

**The Effect of Resistance Band Exercises Through Audio Visual on Learning Freestyle swimming at Club Garuda Laut Palopo****Reski Amalia^{1✉}, Suaib Nur², Muhammad Irham Zainuri³**

Pendidikan Jasmani, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Muhammadiyah Palopo,
Jl. Jenderal Sudirman, Kota Palopo, Indonesia¹²

Bimbingan dan Konseling, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Muhammadiyah
Palopo, Jl. Jenderal Sudirman, Kota Palopo, Indonesia³

Article History

Received June 2023

Accepted October 2023

Published Vol.12 No.(3) 2023

Keywords:

Resistance Band Exercise; Audio Visual; Freestyle; Swimmin.

Abstract

Swimming is a sport that has great benefits. The problem for athletes, especially freestyle swimming, lies in technique, especially in the position of the hands and feet, sometimes athletes are not in line with what the coach expects. The purpose of the study was the effect of resistance band training through audio visual on freestyle swimming learning at Club Garuda Laut Palopo. This type of research is quantitative research that uses a one-group pretest-posttest design. This research is a pre-experimental research design. The population in this study was novice swimming athletes Club Garuda Laut Palopo. The population sampling technique in this study used saturated samples (census), which is a sampling technique where all populations were sampled as many as 5 novice swimming athletes. The research data was analyzed descriptively, the requirements test was the data normality and homogeneity test, and the T test used SPSS version 20.00. The results showed that the value of $t = \text{count of } 2.958$ was greater than $t = \text{table } 2.571$ or $t = \text{count of } 2.958 > t = \text{table } 2.571$ and sig results. (2-tailed) which is $0.000 < 0.05$. This means that there is a significant influence of resistance band training through audio visual on freestyle swimming learning at Club Garuda Laut Palopo.

How to Cite

Amalia, R., Nur, S., & Zainuri, M. I. (2023). The Effect of Resistance Band Exercises Through Audio Visual on Learning Freestyle swimming at Club Garuda Laut Palopo. *Journal of Physical Education, Sport, Health and Recreation*, 12 (3), 247-253.

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✉ Correspondence address :
E-mail: reskia794@gmail.com

INTRODUCTION

Swimming is one of the fun water sports, and nourishes the body, and is suitable for anyone regardless of age (Ratno & Simanjuntak, 2022). Swimming sports can be interpreted as a form of activity carried out in water, moving limbs to stay afloat, and other limbs moving freely (Sembiring & Ansari, 2022). Swimming is one sport that has developed in accordance with its purpose both to maintain health and fitness, for recreation and for achievement purposes (Ahmad et al., 2020). Swimming is a water sport consisting of several styles, namely: freestyle, breaststroke, backstroke and butterfly (Walinga, 2021). Swimming is a sport that has great benefits, because if a person swims, then his whole body gets pressure from the water and feet, his hands must always move, otherwise he will drown in water (Asri & Maidarman, 2020).

One of the styles that must be mastered by swimmers is freestyle. Freestyle, one of the fastest of all types of styles in swimming (Anam et al., 2017). Freestyle swimming is a person's ability to perform a swim using actual freestyle (Ahmad & Hasanuddin, 2018). Freestyle is a force that is not tied to certain basic techniques (Lahinda, 2020). Freestyle is one of the swimming styles in which the position of the body (chest) is facing the surface of the water (Prastyo & Hananto, 2021). Freestyle swimming is an efficient technique and easier than other swimming styles because it uses hand swing movements through the surface of the water (Dharma & Rediani, 2022). In freestyle swimming, a swimmer needs certain physical conditions and techniques to perform rowing movements consisting of pull and push movements (pulling and pushing) (Riswanto, 2017). Freestyle is the fastest style compared to other styles (Wardhani, 2022). Freestyle swimming technique (stroke) is a swimming style that is suitable to be given to people who are just learning to swim, besides philosophically having a series of movements that are almost similar to daily walking activities (Gusfa & Ridwan, 2019).

Freestyle is one of the most contested styles, in this style as well as others in the sport of swimming speed is the benchmark of success (Tofikin et al., 2019). Freestyle swimming is done with the body in a prone state, transverse posture and straight arms just above the head are done floating like a log (Haza et al., 2022). Freestyle swimming is a very fast swimming among other swimming styles (Gani et al., 2022). Freestyle is swimming with your chest facing the surface of the water (Megasuari, 2021). Freestyle swimming

movements involve almost all muscles and joints of the body (Ketut et al., 2018). The freestyle swimming technique is very efficient compared to other swimming styles, because the hands and feet are used in different ways, which provide a resting phase during recovery (Putra, 2017). The factor that affects the speed of freestyle swimming is that the faster the pedaling of the hands and feet with the correct technique, the faster the swimmer reaches the finish line (Evenetus et al., 2019).

Resistance band training is a sports tool used to train arm strength that is elastic and can increase power with a very important technical approach (Ratno & Simanjuntak, 2022). Resistance band is an efficient and easy-to-carry fitness equipment made of rubber (Rahman et al., 2021). Resistance Band exercises are elastic bands made of rubber or latex that can be used to strengthen muscles (Ali et al., 2022). Resistance band is a type of exercise that utilizes the elasticity of the rubber band as muscle thrust to bring up power in the legs (Pirmansyah, 2018.).

Resistance band is a sports equipment made of rubber and easy under anywhere (Febrianto & Ismalasari, 2018). Resistance band is an efficient and easy-to-carry fitness equipment made of rubber with handrails that are the support (Aziz, 2019). Exercises using resistance bands are very effective exercises to increase muscle strength to be trained (Sembiring & Ansari, 2022). Resistance band exercise is an exercise modality tool that has two straps and stretches that aim to facilitate its use (Nilhakim, 2020).

Audiovisual media play a role in cognitive development related to the basic motion of freestyle swimming (Rosmi, 2019). Audio visual is an attempt to change or adjust (Kurniawan, 2021). Audio visual is an exercise by applying memory and comprehension (Kurniawan et al., 2022). Audio-visual media stimulates the imagination of athletes to perform movements well according to examples in audio-visual media (Bastomi & Hartoto, 2017). Audio and Visual Media is a medium to convey information that has the meaning of Audio (sound) and Visual (images) (Nugroho & Khory, 2020). Audio visual media is the most complete media, which uses audio and visual capabilities (Valentino & Akbar, 2018). Audio media is a tool for communicating which is very helpful in learning activities effectively (Kausar, 2021). Audio-visual media is a learning model in which the use of material and absorption through vision and hearing is not entirely including the tools used can be in the form of video and computers (Himawan et al., 2022). Audio visual me-

dia is media that has elements of sound and elements of images (Aliansyah et al., 2022).

Visual media is the right tool to teach skills, because in the video elements such as sound, images, lines of symbols and motion will be displayed (Aswara, 2019). Audio media is a media that can be heard as well as seen (Salsabila et al., 2020). The audio-visual method is a learning system that helps players learn basic skills and obtain information that shows moving images and sounds together (Windary & Rahayu, 2022). Visual media is a medium that makes it easier for students to demonstrate demonstrations (Agestha, 2022). Audio visual is a vehicle for delivering information or learning messages to athletes, with audio-visual media coaches can stimulate the development of athletes' memory and have advantages and disadvantages (Fahmi et al., 2018). The benefits of audio-visual media are to help students develop children's mindsets with examples of movements through the help of audiovisual media (Ramdhani et al., 2018). The form of exercise (audio visual) video is also the best alternative as a learning medium in sports when compared to other forms of presentation, because video has a dynamic nature and allows it to be repeated (Nesia et al., 2022).

Garuda Laut Palopo is a swimming club in Palopo City under the auspices of PRSI Palopo City. Starting from Porda Pinrang in 2018. Palopo City's swimming athletes' training ground is the WaeKan'Bass swimming pool located on Jl. Opu Daeng Mappunna, Takkalala, South Wara District, Palopo City. At that time, swimming athletes representing Palopo City were athletes hired from PRSI Makassar City. Over time, the Garuda Laut Palopo Club was formed which was initiated by Mr. Suaib Nur, M.Pd, Mr. Ahmad, M.Pd and Mrs. Indrawati, S.Or. Club Garuda Palopo has produced talented and accomplished athletes and made Palopo City proud at the provincial level.

The results of observations made to the coach of Club Garuda Laut Kota Palopo on behalf of Mrs. Indrawati, S.Or that the problem for athletes, especially freestyle swimming, lies in technique, especially in the position of the hands and feet, sometimes athletes are not in line with what the coach expects. The program that has been given by the coach is very good, but the athletes are not in line with what the coach says.

From the observations, the formulation of the problem is whether there is an influence of resistance band training through audio visual on freestyle swimming learning at Club Garuda Laut Palopo. Results of previous research (Ratno

& Simanjuntak, 2022) said that there is an effect of resistance band training on upper leg speed swimming 50 meters freestyle in athletes 10 – 15 years old at Aquatic Swimming Club Medan. before training using the Resistance band had an average pretest value of 63.18 and a posttest of 61.37. Then statistically the test results paired sample test with (2-tailed) showed that $t_{count} (1,683) < t_{table} (2,306)$ at $\alpha = 0.05$ by rejecting H_0 and accepting H_a , that is, there was an effect of training using resistance bands on the speed of the upper limbs of the 50-meter freestyle swimming style.

METHODS

This type of research is quantitative research that uses a one-group pretest-posttest design. This research is a pre-experimental research design. The research location is the WaeKan'Bass swimming pool located on Jl. Opu Daeng Mappunna, Takkalala, South Wara District, Palopo City. The research time is February-March 2023. This study design used pretest data as a start to determine freestyle swimming in athletes/research samples before treatment. Through this research design, the results of treatment can be known accurately, because it can compare with the situation before treatment. The treatment that will be given in this study is resistance band exercises through audio visual.

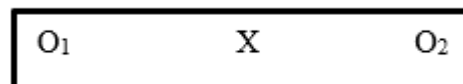


Figure 1. Research Design

The population in this study was novice swimming athletes Club Garuda Laut Palopo. The population sampling technique in this study used saturated samples (census), which is a sampling technique where all populations were sampled as many as 5 novice swimming athletes. Data collection technique using freestyle swimming test (Prastyo & Hananto, 2021). Before the treatment is carried out, a freestyle swimming pretest is first given to obtain preliminary data. Then treatment was given for resistance band exercises through audio visual for 16 meetings according to details 3 times a week with a duration of 60 minutes. Final test (posttest) to reveal the effect after treatment. The research data was analyzed descriptively, the requirements test was the data normality and homogeneity test, and the T test used SPSS version 20.00.

RESULTS AND DISCUSSION

The preliminary data results of Club Garuda Laut Palopo athletes were carried out before giving treatment to respondents. The treatment was given during 16 meetings by applying resistance band exercises through audio visual. Furthermore, final data collection was held after carrying out treatment in stages. The picture from this study can determine the increase in freestyle swimming learning at Club Garuda Laut Palopo. The results of data analysis testing are as follows

Research data overview, descriptive analysis of data. Descriptive analysis was conducted on pretest and posttest data of soccer skills. Descriptive analysis includes mean, standard deviation, range, minimum and maximum values as follows **Table 1**.

Table 1. Data Descriptive Analysis

Variable	Pretest swimming Freestyle	Posttest swimming Freestyle
N	5	5
Mean	64,7460	55,4900
Std. Deviasi	3,67382	3,79245
Range	7,84	8,88
Min	60,36	51,12
Max	68,20	60,00

The results of the descriptive analysis of freestyle swimming learning pretest data have N (sample) of 5, mean (average) of 64.7460, Std. deviation (standard deviation) of 3.67382, Range (range) of 7.84, Min (lowest value) of 60.36, Max (highest value) of 68.20. The results of descriptive analysis of posttest data for freestyle swimming learning have N (sample) of 5, mean (average) of 55.4900, Std.deviation (standard deviation) of 3.79245, Range of 8.88, Min (lowest value) of 51.12, Max (highest value) of 60.00.

The Normality Test is to test whether variables are normally distributed or not. This normality test uses SPSS 23. To find out whether the data is normal or not, if the sig is > 0.05 , it is normal and if it is < 0.05 , it can be said to be abnormal. The calculation results are obtained in the following **Table 2**.

Table 2. Data Normality Test Results

Variable	Shapiro-Wilk	Sig.	α	explanation
Pretest Freestyle swimming	0,835	0,152	0,05	Usual
Posttest Freestyle swimming	0,931	0,604	0,05	Usual

The results of the normality test data significant value of the freestyle swimming learning pretest with a Shapiro-Wilk value of 0.835 and a significant level of 0.152 greater than $\alpha 0.05$, it can be said that the distribution of the freestyle swimming learning pretest is following a normal distribution or normal distribution. While the freestyle swimming learning posttest with a Shapiro-Wilk value of 0.931 and a significant level of 0.604 is greater than $\alpha 0.05$, it can be said that the distribution of freestyle swimming learning posttest is following a normal distribution or normal distribution.

The homogeneity test is to find out the similarity of variances or to test that the data obtained comes from a homogeneous population. The decision-making criterion is accepted when the significant value is greater than 0.05.

Table 3. Homogeneity Test Results

Lavene Statistic	df1	df2	Sig.	explanation
0,008	1	8	0,932	Homogeneous

The results of the pretest and posttest homogeneity test with a lavene test of 0.008 with a significant value of 0.932, it is known that a significant value of 0.05 then the hypothesis states that the data are obtained from the homogeneous sample received. The conclusion is that the pretest and posttest data have a homogeneous population.

To determine the effect of resistance band training through audio visual on freestyle swimming learning using the T Test or paired sample T test. The results of the paired sample T test can be seen as follows **Table 4**.

Table 4. Paired T Test Results

Variable	N	T-Count	T-Table	Sig. (2-tailed)
Pretest Freestyle swimming Posttest Freestyle swimming	5	2,958	2,571	0,042

Based on the table above, it can be concluded that the value of $t = \text{count}$ is 2.958, the value is greater than $t = \text{table}$ 2.571 or $t = \text{count}$ of 2.958 $> t = \text{table}$ 2.571 and sig results. (2-tailed) which is 0.000 < 0.05 . This means that there is a significant influence of resistance band training through audio visual on freestyle swimming learning at Club Garuda Laut Palopo.

The application of basic freestyle technique training has a more effective effect in improving freestyle skills (Tahapary & Syaranamual, 2020). Resistance band training can be one of the maximum achievements of athletes to improve the knowledge and skills of athletes can be achieved well (Sembiring & Ansari, 2022). The use of Audio-Visual based learning media shows an increase in student learning interest which will affect the improvement of student learning outcomes as seen from the pretest and posttest results. The use of Audio-Visual based learning media shows an increase in student learning interest which will affect the improvement of student learning outcomes as seen from the pretest and posttest results (Gabriela, 2021).

Video media in learning will have a positive impact on the learning process. This research is different from existing research because the video used will focus more on freestyle exercise models that are packaged attractively with a combination of theory and real exercise images. With this learning video, it is hoped that the swimming learning process, especially freestyle, will be more interesting and can increase the mastery of freestyle and speed of elementary school student athletes (Dharma Sanjaya & Rediani, 2022). Audio-visual media play a role in cognitive development related to the basic motion of freestyle swimming (Rosmi, 2019). So, the existence of video media will have an impact on mastery of freestyle swimming. With good mastery will achieve optimal time speed, this is because students are able to apply what they have to solve the desired problem, in this case the goal of students is to achieve good speed (Pratiwi, 2022).

CONCLUSION

The results of research that have been conducted show that there is an influence of resistance band training through audio visual on freestyle swimming learning at Club Garuda Laut Palopo. Based on the value of $t = \text{count of } 2.958$, the value is greater than $t = \text{table } 2.571$ or $t = \text{count of } 2.958 > t = \text{table } 2.571$ and the result of sig. (2-tailed) which is $0.000 < 0.05$. This means that there is a significant influence of resistance band training through audio visual on freestyle swimming learning at Club Garuda Laut Palopo.

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