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EFFECTIVENESS OF GAME-BASED FREESTYLE SWIMMING TRAINING MODELS FOR EARLY CHILDREN (4-6 YEARS)

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Abstract The aim of this study was to obtain empirical data about the effectiveness and results of a game-based freestyle swimming training model for early childhood (4-6 years). This type of research is an experiment with a pre-test and post-test design. Data analysis techniques collect effectiveness test data using the T test with SPSS software. The effectiveness test was carried out in early childhood (4-6 years) at Flobamora Swimming Club in Senen, Central Jakarta with a total of 14 children as subjects who were given treatment using a variety of game-based freestyle swimming training models for 16 meetings. The freestyle swimming motion assessment instrument is carried out by the freestyle swimming test. The results of the study, in the experimental group, the mean pre-test was 8,428 and the mean post-test was 12. Meanwhile, in the control group, the pre-test was 6.5 and the post-test was 8.2. Testing the success of the experimental method with the control, the results obtained are sig 0.000 <0.05, which means that there is a significant difference between the subjects who were given control treatment and the experiment, with a difference of 3.80 so that it can be said that the experimental method that has been applied provides better effectiveness than with control group.

Keywords: swimming; freestyle; 4-6 years old

INTRODUCTION

Community activities at this time cannot be separated from sports, both as an arena for achieving achievements and as a need to keep the body healthy. Sport is a form of efforts to improve the quality of Indonesian human beings which are directed at forming character, personality, discipline and high sportsmanship as well as increasing achievements that can arouse a sense of national pride, one of which is swimming (Thomas, D. G. 2007). This sport is in demand by all age levels from adults, teenagers and children are no exception who are looking forward to where children can play in the pool with their friends such as walking around in the pool area and even competing in swimming (Hidayat, T. A. S. 2019). The benefits of this sport besides being fun can also improve fitness because in practice it has components of aerobic and anaerobic fitness. Through swimming, besides being able to improve fitness, it can also increase growth and development, especially at the age of children.

Swimming does not have to be done in a swimming pool but can also be done in rivers, lakes or beaches. Swimming is a sport that can provide physical and mental health because of the purpose of swimming itself apart from being an achievement sport it is also for recreational activities or seeking pleasure. The development of swimming in Indonesia is currently increasing rapidly, along with the developments and demands of life including the lifestyle of a person who has switched to a dynamic lifestyle, this encourages a person to continue to exist in his life, thereby encouraging a person to carry out sports activities, one of which is swimming.

Practicing swimming in terms of honing and developing one's potential, talent and interest in becoming a swimming athlete can be realized through a swimming club. The more swimming clubs in Indonesia, of course, many athletes want to compete for achievements. The swimming club emerged because the needs of people who want to learn swimming are getting higher, both for achievement sports and as recreational sports. The development of swimming sports achievements in Indonesia is highly expected, because it becomes a matter of pride for the nation and state.

The steps that need to be taken to achieve this include paying attention to increasing the procurement of facilities and infrastructure, talent guides, improving the quality of coaching and training, so that in

pursuing this all needs to start with carrying out coaching on an ongoing basis starting from an early age. As a basis for sports coaching, early childhood must develop basic skills, especially those related to general techniques in sports, especially swimming, which have different basic techniques or basic styles. These swimming styles include: crawl or freestyle, back crawl or backstroke, breastroke or breaststroke and dolphin or butterfly style (Subagyo, 2018).

Crawl style or better known as freestyle is the initial style to learn various styles in swimming. According to Subagyo (2018) states that freestyle is "a movement that is done by turning the body upside down, where the arms pull and the legs kick in the water". Freestyle is a style in swimming that is often taught at the beginning of swimming lessons for beginners before learning other swimming styles (Dinata, R. M., Nurrochmah, S., & Sugiarto, T, 2016), this is in line with Tetikay, R (2011) who argues that "Freestyle swimming is a swimming style that must be prioritized to be taught earlier for beginner swimmers because: (1) freestyle has movements that lead straight, thus logically it is easier to learn than with bending movements, (2) besides that the movement of the legs in freestyle will be more in line with the feet when walking everyday ".

Based on the explanation above, it can be concluded that freestyle is a top priority in starting swimming lessons. The material given to the swimming club consists of four styles in swimming technique. The swimming techniques given during practice are arranged through a program made by the trainers of each club. In early childhood, the first swimming style technique given is freestyle. Trainers prioritize freestyle swimming exercises as the initial training for beginner swimming athletes because the style is the easiest or like people walking, so that novice swimming athletes are motivated to do routine and systematic exercises, a varied training model is needed.

The early childhood swimming learning program aims to introduce children to the joy of water activities, dare to recognize risks in water activities and teach basic swimming skills. Learning to swim for young children is more focused on introducing motoric aspects in water as a basis for basic swimming skills. These motor skills include: (1) getting into the pool, (2) floating, (3) arm movements, (4) leg movements, (5) breathing control, and (6) complete swimming (Susanto, E, 2014). The world of children is a world of play, fun is one of the main elements in play. The

child will continue to play as long as the activity entertains him, when the child is bored the child will stop playing. Making a fun training program is something that must be considered by the trainer. The enthusiasm given by children will increase when the exercise program given to children is fun, whereas if the exercises given are less varied and less fun then the child becomes less focused or the child looks less enthusiastic when practicing, therefore one way to overcome boredom is by playing that is inserted in each exercise program that is made.

Based on the results of observations and observations of researchers at the Flobamora Swimming Club, the enthusiasm of the children to participate and do the exercises is still not good. This can also be seen from the decreasing number of children practicing at the Flobamora Swimming Club. In participating in freestyle swimming basic technique exercises, things are still not optimal. this is due to the monotonous training program so that children feel bored, this is also based on the use of training tools that are still minimal.

Based on the results of observations and interviews with parents, researchers obtained information that when practicing swimming, children feel bored, children feel tired, causing children to no longer want to practice swimming. The results show that: (1) children tend to be less active and enthusiastic in participating in training, (2) there is no exercise carried out in the form of a game, (3) the training model for freestyle swimming given by the coach is still minimal or not varied, (4) lack of tools used. Based on the observations of researchers, children look bored and lack enthusiasm when practicing freestyle swimming because they do repetitive techniques (drill) without any games between exercises, even though they should be in the basic freestyle swimming techniques, especially for early childhood if trained properly and it is true that it will be easier to develop the next technique, the lack of a game-based training model to improve freestyle swimming technique skills. Mastery of the basic freestyle swimming techniques requires finding the right approach to training and playing techniques to improve basic technique skills so that children quickly master freestyle swimming techniques.

During the training process, many coaches still only use the drill technique, causing boredom due to the lack of variety for freestyle swimming technique training, the absence of an element of play during practice and during practice there is still a lack of enthusiasm in the child's exercise as seen from the child's attitude. alone.

Freestyle swimming technique training is not only done with the drill method, freestyle swimming technique training can also be done by giving points or games. The concept of this game-based training model provides a state of exercise so that it doesn't feel heavy, doesn't feel bored, has an element of play and an element of challenge, so in practice it is necessary to have a game. Researchers need to make game-based exercises to add an element of fun to the exercise while at the same time increasing the sense of competition from the children. Freestyle swimming training for an early age (4-6 years) must pay attention to an exercise program accompanied by something that can add an element of joy and the need for innovation and creativity in game-based freestyle swimming technique training. The importance of good innovation and creativity in the freestyle swimming technique training process for early childhood (4-6 years), so that the coach can give a new feel to the child, so that the child does not get bored with the previous freestyle swimming technique material.

To obtain more optimal results, it is necessary to have an appropriate game-based training model suitable for early childhood (4-6 years) which can provide an increase in freestyle skills for early childhood (4-6 years).

METHOD

The freestyle swimming motion assessment instrument is carried out by a freestyle swimming test. This type of research is an experiment with a pre-test and post-test design. Data analysis techniques collect effectiveness test data using the T test with SPSS software. The effectiveness test was carried out in early childhood (4-6 years) at Flobamora Swimming Club in Senen, Central Jakarta with a total of 14 children as subjects who were given treatment using a variety of game-based freestyle swimming training models for 16 meetings.

RESULTS AND DISCUSSION

Table 1. Results of the Experimental Group's Freestyle Swimming Movement Skills Assessment

	Mean	N	Std. Deviation	Std. Error Mean
Pretest	8.4286	14	1.55486	.41555
Postest	12.0000	14	1.46760	.39223

The average test results of 14 children before being given treatment was 8,428 and after being given the treatment of variations in freestyle swimming training models, there were 21 models that had been evaluated and validated. Furthermore, after taking the post-test data, it is known that the variation of game-based freestyle swimming exercises is characterized by an

increase in the results of the record with an average of 12. Based on the description above, after being measured with the freestyle swimming motion assessment instrument, there are differences in the results of the variations in style swimming exercises. free between the pre-test and post-test that the variation model of the freestyle swimming training model developed is effective and can improve the child's freestyle swimming motion skills.

Data from the pre-test and post-test results of children's freestyle swimming using the Lilliefors test at a significance level = 0.05, while the summary of the calculation results is shown in the following table:

Table 2. Tests of Normality of the Experimental Group

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pretest	.201	14	.130	.909	14	.151
Postest	.143	14	.200*	.900	14	.112

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Table 3. Tests of Homogeneity of Experimental Group

	Levene Statistic	df1	df2	Sig.
Based on Mean	0,481	1	26	0,494
Based on Median	0,181	1	26	0,674
Based on Median and with adjusted df	0,181	1	25,92	0,674
Based on trimmed mean	0,475	1	26	0,497

The results obtained in the normality test using the Kolmogorov Smirnov test obtained sig values above 0.05 for both samples (pretest & posttest) in the experimental group so that it can be said that the normality assumptions have been met. And based on the homogeneity test using the Levene test, a sig value of 0.494 > 0.05 is obtained, which means that the pretest & posttest samples meet the assumption of homogeneity.

Furthermore, the result data obtained from a study of 10 children in the control group are shown in the following table:

Table 4. Tests of Normality for the Control Group

	Mean	N	Std. Deviation	Std. Error Mean
Pretest	6.5000	10	1.43372	.45338
Postest	8.2000	10	1.54919	.48990

The test was carried out to find out the results before and after being given treatment. The average test result for 10 children before being given treatment was 6.5. After the trainer gave the treatment according to the number of experimental group meetings, a post-test was then carried out to find out whether there was an

increase in the children's freestyle swimming motion skills. The post-test results showed that the children's freestyle swimming skills increased with an average of 8.2.

Tabel 5. Tests *of Normality* Kelompok Kontrol

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
Pretest	.236	10	.120	.886	10	.151
Postest	.177	10	.200	.887	10	.156

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Based on the description above, there is a difference in the results of the freestyle swimming movement skills between the pre-test and post-test, but not too significant when compared to the experimental group.

Table 6. Tests of Control Group Homogeneity

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Based on Mean	0,014	1	18	0,907
Based on Median	0,055	1	18	0,818
Based on Median and with adjusted df	0,055	1	17,889	0,818
Based on trimmed mean	0,026	1	18	0,873

The results obtained in the normality test using the Kolmogorov Smirnov test obtained sig values above 0.05 for both samples (pre & post) of the control group so that it can be said that the normality assumptions have been fulfilled. And based on the homogeneity test using the Levene test, a sig value of 0.907 > 0.05 is obtained, which means that the pre & post samples meet the assumption of homogeneity.

Table 7. Independent Sample t-Test Results for the Control Group and the Experiment Group

	t-test for Equality of Means				
Variabel	t	Df	Sig	Mean Diff	Std Error Diff
Kontrol - Eksperimen	-6,338	23	0,000	-3,800	0,5995

Testing the success of the experimental method with the control, the results obtained are sig 0.000 <0.05, which means that there is a significant difference between the subjects who were given control treatment and the experiment, with a difference of 3.80 so that it can be said that the experimental method that has been applied provides better effectiveness than with control group.

CONCLUSION

The game-based freestyle swimming training model developed based on research data obtained results that are effectively used to improve game-based freestyle

swimming skills for early childhood (4-6 years).

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