooting exercises using obstacles in Petanque TC Athletes of Bima Regency Against the Achievement of the 2023 NTB Provincial Sports Week.

Materials and Methods

Study participants

Using different sample sizes from the same population did not produce significant differences. Results from a sample of only two percent were not significantly different from results using a sample of ten percent of the population. In strictly controlled experimental research, if each group consisted of between 8 and 10 subjects, this was considered sufficient to obtain accurate results, although statistical tests always showed significance if the sample size was large enough (Holland & Wainer, 1993: 12) in (Alwi, 2015). The same opinion was expressed by (Arikunto, 2017) who said that if the subject was less than 100, then the entire population became the research sample. But if the subject was more than 100 then 10-15% or 15-25% could be taken. Therefore, the research sample of all Bima Regency petanque athletes who conducted TC for the West Nusa Tenggara Provincial Sports Week championship in 2023 was 10 people.

Study organization

The type of research used was quantitative research and quasi-experimental research method, carrying out tests on one or more groups that were given treatment and comparing the results with one or more control groups that were not subjected to treatment. The research design used was "One Group Pretest and Posttest Design", which was a research design that included a pretest before treatment and a posttest after treatment. Because it can be compared to what was done before to the treatment being administered, it may be known more precisely in this way (Sugiyono, 2019). The research instruments were 10 petanque athletes doing pretest shooting with a distance of 8 meters, while for the treatment they did shooting exercises using obstacles with distances of 6, 7, 8, and 9 and throwing bosi with a distance of 10 throws each. The posttest was conducted to measure the ability of petanque athletes to shoot at a distance of 8 meters.

Statistical analysis

Data analysis techniques were carried out by hypothesis testing, prerequisite tests, normality tests, and paired T-test statistical tests, using SPSS. Hypothesis testing using the t-test, by comparing the results of the Pretest and post-test if the Sig value. More than 0.05, then the results are not significant if the Sig value. Less than 0.05, then the result is significant (Malay, 2022)

Results

The results of the data analysis of shooting training for Petanque TC athletes in Bima Regency towards the achievements of the 2023 NTB Provincial Sports Week, by conducting a statistical normality test as shown in the following table:

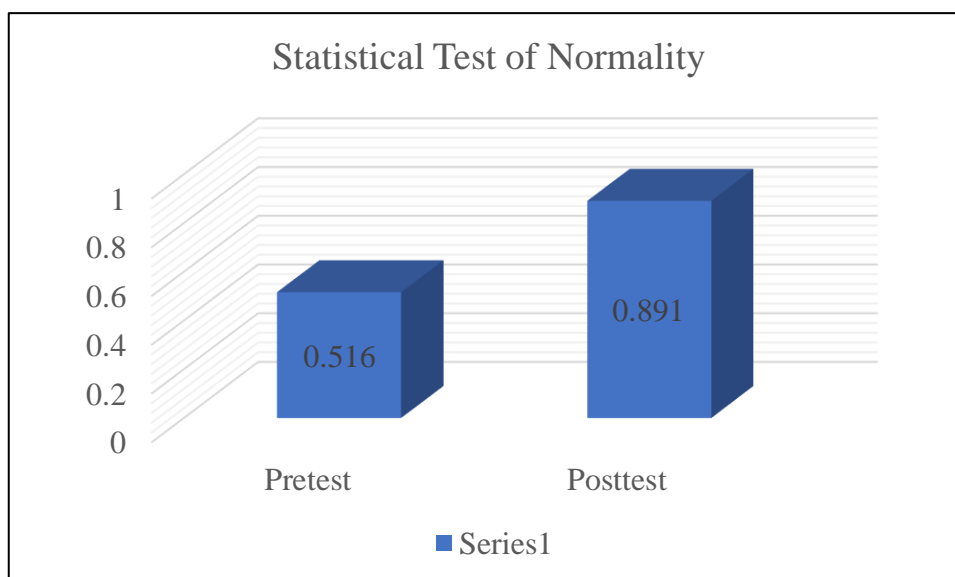


Figure 1. Statistical Test of Normality

The normality test in the Shapiro-Wilk table obtained shooting data on the pretest of 0.516, while the shooting test on the posttest obtained a result of 0.891 which means the shooting significance value is above 0.05 which means the data is normally distributed.

The next statistical test was to conduct a T-Test test of shooting exercises on Petanque Athletes of the Bima Regency Training Center on the Achievement of the West Nusa Tenggara Provincial Sports Week in 2023, according to the following figure.

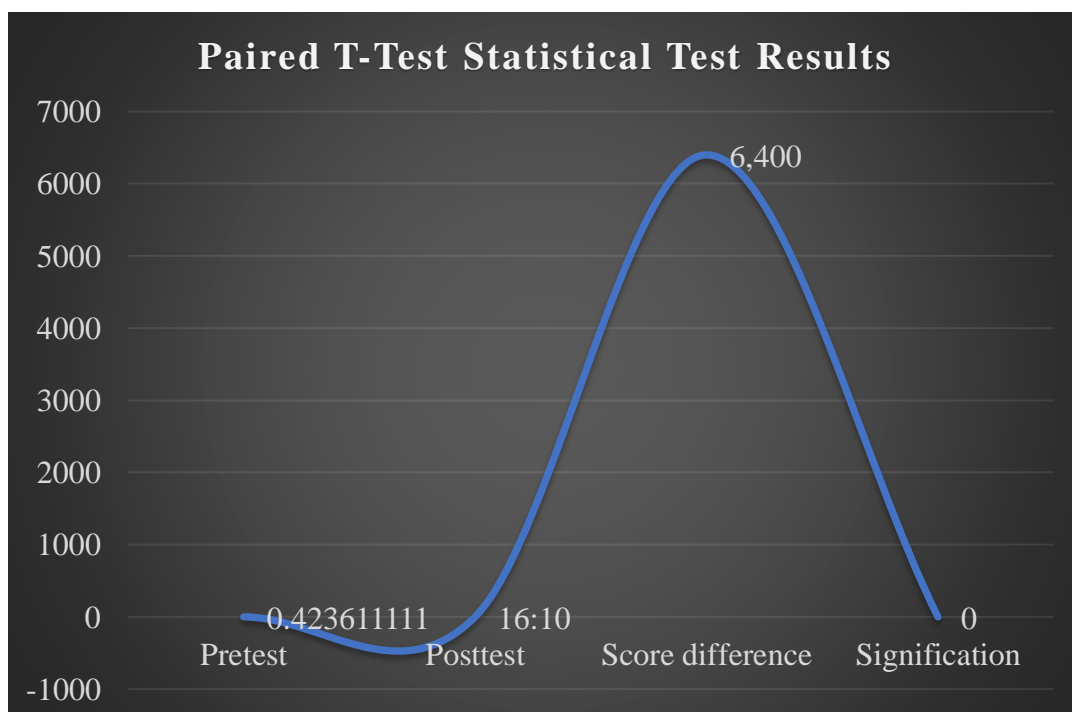


Figure 2. Paired T-Test Statistical Test Results

The results of the T-Test statistical test obtained pretest shooting results with a mean value of 9.70, while the posttest_shoot results had a mean value of 16.10. with a mean difference of 6.400. The final result of the T-Test obtained a significance value <0.001 , meaning that there was an effect of shooting training using obstacles on TC Petanque Athletes of Bima Regency on the Achievement of the 2023 NTB Provincial Sports Week.

Discussion

Shooting practice is certainly not the only variable that affects petanque sport achievement in Bima Regency, other variables include mental, physical, and others. This has been proven by several research results, that there is a significant contribution and relationship between the level of concentration and motor skills on the accuracy of petanque shooting (Gontara, 2022). There is a relationship between eye-hand coordination, arm muscle power, and a combination of eye-hand coordination, kinesthetic, and arm muscle power with the accuracy of shooting results. And there is no kinesthetic relationship with the accuracy of shooting results. Researchers suggest that to achieve the accuracy of shooting results it is necessary to increase kinesthetic and arm muscle power (Anwar, 2019). The athletic performance of petanque players is influenced by a number of factors, including arm muscle explosive power, shoulder flexibility, and self-confidence. Additionally, the shooting performance of petanque players is influenced by the influence of shoulder flexibility and arm muscle explosive power through self-confidence (Handayani & Setiakarnawijaya, 2021). In conclusion, there is a relationship between concentration and coordination in shooting accuracy in the performance of petanque athletes (Awang et al., 2019). There is an influence between accuracy training programs on shooting results in petanque athletes aged 15-20 years (Phytanza et al., 2022)

Some of the research results above are relevant to the results of research using shooting training for Bima Regency Petanque Puslatda athletes on the achievements of the West Nusa Tenggara Provincial sports week with shooting distances of 6, 7, 8, and 9 meters, this is because of the influence of the training program applied and petanque athletes are given training camps to facilitate the provision of training programs and control the improvement of athletes' abilities in shooting training. Other indicators for petanque shooting ability According to (Phytanza et al., 2022) four main indicators affect petanque shooting results, namely backswing, swing, release, and ball height. If one of these indicators is dominant, then the other indicators must also be adjusted because the 4 indicators are interrelated with good shooting results.

There is a difference in the effect of group A training (shooting practice using a barrier) which gives a better effect than group B (shooting practice without a barrier) on increasing the shooting distance of 7 meters in Sragen Regency Petanque athletes ((Mayangsari et al., 2022). The results presented above show that the existence of a Booklet of Basic and Advanced Shooting Training Stages for Jambi petanque players is very helpful in training for coaches and makes it easier for players to understand and independently analyze errors in the exercises performed (Rasyono et al., 2020). The results showed that there was an effect of shooting training using barriers on Bima Regency Petanque athletes on the achievement of the 2023 NTB PORPROV. This is in accordance with the results of statistical analysis in Figure 2, the effect of shooting training has also been proven in the achievements obtained, namely 6 medals at the Prov. West Nusa Tenggara in 2023. This achievement proves that a diligent and scheduled training process followed by athlete discipline will have an impact on increasing the achievement itself, thus this achievement will trigger the enthusiasm of athletes to continue to improve their abilities in various subsequent championships.

Conclusions

This research was conducted on Bima Regency Petanque TC Athletes who participated in the 2023 NTB Provincial Sports Week, it is concluded that there was an effect of shooting training using obstacles on the achievements of Bima Regency Petanque athletes. This is based on the results of the T-Test statistical test obtained pretest shooting results with a mean value of 9.70, while posttest shooting results with a mean value of 16.10. with a mean difference of 6.400. The final result of the T-Test obtained a significance value of <0.001 , with a significance level of 0.05.

Acknowledgment

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Conflict of interest

This research contains no conflicts of interest.

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