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The Effect of Fins Training on Leg Strength of Freestyle Swimming in Beginner Swimmer at Garuda Laut Palopo

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Abstract

The research is based on the increasing interest in swimming in the community and trying to provide an understanding that there are methods that can be used to increase the swimmers' leg strength, especially freestyle swimming, by training methods using fins tools. Fins are one of the tools commonly used in diving. Fins consist of various types, including kaki kayak. Kaki kayaks or fins are made of rubber with widened shapes at the ends of the feet. Fins are swimming tools with many benefits, such as increasing propulsion speed for swimming practice. By using fins, swimmers can train leg muscle strength and produce swimming speed rates on freestyle legs; these fins can optimally increase the power of the legs and flex freestyle leg swings. Fins can also train flexibility in the ankles. The research used is quantitative research using experimental methods and the Discovery Learning approach. Discovery Learning is a method that aims to guide students to gain concepts from various data found through observation and experimentation. The research design used in this study is a one-group pretest-posttest design to compare conditions before and after treatment. Subjects from This research is a beginner swimmer at Garuda Laut Palopo, and this practice is carried out in the Wae Kambass swimming pool. The sample in this study were novice swimmers at the Palopo Sea Garuda. The population of this study is all beginner swimmers who are members of the Palopo Laut Garuda Club, totaling 15 people. Samples were taken by setting the age criteria of 9-21 years; novice swimmers included in this criterion counted ten people. The results of the research and discussion of the data obtained using a statistical approach concluded that there was a "significant effect of training using fins aids on the strength of the 50-meter freestyle leg swimming for beginner swimmers, Garuda Laut Palopo. From the conclusions above, several suggestions can be conveyed, namely to generate strength in freestyle swimming, especially in the legs.

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INTRODUCTION

Swimming is an enjoyable and suitable sport for all people; swimming is a type of sport that is very popular in the world of sports and among the community (Pratiwi, 2015). Swimming is a water activity with many styles known for a long time, and many benefits can be obtained. Several things need to be considered in swimming, especially the facilities and infrastructure. Swimming is also widely known as a sport that is considered a fun sport and is widely liked by all groups (Yudha Prawira et al., 2021). Swimming activity is one of the exciting sports activities because in swimming various styles can be done. Swimming sports have many characteristics that always move all body members, especially the legs, arms, and head. Swimming can improve motor skills which will have a positive physical impact on the body (Budi et al., 2020). Swimming has health benefits. Swimming can also be used as a recreational activity and to fill free time for workers. This swimming sport is often an alternative sport or a sport of choice (Harmoko & Sovensi, 2021). Swimming is one of the water sports carried out by moving all the limbs in the water, with the body's position floating on the water's surface (ROHMAN, 2019). Swimming can improve motor skills which will have a positive physical impact on the body (Budi et al., 2020). Swimming has health benefits. Swimming can also be used as a recreational activity and to fill free time for workers. This swimming sport is often an alternative sport or a

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Swimming is a trendy sport among humans because it can be done by all groups (Lahinda, 2020). There are various styles, and one of the styles in swimming is freestyle. Free swimming style is understood faster than other styles because this swimming style has good

movement coordination, and the resistance is less than the other styles. Freestyle swimming has a characteristic that the body's position faces down above the surface of the water, and the position of the hands is above the head, straight following the body's position. Then the two hands are alternately pulled until the thumbs touch the thighs then the hands return to their previous position (Rizkiyansyah & Mulyana, 2019). Freestyle swimming is similar to walking movements, and freestyle swimming is one of the swimming styles taught to regulate breathing, movement, legs, and arms (Nurajab, 2016). The sport of swimming has various characteristics because each style of swimming has difficulties, and the techniques of each freestyle have become popular because this style is the basic style of swimming (Rendiyanto, 2019). From the explanation above, freestyle swimming is a widely known style in society. This freestyle swimming style resembles movement when walking, but what distinguishes it is the prone position of the body or the position of the body facing the floor. The sport of swimming has various characteristics because each style of swimming has difficulties, and the techniques of each freestyle have become popular because this style is the basic style of swimming (Rendiyanto, 2019). From the explanation above, freestyle swimming is a widely known style in society. This freestyle swimming style resembles movement when walking, but what distinguishes it is the prone position of the

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The sport of swimming has several supporting tools for leg strength, including the fins or commonly called fins. Fins or fins are one of the tools commonly used in diving. Fins consist of various types, including frog legs. Frog legs or fins are made of rubber with widened shapes at the ends of the feet. Fins are swimming aids that have many benefits, such as increasing propulsion speed for regular swimming exercises; these fins can help the ability of the legs to move in water (Puspita, 2017). By using fins, swimmers can train leg muscle strength and produce swimming speed rates on freestyle legs; these fins can increase the strength of the legs optimally and flex the freestyle leg swing. Fins can also train flexibility in the ankles (Ramdhani et al., 2021). Using fins for beginners can affect technique in a freestyle swimming branch and increase freestyle speed (Febrianto, 2019). From the explanation above, it can be concluded that these fins are one of the

aids in swimming which are made of rubber and resemble frog legs

METHODS

The research is quantitative research using experimental methods and using the Discovery Learning approach. Discovery Learning is a method that aims to guide students to gain concepts from various data found through observation and experimentation (Ana, 2019). During the learning process, participants are expected to find their way of solving problems so that later these swimmers are expected to swing their legs above the surface of the water in their way.

The research design used in this study was the one-group pretest-posttest design to compare conditions before and after treatment. The subjects of this study were beginner swimmers of the Palopo sea eagle, and this practice was carried out in the Wae Kanbass swimming pool, Jln. Opu Daeng Mappunna City of Palopo.

The population is a generalization area consisting of objects/subjects with specific qualities and characteristics determined by the researcher. At the same time, the sample is part of the number of characteristics possessed by the population (Sugiyono, 2014). The research population is all beginner swimmers who are members of the Palopo Laut Garuda Club, comprising 15 people. Samples were taken by setting the age criteria, namely 9-21 years; novice swimmers included in this criterion totaled ten people (Ramdhani et al., 2021).

The research procedure was carried out by analyzing the results of swimmer training by paying attention to the techniques carried out by participants who had undergone fins training. Furthermore, the study's results were analyzed by measuring how strong and far the participants were in swimming.

The assessment classification used in this study uses a timer or stopwatch, the instrument in this study is the freestyle swimming test which is reflected in time and place, so the instrument in this study uses the help of a stopwatch to measure travel time. These Setra swimming pools are 50m away.

Data collection was carried out with two tests, namely pre-test and post-test. Before carrying out the research, the researcher prepared the facilities and infrastructure tested on beginner swimmers at the Palopo Marine Grade. After all the data from the tests have been collected, the next step is to analyze the data to find out whether the fins training treatment affects the leg strength given to the beginner swimmers of the Palopo sea eagle.

RESULTS AND DISCUSSION

Based on the description above, this research has been proven true by producing data that supports the hypothesis and showing that there is an effect of pre-test and post-test exercises using fins on freestyle leg strength by carrying out intensive training according to the goal that supports strength to prove the existence changes in terms of increased strength from the

results of training using fins on the leg strength of freestyle swimming in novice swimmers. Then the results of the research and discussion of the data obtained using a statistical approach, it was concluded that there was "a significant

effect of training using fins on the strength of the 50-meter freestyle leg swimming in beginner swimmers of the Palopo Laut Garuda" from the conclusion above.

Table 3: Descriptive

	N	Descriptive Statistics			
		Minimum	Maximum	Mean	Std. Deviation
Pre-Test	10	60.22	70.34	66.4520	3.10170
post-test	10	50.13	60.00	54.0520	3.95398
Valid N (listwise)	10				

Table 4: Paired Samples Test

Paired Samples Test

		t	Sig. (2-tailed)
Pair 1	Post-Test - Pre-Test	9	.001

Discussion

The existence of equipment and tools to improve performance in swimming is expected to be a solution to improving technique and increasing the performance of swimmers. So that existing training programs for beginner swimmers and athletes can be carried out without any obstacles

From the research results on beginner swimmers who participate in the Garuda Laut Palopo swimming, researchers found essential

things about efforts to increase leg strength with exercises that are passed using fins aids.

Freestyle is swimming that uses some muscle strength where the muscle strength lies in the hands, legs, and neck. Freestyle is done in a prone position facing the pool floor; the hands are moved in an orderly, then the legs are swung alternately with the whip up and down; in this exercise, you must need tools to improve the swimming technique. Freestyle itself. Excellent and efficient hand swings and leg lashes require strength and flexibility from every joint that will

be moved in swimming. Using the fins for freestyle swimming practice improves swimming technique and the strength of leg swings or lashes.

If swimmers use fins, it will result in heavy leg swings; leg swings will use large leg muscles, and indirectly, the feet will be trained to use force in an orderly and controlled manner. The fins used during swimming practice serve as training aids in that these devices can change mechanics (Rizkiyansyah & Mulyana, 2019). The fins can be used to increase leg muscle strength, where the area of water that must be kicked is more comprehensive so that the energy needed by the leg becomes greater (Imansyah, 2016). In training using fins, the use of fins or toe fins must be the right size for each swimmer, when swinging legs must start from the thigh with straight knees and let the fins of the swimmer's feet move following the swing of the swimmer's legs, ankles must remain flexible so that the fins of the swimmer's feet can move up and down correctly to generate thrust.

CONCLUSION

Based on the research results above, it can be concluded as follows: 1) there is an effect of swimming training using fins on the strength of the 50-meter freestyle swimming in novice swimmers; 2) through practice using Fins. From the conclusions of the research above, the authors put forward suggestions, namely: 1) to increase the power of freestyle swimming, coaches can use swimming exercises using fins

because they are proven to be able to provide convincing results in increasing freestyle swimming speed; 2) in carrying out swimming exercises using fins, the coach needs to pay attention to the size of the fins so that they can provide optimal results in developing the strength of the swimmer's limbs to support the strength of the swimmer in swimming according to the style being taught or trained

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Alfabeta.

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