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Comparison of Drill Method and Game Method Long Jump Training in an Effort to Improve Students' Long Jump Abilities

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ABSTRACT
This research is experimental research which aims to determine the comparison of drill training methods and game training methods in improving students' abilities in the long jump. The research design used was Two Group Pre-test and Post-test. The sample used was 50 students from the Education, Physical, Health and Recreation Study Program at FIK UNM, divided into 2 groups. The sample was determined using a purposive sampling technique, by establishing certain criteria. To answer the hypothesis in this research, a t-test was carried out. Based on the results of data analysis, it is known that the Sig. (2-tailed) is 0.003 < 0.05, which means that there is a significant difference in the average value between the drill training method and the game training method. Where the mean value of the drill training method is 472.12 or greater than the mean value of the game training method of 441.28 with the difference between the two mean values being 30.84. So, based on this explanation, it can be concluded that the drill training method is better than the game training method in improving the long jump ability of students in the Education, Physical, Health and Recreation Study Program at FIK UNM.

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INTRODUCTION

The key indicator of success in sports performance is a substantial increase in performance in line with the coaching concept. UU no. 3 of 2005 has regulated, among other things, procedures for coaching athletes, managing and acquiring sports facilities, and holding championships (Tampubolon & Harianja, 2020). The enactment of Law Number 3 of 2005 concerning the National Sports System aims to improve Indonesia's athletic performance in regional and international competitions (Syafruddin et al., 2022). UU no. 3 of 2005 contains provisions regarding sports achievements. Sports Achievement is an activity that

develops athletes systematically and continuously through organized and tiered competition, with the help of sports science and technology, to achieve brilliant achievements (Irfan & Or, n.d.). Achievement sports aim to improve the skills and abilities of athletes with the aim of raising the honor and dignity of the nation (Setiawan et al., 2018). Developing sporting performance requires careful consideration of the athlete's age, training experience, and the nature of the sport. This information is used to adjust training programs to align with these factors and desired competition goals. During adolescence, athletes typically have less developed biological and training ages. Therefore, it is necessary to introduce training innovations that are in line with the specific characteristics of this stage of development. The pyramid image of training elements shows that adolescent athletes prioritize physical training and a fundamental approach to build a solid foundation, by combining creative exercise variations (Szivak et al., 2013; Torres et al., 2021).

Athletics is a measurable activity that emphasizes the physical abilities of athletes based on their talents (Rismayanthi & Jaya, 2018). Athletics is categorized into two different types of competition: track events and field events (Henjilito & Pardilla, 2024). Track numbers and field numbers are also divided into several categories, making athletics the sport that competes for the largest number of medals in multi-event competitions. Field numbers are sometimes referred to as technical numbers, with a focus on automating movements in both basic and advanced ways. Long jump is the most popular sport among young athletes in field sports (Abrar & Fitroni, 2021). Apart from being the easiest to do, it is also one of the leading competitions. This ensures that all students at these schools receive practical training in physical education. On the topic of long jump. Long jump is a technical discipline in athletics that emphasizes movement efficiency, inspiration in movement, and achieving maximum momentum in an optimal time period to achieve peak performance (Rahadian et al., 2021). The training methods commonly used in sports are drill and game training methods, each of which has its own role, especially for athletes in the early stages of development, from childhood to adolescence, who still need fun training.

Training methods refer to systematic approaches and techniques used to determine the appropriate type of training and make necessary adjustments based on the magnitude of difficulty, complexity and intensity of workload (Beaver, Wasserman, & Whipp, 2016) in (D. D. Kurniawan, 2020). A training method, as defined above, refers to a planned approach or procedure that considers the type of training and adjustments required based on the level of difficulty and complexity. This approach is guided by universally accepted training theories and principles, with the ultimate goal of improving athlete performance. Playing is an important activity in everyday human life. A person freely and enthusiastically engages in activities to increase their effectiveness and enjoyment, while actively contributing to the movement (Light & Harvey, 2017) in (Chawla, 2020). Practice is a deliberate effort to increase the proficiency of acquired skills or automatic associations (Yuli, 2023). Several previous studies on the long jump have examined the impact of specific training models, training techniques, and training comparisons, resulting in the following findings. A study conducted by (Ningsih et al., 2024) investigated the impact of box drill training on long jump performance. The results showed that deer jumping training had a significant influence on long jump results.

However, Indonesia's athletic achievements are still challenging enough to compete with advanced industrial countries on the Asian continent. The realm of competition for achievement in Indonesian athletics is mainly limited to the Southeast Asia region. Indonesia's athletic achievements are still lagging behind due to several reasons, such as low interest in athletics (Zar'i, 2022). This lack of interest can be seen from the limited enthusiasm of students for physical education and athletics subjects, as well as the lack of

athletes who are dedicated to achieving athletic achievements. Athletics lags far behind team sports such as football, volleyball and basketball in terms of popularity (D. D. Kurniawan, 2020). There are widespread problems in the field of athletics in Indonesia, including the failure to develop and maintain athletic performance effectively in accordance with coaching principles. This problem is especially visible at the grassroots level, such as in districts/cities, schools and athletic clubs. Additionally, a well-organized long jump training program is lacking. As a result, field observations show many fundamental problems that require appropriate solutions.

If we look at the results of KOSN matches and age group athletic matches, it can be seen that the limited number of participants in field events is still an obstacle to achieving success. Apart from that, the level of achievement in these events is still very low when compared with the achievements of age groups in developed countries in Asia, Europe and America. Indeed, there is only one individual in Indonesia who has succeeded in exceeding 8 meters in the men's high jump. The outstanding athlete is Safwaturrahman from NTB (B. Kurniawan, 2022). This achievement is still far from the world record, the Olympic threshold, the Asian competition limit, and even the Southeast Asian level championship benchmark. Indonesia's poor performance in the long jump can be caused by the causes mentioned above, as well as the lack of innovative coaching models and inadequate performance growth in schools, clubs and among parents of athletes in various regions and cities. Coaches prioritize the importance of focusing on basic long jump skills to foster a more imaginative and innovative approach, especially for youth athletes. Long jump success largely depends on the athlete's capacity to convert horizontal approach speed into horizontal and vertical takeoff speed during the support phase of the jump (Arianto, 2021).

So, based on the various explanations above, the researcher will conduct research with the title "Comparison of Long Jump Training with the Drill Method and Game Method in Efforts to Improve Students' Long Jump Ability" based on the great interest in previous research and observations regarding the long jump. The aim of this research is to examine previous research in order to compare the effect of drill technique training and game methods on improving the long jump performance of students from the Physical Education, Health and Recreation Study Program, Faculty of Sports Science, Makassar State University.

MATERIALS AND METHODS

This research uses a true experimental approach with a two-group pretest-posttest design. This research involved a population of 50 students from the Physical Education, Health and Recreation Study Program at FIK UNM. The sampling method used was purposive sampling, namely selecting students who actively took part in athletics lectures, especially long jump material. When dividing groups using ordinal pairwise matching, we are essentially dividing two groups. To form two different groups, one group (Group A) received drill method training and the other group (Group B) received game method treatment. Each group consisted of 25 Group A athletes and 25 Group B athletes. This research was conducted over a period of 8 weeks. Each week, three treatments were given, with each treatment spaced one day apart (one day of treatment followed by one day of rest). This research uses achievement tests as the main instrument. Both the pre-test and post-test use meter media to measure and quantify results or achievements in meters.

This study uses t-test analysis to compare the average values of group A and group B, with a significance level of 0.05. Analysis was carried out using the SPSS program. Before carrying out a hypothesis test, it is first necessary to carry out preliminary tests in the form of normality tests and homogeneity tests. The normality test is used to ensure whether the

data resulting from the test meets a normal distribution or not. In this study, the normality test was carried out using the One Sample Kolmogorov-Smirnov Test technique, with a significance threshold set at 0.05. The data used for the homogeneity test consists of achievement scores obtained from the first test of each group and achievement scores obtained from the final exam of each group. To evaluate a hypothesis, it is important to assess sample homogeneity first.

RESULTS

Results

Before data analysis is carried out to answer the hypothesis in this research, prerequisite tests must first be carried out. The prerequisite tests in this research are the normality test and homogeneity test. For more details regarding the prerequisite tests in this research, see the following explanation.

Table 1. Post-test and pre-test data normality test results for drill training methods and game training methods for students of the Physical Education, Health and Recreation Study Program, FIK UNM

Data	N	Sig.	α	Details
Pre-test Drill Method	25	0,786	0,05	Normal
Post-test Drill Method	25	0,574	0,05	Normal
Pre-test Game Method	25	0,701	0,05	Normal
Post-test Game Method	25	0,264	0,05	Normal

The results of the post-test and pre-test data normality test for the drill training method and game training method in the table above show that each Sig. for the drill method pre-test data, drill method post-test, game method pre-test, and game method post-test all > α = 0.05. So it can be concluded that all long jump data from students from the Physical Education, Health and Recreation Study Program at FIK UNM is normally distributed.

Table 2. Homogeneity test results of pre-test data for drill training method and pre-test game training method for students of Physical Education, Health and Recreation Study Program FIK UNM.

Data	Sig.	A	Details
Pre-test drill and game method	0,785	0,05	Homogen

Based on the results of the homogeneity test analysis of the pre-test data for the drill and game training methods above, it is known that the Sig. > 0.05, so it can be concluded that the variance of the pre-test data from the long jump results from the game and drill training methods for students of the Physical Education, Health and Recreation Study Program at FIK UNM is the same or homogeneous.

Tabel 3. Hypothesis test results, post-test data, long jump results from drill practice methods and game practice methods for students of the Physical Education, Health and Recreation Study Program, FIK UNM

Data	N	Mean	t	Difference Mean	Sig. (2-tailed)
Drill Method	25	472,12	3,072	30,84	0,003
Game Method	25	441,28			

Based on the results of data analysis using the t-test, from each of the 25 samples given the drill training method and game training method, it is known that the Sig. (2-tailed) is 0.003 < 0.05, which means that there is a significant difference in the average value

between the drill training method and the game training method. Where the mean value of the drill training method is 472.12 or greater than the mean value of the game training method of 441.28 with the difference between the two mean values being 30.84. So it can be concluded that the drill training method is better than the game training method in improving the long jump ability of FIK UNM Physical Education, Health and Recreation Study Program students.

DISCUSSION

Training methods refer to systematic approaches and techniques used to determine the appropriate type of training and make necessary adjustments based on the magnitude of difficulty, complexity and intensity of workload (Beaver, Wasserman, & Whipp, 2016) in (D. D. Kurniawan, 2020). A training method, as defined above, refers to a planned approach or procedure that considers the type of training and adjustments required based on the level of difficulty and complexity. This approach is guided by universally accepted training theories and principles, with the ultimate goal of improving athlete performance. Playing is an important activity in everyday human life. A person freely and enthusiastically engages in activities to increase their effectiveness and enjoyment, while actively contributing to the movement (Light & Harvey, 2017) (Chawla, 2020). Meanwhile, the drill method is an activity of doing the same thing over and over again seriously with the aim of strengthening an association or perfecting a skill so that it becomes permanent (Mardiana, 2022).

The results of the analysis show that training students from the Education, Physical, Health and Recreation Study Program at FIK UNM using the drill training method produces superior long jump performance compared to training them using the game training method. The post-test average for the drill training method group was 472.12 cm. Meanwhile, the average post-test score for the game training method group was 441.28 cm. According to (Taher et al., 2021) the use of drill model training methods can increase an athlete's capacity to initiate long jumps. Apart from that, the training prioritizes improving the basic technical aspects of body position during take-off and after take-off. Repeatedly practicing this exercise can significantly improve an athlete's performance during the take off phase in the long jump. Utilizing the drill training method has proven to be more successful and dominant among students. The effectiveness of using game-based training methods for adolescent athletes is currently limited. This is because teenage athletes who are members of sports clubs already have above average basic skills, such as speed, strength and other physical abilities. Another benefit of the drill training method is that it speeds up students in mastering movement skills. With continuous practice, the relationship between stimulus and response becomes automatic. (Ash Shiddieqy, 2024).

Therefore, these athletes still need further training in order to master the correct basic techniques. Even though efforts have been made, the game method has not succeeded in fully optimizing the improvement of the basic long jump method in the take off phase for adolescent athletes (Harder, Egert, Wenz, Jochens, & Kern, 2013) in (D. D. Kurniawan, 2020). Athletes should prioritize repetition over using enjoyable methods, but it is also important to provide a sufficient number of enjoyable training methods to balance the demands of adolescent athletes who are still undergoing complex development (Keller, Lauber, Gehring, Leukel, & Taube, 2014) in (Taube & Lauber, 2020).

CONCLUSION

Based on the results of the research and analysis carried out, it can be concluded that the drill training method is better than the game training method in an effort to improve the

long jump ability of students from the Physical Education, Health and Recreation Study Program, Faculty of Sports Science, Makassar State University. So, this research can be used as a consideration for lecturers, coaches and sports teachers in improving the long jump ability of students and athletes.

CONFLICT OF INTEREST

There are no conflicts of interest in this article.

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