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Influence of Swim Board Aids on Learning Freestyle Swimming Policy Techniques

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KEYWORDS
auxiliary devices; swim board; freestyle swimming learning

ABSTRACT
The purpose of this study was to determine the Effect of Swim Board Aids on Learning Basic Freestyle Swimming Techniques in Class VII Students of SMP Negeri 5 West Karawang. The approach used in this study is a quantitative approach with experimental research methods. The population in this study was all students of SMPN 5 Karawang Barat class VII which amounted to 394 students. The study sample was taken using cluster random sampling technique. This research instrument uses freestyle swimming skill tests that have previously been made by previous researchers. Data analysis techniques using pretest posttest design. The result of the study was a pretest mean of 9.20 and a greater posttest mean = 12.07. The results of the paired sample t-test analysis with the data obtained are the significance value (2-tailed) = 0.000 less than the significance level (α) = 0.05, then H0 is rejected and H1 is accepted. So it can be concluded that learning using swim board aids can affect the improvement of basic freestyle swimming techniques at SMPN 5 West Karawang

Introduction

Education is a series of human guidance that lasts a lifetime (Fajriyudin et al., 2021: 52). The quality of human resources depends on the main key itself, namely education (Mustafa &; Dwiyogo, 2020:423). Therefore, the contribution of education is very necessary to support global development in a sustainable manner.

Sports and health physical education or commonly referred to by the abbreviation PJOK is an educational program that prioritizes physical activity and healthy life coaching for harmonious, harmonious, and balanced growth and development, physical, mental, social, and emotional (Ardiansah & Setiyo, 2018: 56). PJOK not only aims to educate students in physical development and growth, but also the cultivation of good attitudes and life values, for this reason, it is necessary to increase PJOK in the school environment (Gani, Winarno, Achmad, et al., 2020).

According to the Regulation of the Minister of Education and Culture number 21 of 2016 concerning content standards for primary and secondary education, there is a scope of PJOK material as follows: physical activity and various basic sports movements basic techniques of big ball games, small ball games, physical activity through athletics, physical activity basic martial arts techniques, physical activity and fitness components related to health and related skills, physical activity gymnastics, physical activity through a series of swimming and health (Destiawan et al., 2020). Swimming is very well known in the wider community, especially in schools (Sholikhah &; Ridwan, 2021). Therefore, swimming learning by teachers in schools is important to teach, so that students know and learn about this socializing sport, in addition to socializing this sport is also important to teach because we not only live in the scope of the plain, but there are times when someone must be able and survive when in the water because swimming can help us to save ourselves from the danger of drowning (Gourgoulis et al., 2019).

Swimming is a physical activity that has been practiced by humans since centuries ago, before humans knew and used swimming pools as a place to develop exercise skills as they are today (Gani, Winarno, Aminudin, et al., 2020). The swimming sport itself has several styles including: freestyle (crawl stroke), breaststroke (breast stroke), butterfly stroke (butterfly stroke) and backstroke (Putri et al., 2022). Swimming can also increase heart rate and stimulate circulation, this sport involves all muscle groups working (Silveira et al., 2019). However, usually the first time taught in school is freestyle (crawl stroke) because it is faster to teach to students and then breaststroke (Maass et al., 2016). In order to master freestyle swimming (crawl stroke), students must master the basic techniques first, including: body position when gliding, leg movements, arm movements, breathing and overall coordination of movements (Sin &; Hudayani, 2020).

From observations made by the author during the Introduction to School Field (PLP) in several junior high schools in Karawang, the majority of grade VII students do not really master one of the sports they must learn, namely swimming using freestyle (Fauzi et al., 2023: 2). Some of them said that they could not swim yet and still needed media aids to learn to swim. This is to support learning so that learning objectives can be achieved.

Understanding learning media itself is a tool that can help teachers in the teaching and learning process that functions to stimulate students in learning (Nana &; Rivai, 2015). In this case, the media in question is a swim board. The use of auxiliary media in the form of frog legs (flipper), swim board (swim board), hand paddle swim, pull buoy is very helpful for buoyancy making it easier to master basic swimming techniques, thus the attention of learning to swim can be focused on foot movement techniques and arm movements (Susanto, 2017). The use of media assistance can help reduce the weight of swimmers in the water and can help the body position become streamlined (flat) so as to get a shape that has less resistance (Pradana et al., 2018). From the description above, in this study a tool in the form of a swim board was used to help improve learning basic freestyle swimming techniques grade VII SMP Negeri 5 West Karawang.

In a previous study conducted by Dea Mayang Ramadhan entitled "The Effect of Swim Board Aids on the Learning Outcomes of Breaststroke Swimming (Study on Class X Students of SMAN 4 Sidoarjo) the result was that the provision of swim board aids affected the learning outcomes of breaststroke swimming, this was evidenced by the average results of the skill pretest which was 46.32 and the skill posttest was 77.72. While the average pretest knowledge was 45.29 and posttest knowledge was 66.32. Therefore, the hypothesis that there is an influence of swim board aids on the learning outcomes of

breaststroke swimming in grade X students of SMAN 4 Sidoarjo can be accepted with an increase in skill value by 68% and an increase in knowledge value by 46% (Ramadhan &; Hartoto, 2018: 4).

The novelty that exists in the author's research is about the use of swim board aids in learning basic freestyle swimming techniques, so researchers are interested in how to examine the influence of swim board aids on learning basic freestyle swimming techniques so that it can be known how much influence it has. Therefore, the researcher drew a research title "The Effect of Swim Board Aids on Learning Basic Freestyle Swimming Techniques in Class VII Students of SMP Negeri 5 West Karawang". The reason for the novelty that I chose is because previously I had made observations and observations directly in the swimming pool and at SMP Negeri 5 West Karawang.

Research methods

This research method uses experimental methods because this research requires treatment. Experimental research can be defined as a systematic method to build relationships containing cause and effect phenomena Sugiyono in (Yusnizar, 2019: 421). The research design used by researchers is Pre-Experimental Design with the form of One-Group Pretest-Posttest Design. According to Sugiyono, population is a generalized area consisting of objects / subjects that have certain qualities and characteristics that are applied by researchers to be studied and then drawn conclusions (Arifin, 2020: 3). The above opinion is one of the references for researchers to determine the population. The population of this study was all students of grades VII A to VII K SMPN 5 West Karawang totaling 394 students. The sample is the part of the population that the researcher wants to study. According to Sugiyono, the sample is a portion of the population, such as residents of certain areas, the number of employees in certain organizations, the number of teachers and students in certain schools and so on (M. Ramadhan, 2021). The sampling technique used in this study uses cluster random sampling, according to Sugiyono in Dwihandaka (2020: 196) cluster random sampling is a sampling technique used to determine samples if the object to be studied or the data source is very broad. Researchers will determine the sample to be used by drawing the number of each class, the class that comes out first will be the sample (Unaradjan, 2019). Data collection was carried out with an initial test first and then given the treatment of a learning program of basic freestyle swimming techniques using swim board aids for 12 meetings a week conducted three times, after that there was a final test to see the improvement of basic freestyle swimming technique skills. Data collection techniques with freestyle swimming skill test instruments. Calculation of research data analysis with t-test using Paired Sample t Test using IBM SPSS Statistics Software Version 26 for Windows. Statistical testing with a data normality test with Shapiro-Wilk with a significance test of 0.05. Homogeneity test with significance 0.05.

Results and Discussions

RESULT

After the data is collected then calculate the Mean, Standard Deviation, Variance, Minimum and Maximum data, the results of the data calculation can be seen in the table below.

Table 1 Descriptive Statistical Results of Research

Descriptive Statistics

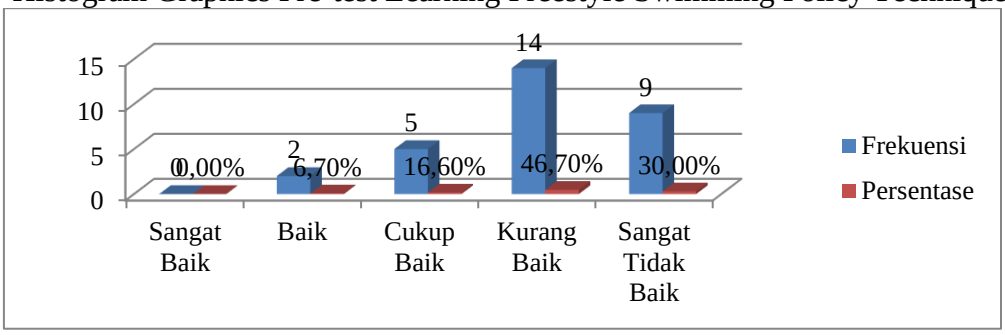
	N	Minimum	Maximum	Mean	Std. Deviation	Variance
Pre – Test	30	6	14	9.20	2.058	4.234
Post – Test	30	9	15	12.07	1.721	2.961
Valid N (listwise)	30					

Based on table 1 on the descriptive statistical results have a pretest mean result = 9.20 while the posttest mean is greater = 12.07. It can be concluded from the results of descriptive statistical calculations on the pretest and posttest mean has increased significantly.

Table 2 Pre-test Frequency Distribution of Learning Basic Freestyle Swimming Techniques

No.	Category	Score Range	Frequency	Percentage
1.	Excellent	14 And above	0	0%
2.	Good	13 to 14	2	6,7%
3.	Enough	11 to 12	5	16,6%
4.	Less	9 to 10	14	46,7%
5.	Very Lacking	Less than 9	9	30%
Total Amount			30	100%

Histogram Graphics Pre-test Learning Freestyle Swimming Policy Techniques



Based on table 2 of frequency distribution and figure 1 of the histogram graph of the assessment of basic freestyle swimming techniques in grade VII students of SMPN 5 West Karawang above, it is known that the basic movement ability of crawl style swimming for 30 students, divided into several categories. The very good category has no students (0%), for the good category there are 2 students (6.70%), the category is enough to have 5 students (16.60%), while the category is less there are 14 students (46.70%), and the last one in the very less category is 9 students (30%).

Table 3 Post-test Frequency Distribution of Learning Basic Swimming Style Techniques Bebas

No.	Category	Score Range	Frequency	Percentage
1.	Excellent	14 And above	3	10%
2.	Good	13 to 14	10	33,3%
3.	Enough	11 to 12	11	36,7%
4.	Less	9 to 10	6	20%
5.	Very Lacking	Less than 9	0	0%
Total Amount			30	100%

Post-test Histogram Graphics Learning Freestyle Swimming Policy Techniques

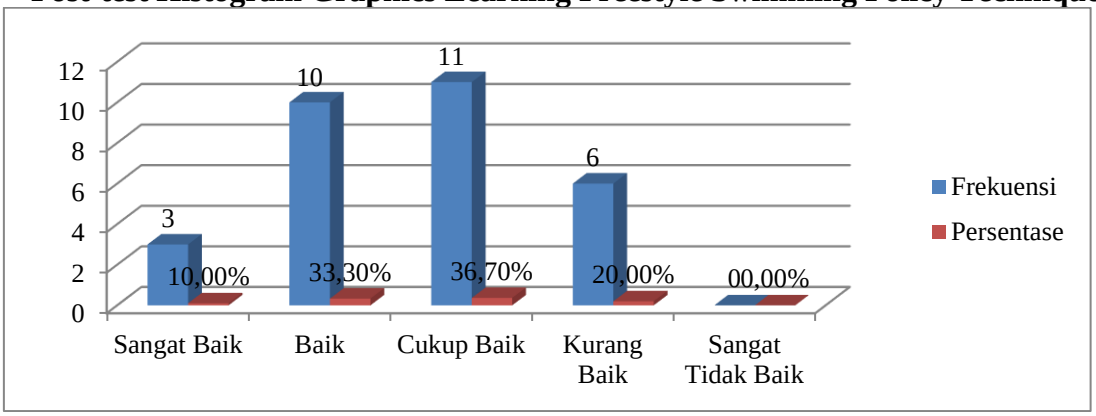


Figure 1 Post-test Percentage of Basic Freestyle Swimming Techniques

Based on table 3 of frequency distribution and figure 4.2 of the histogram graph of the assessment of basic freestyle swimming techniques in grade VII students of SMPN 5 West Karawang above, it is known that the basic movement ability of crawl style swimming for 30 students, divided into several categories. The very good category has 3 students (10%), for the good category there are 10 students (33.30%), the category is enough to have 11 students (36.70%), while the category is less there are 6 students (20%), and the last one in the very less category there are no students (0%).

Table 4 Normality Test of Basic Freestyle Swimming Techniques

Freestyle Swimming Test	Lcalculate	Ltabel	Conclusion
Initial Test	0,066	0,05	Normal
Final Test	0,107	0,05	Normal

Based on table 4 above, it can be seen that the results of the normality test of the initial test (Pretest) of basic freestyle swimming technique ability in grade VII students of SMPN 5 West Karawang obtained a score of Lcalculate = 0.066 with n = 30, and Ltabel at the level of significant testing α = 0.05 which is greater than Lhitung. So it can be concluded that the initial test data (pretest) of the ability of basic freestyle swimming techniques in grade VII students of SMPN 5 West Karawang is normally distributed.

Meanwhile, the final test data (posttest) of basic freestyle swimming technique ability in grade VII students of SMPN 5 West Karawang obtained a score of Lcalculate = 0.107 with n = 30, and Ltabel at a significant testing level of α = 0.05 which is greater than Lhitung. So it can be concluded that the final test data (posttest) of basic freestyle swimming technique skills in grade VII students of SMPN 5 West Karawang is normally distributed.

Table 5 Levene Test Homogeneity Test

Levene Statistic	Dfl	df2	Sig.
.294	1	58	.690

Based on the homogeneity test presented in table 5 above, a significance value of 0.690 was obtained. Since a significance value of 0.690 means a significance value of > 0.05, it can be concluded that the data is homogeneous.

Table 6 Uji t Paired Sample T-Test

Variabel	t-count	Sig. (2-tailed)	Level Of Significant
Pretest & Posttest	-16,755	0,000	0,05

Based on the paired sample t-test table, a significance value = 0.000 is less than the significance level (α) = 0.05, then H0 is rejected and H1 is accepted. This means that there is a significant difference between the average value before treatment and the average value after treatment. In the table t obtained negative t, which is -16.755 which means

that the average before treatment is lower than the average after treatment. So it can be concluded that learning using swim board aids can affect the improvement of basic freestyle swimming techniques at SMPN 5 West Karawang.

DISCUSSION

During the learning process the teacher is tasked with paying attention to the level of ability of students, because not all students have the same ability, therefore the attention of a teacher is very important. This difference in student ability levels is very influential on learning targets, this difference is influenced by internal and external factors (Susanta, 2021). The existence of equipment and aids in an effort to improve the ability to swim in students is expected to be a solution in order to improve, improve, and develop the abilities and achievements of students, so that programs and objectives in learning can be achieved and implemented without experiencing obstacles (Wicaksono et al., 2021). The availability of relevant and adequate tools will greatly support the smooth teaching and learning process, on the other hand, if the tools are not available, it requires teachers to be creative so that learning and running optimally (Pratama, 2018).

Based on data management and analysis with a statistical approach, it shows that the tests that have been conducted by researchers at SMPN 5 West Karawang get valid and significant results. This study was conducted for 12 meetings, at the first meeting researchers conducted an initial test or pretest to all samples of grade VII J students, the second meeting to eleven researchers treated or treated grade VII J students with the use of swim board aids, then at the last meeting researchers conducted a final or posttest test to find out whether the swim board aids could have an effect or not on Improved ability of basic freestyle swimming (crawl) techniques. The essence of learning using swim board tools is feedback between students (Rizkiyansyah &; Mulyana, 2019). The use of swim board can help the body position become streamlined so as to get a shape that has smaller resistance (Apriliyanto, 2017). For some students, swimming skills become something scary, because many have tried to practice but it is still very difficult to master. The results showed that students could not understand the basic swimming movement skills techniques conveyed by the trainer orally (Engel et al., 2022). Based on this, there is a need for new things so that the delivery of swimming learning can be achieved in accordance with the learning objectives. Basic movement skills in swimming are basic things that must be possessed by a swimmer. For mastery of freestyle in swimming, a swimmer is required to know the right techniques in order to achieve good results in accordance with the style taught in the exercise program (Carmigniani et al., 2020). The results showed that the drill method using flipper float media had an influence on the basic motion of freestyle swimming.

The discussion of the results of this study provides further interpretation, especially regarding the results of research and data analysis that has been carried out previously by Maulana and Hartoto (2022) that the use of swimboards can improve freestyle swimming learning outcomes. Based on the results of the analysis of his research shows that the effectiveness of using swimboards can be better combined with pullboys, swimboard modifications, and animated videos.

Based on the results of data analysis and hypothesis testing that has been carried out by researchers that the provision of swim board aids can improve the ability of basic freestyle swimming techniques in grade VII students of SMPN 5 West Karawang, this shows that the effect of providing swim board aids has considerable effectiveness on the learning outcomes of basic freestyle swimming techniques. The results of this study have proven the theories described above that swim board aids can improve the ability of basic

freestyle swimming techniques, so it is hoped that the results of this research can be a reference for teachers / coaches to be able to develop the abilities of students and of course can be useful for the wider community.

Conclusion

Based on the results of research that has been obtained by data analysis and hypothesis testing from the average before treatment and after treatment has increased significantly from 9.20 to 12.07. Meanwhile, the calculation results of hypothesis testing obtained a significance value that is less than the significance level (α), which is 0.000<0.05. The results of descriptive statistical calculations on the mean pretest and posttest of the ability of basic freestyle swimming techniques can be concluded that the influence of swim board aids in improving the ability of basic freestyle swimming techniques in grade VII students of SMPN 5 West Karawang.

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