

BREAST STROKE SWIMMING ABILITY IN STUDENTS INTERESTED IN SWIMMING SPORTS TALENT

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Abstract

This study aims to analyze the level of breast stroke swimming ability in students of the Swimming Talent Interest of the Muhammadiyah University of Surakarta. The method used is descriptive research with a quantitative approach, involving 20 students as samples. Data were obtained through swimming ability tests and analyzed using descriptive statistical techniques. The results showed that the majority of students had appropriate abilities in breast stroke swimming techniques, with the highest percentage in the appropriateness of body position when gliding (75%). However, there were also some students who still needed improvement in leg movement techniques, hand movement techniques, breathing techniques, and movement coordination techniques. The conclusion of this study is that although most students showed good abilities, there is still a need for additional training to improve their swimming skills.

Keywords: *Ability, Breast stroke swimming, Interest and talent*

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INTRODUCTION

In today's development, the role of sports in improving physical fitness and providing the necessary exercise in everyday life is considered very important. Everyone longs for a healthy and happy life and wants to always be healthy (Oktri Yeni, 2019) . Sports can also increase self-confidence and make a person feel better about themselves. Therefore, scientific research must be done to achieve the best results in an effort to improve individual abilities in various sports. Swimming is one of them.

Swimming is a sport that is done underwater that moves almost all parts of the body (Ervina, 2021) . According to Sistiasih (2020) Swimming is a sport with complex skills that requires good basic knowledge and regular practice to master it quickly . Rusdianti (2024) stated that swimming is an activity that requires complex movements. In order to be able to do swimming movements well, the ability to

coordinate hand and leg movements as well as breathing is needed harmoniously. After physical conditions in the sport of swimming, mastery of technique is very important in supporting swimming achievements, especially breast stroke swimming. Swimming has many benefits, such as maintaining physical fitness, improving personal safety, improving physical abilities, improving physical growth and development, becoming a means of recreation, education, rehabilitation, and achievement. Swimming has been a means of transportation, sport, and recreation since ancient times.

According to Arhesa (2019) The development of swimming sports in Indonesia is increasingly showing very significant progress, this is proven by the many swimming pools in various regions and public appreciation for this sport can be seen from the public's interest in doing water activities in sports facilities centers. Along with the development of swimming, swimming has become a popular sport for many people. Introduction to swimming sports from an early age through devotion to The community is carried out by exploring, developing, preserving and utilizing recreational sports, one of which is water games, water safety, water movement skills and swimming that exist in the community. (Jariono, 2022) . Swimming does not only rely on a person's physical condition but must also pay attention to basic swimming techniques, floating, gliding, breathing, leg movements, arm movements, and movement coordination (Harija, 2021) .

According to Fendi Setyawan (2024) Swimming not only improves muscle strength and physical fitness, but also benefits mental and emotional health. In swimming competitions, there are four styles that can be competed: freestyle (front crawl) , backstroke (back crawl) , breaststroke (breast stroke), and butterfly stroke (butterfly stroke) . The swimmer who wins the swimming race is the swimmer who completes the fastest lane, the competition numbers in swimming, especially the 50m distance race number, require motivation to achieve and in this study the researcher took one of the four styles, namely the breast stroke style .

Breast stroke swimming style is a sport that moves the whole body which is done in the water with the chest facing the surface of the water, with movements

similar to the movement of a frog . Breast stroke swimming is commonly called frog swimming. This name is because the breast stroke swimming movement resembles the movement of a frog when swimming (Journal of Physical Education 2017) . Breast stroke is a swimming style in which from the start of the first arm stroke after the start and after turning the body must be face down and both shoulders are in line with the water.

According to Priana (2019) Breaststroke is a style that has great resistance when seen from the way the swimmer does the breaststroke, for example when going up and down when taking a breath, opening the arms to the side when pushing the water, opening the legs to the side when pushing the water . Breast stroke style is the most interesting style because it is not tiring quickly when compared to other styles, because the breathing process takes place easily so that it is easier to use in long-distance and relaxed swimming. In breast stroke swimming , the basic techniques that must be mastered are; gliding movements, leg movements, hand movements, breathing techniques, and movement coordination.

According to Rusli & Abadi (2022) Swimming does not only rely on a person's physical condition but must also pay attention to basic swimming techniques. The basic swimming techniques are: floating, gliding, breathing, leg movements, arm movements and movement coordination . The basic techniques of breast stroke swimming consist of (1) Leg Movement (Breaststroke Kick) : Focus on the strength and coordination of leg muscles in an efficient push to increase speed; (2) Hand Movement (Pull) : Good hand stroke technique to minimize water resistance and increase forward thrust; (3) Body Position when Gliding : Streamline position to reduce water resistance and increase movement efficiency; and (4) Breathing and Rhythm: Setting the right breathing interval to maintain energy efficiency and stability in swimming.

Sports Talent Interest (MBO) is a system developed by the Physical Education Study Program (PENJAS) to determine the interests and potential of students in the field of sports that aim to achieve peak performance (Indarto, 2018) . MBO also aims to deepen knowledge and skills in competent sports branches.

(Rabani & Nurhidayat, 2021) . Swimming MBO established in 2021, the MBO branch that is popular with PENJAS students . This has increased since the establishment of MBO swimming for 3 years. However, there are some things that need to be honed again in MBO swimming training, especially the ability of breast stroke techniques . For researchers, this is interesting to find solutions to problems related to knowing the level of breast stroke ability of MBO Swimming students . Furthermore, if follow-up is carried out to find a way out, the advantage obtained is knowing the speed of breast stroke swimming of MBO Swimming students.

METHOD

Type study This is study descriptive with approach quantitative. Research This nature descriptive that collects information about existing phenomena. The method used is survey where researcher describe in a way short current state happen on moment That. Technique And data collection using test And measurements used in study This. The test used is test swimming style ability breast stroke. With researching movement swimming style breast stroke For get description in a way systematic, factual And accurate regarding data. This research was conducted on Friday, October 25, 2024 at the Tirta Angkasa Swimming Pool, Adi Soemarmo Air Force Base, Colomadu District, Karanganyar Regency. The population in this study was 38 UMS Swimming MBO students. The sample in this study was 20 students from the UMS Swimming MBO members of the 2022 & 2023 classes.

Data collection in this study uses observation with test and measurement methods whose results will be recorded and analyzed in the form of percentages. For data collected in the research process, it is processed and analyzed first so that it can be used as a basis for decision making. In this study, data presentation is done in the form. (Sudijono, 2012)

RESULTS AND DISCUSSION

Breast stroke swimming is swimming with the chest facing the surface of the water, and the body movement imitates the movement of a frog swimming. This style is also often called the frog style. With a fixed body position, both hands forward, while both legs kick out, then open both hands to the side like a movement of splitting the water, the waah position faces the surface of the water. Breathe when the mouth

is on the surface of the water after one or two hand and leg movements. Keep the shoulders and neck as relaxed as possible, when doing the arm movement gliding forward, position the head slightly down. Compared to other swimming styles, the breast stroke style is the most relaxed style, suitable for beginner swimmers. The basic technique of breast stroke swimming, there are several things that need to be considered, so that a swimmer can easily do breast stroke swimming training , namely, body position technique when gliding, leg movements, hand movements, breathing techniques, and coordination movements.

Based on the results of research conducted on students of the 2022 & 2023 Swimming Sports Talent Interest, Universitas Muhammadiyah Surakarta Physical Education, the breast stroke swimming technique is categorized as appropriate. This can be seen from the results of individual tests from each student, then reinforced by the results of the tests that have been carried out. In preparing the breaststroke swimming technique, the movements produced by students are in accordance with the sources in the theoretical study. That the student's preparation was carried out correctly. This research was conducted at the Tirta Angkasa Lanud swimming pool on October 25, 2024. The subjects taken were 20 consisting of 17 male students and 3 female students. The focus of this study is to analyze breast stroke swimming skills .

Body Position Correction When Gliding

The suitability of the body position when gliding the streamline current with the water surface, hands straight forward and head or face facing down splitting the water surface. Of the total 20 students, 1 student was still not appropriate in doing the start of the gliding movement, 4 students were less appropriate when gliding and 15 students did the movement properly. The data is presented in the table below:

Table 1. Body Position Suitability When Gliding

NO	Movement Compatibility	Number of Students	Presentation
1.	It is not in accordance with	1	5%
2.	Less Suitable	4	20%
3.	In accordance	15	75 %
	AMOUNT	20	100%

Foot Movement Conformity

The suitability of the leg movement, the legs must be moved correctly and equally strong or balanced so that the movement remains straight forward. Of the total of 20 students, 3 students were still not appropriate in doing the leg movement, 7 students were less appropriate in doing the leg movement and 10 students did the movement properly. The data is presented in the table below:

Table 2. Foot movement correspondence

NO	Movement Compatibility	Number of Students	Presentation
1.	It is not in accordance with	3	15%
2.	Less Suitable	7	35%
3.	In accordance	10	50%
	AMOUNT	20	100%

Hand Movement Compliance

The suitability of hand movements, from gliding the body position is quite stable, move both arms in a circle outwards from the body, after forming a full circle, bring both palms together on the upper chest and return straight. Of the total 20 students, 4 students were still not appropriate in doing hand movements, 5 students were less appropriate in doing hand movements and 11 students did the movements appropriately. The data is presented in the table below:

Table 3. Hand Movement Conformity

NO	Movement Compatibility	Number of Students	Presentation
1.	It is not in accordance with	4	20 %
2.	Less Suitable	5	25%
3.	In accordance	11	55 %
	AMOUNT	20	100%

Breathing Conformity

The appropriateness of breathing, lift the head above the water surface when both hands are in a stretched position in front of the chest, take a quick and deep breath through the mouth, lower the head into the water when both hands start to move backwards. Of the total of 20 students, 6 students were still not doing the breathing movements correctly, 6 students were not doing the breathing movements correctly and 8 students were doing the movements correctly.

Table 4. Breathing Conformity

NO	Movement Compatibility	Number of Students	Presentation
1.	It is not in accordance with	6	30%
2.	Less Suitable	6	30%
3.	In accordance	8	40%
	AMOUNT	20	100%

Coordination of Movement Suitability

The suitability of movement coordination or movement combination, performing the sequence of body position movements when gliding, leg movements, hand movements, and taking a good and continuous breath. Of the total of 20 students, 7 students were still not appropriate in doing hand movements, 7 students were less appropriate in doing hand movements and 6 students did the movements appropriately. The data is presented in the table below:

Table 5. Compliance of Movement Coordination

NO	Movement Compatibility	Number of Students	Presentation
1.	It is not in accordance with	6	30%
2.	Less Suitable	7	35%
3.	In accordance	7	35%
	AMOUNT	20	100%

Based on opinion Christiano (2019) Breast stroke swimming became popular when in 1875, British swimmer Matthew Webb became the first person to swim the Channel Bay using this style. This breast stroke style resembles a frog swimming, so some people call it the frog style. The difference is, in humans the gliding position is done with both legs straight, while in frogs this is not found.

in swimming.

In breast stroke swimming skills must be in accordance with the correct and appropriate movements. In this swimming style, you must pay attention to the correct starting body position, correct leg movements, correct hand movements, correct breathing and overall coordination movements correctly. Breast stroke swimming movements conducted on MBO Swimming Physical Education students of Muhammadiyah University of Surakarta Class of 2022 & 2023, seen from the description of the results of data analysis, the level of mastery of the techniques that

occurred: In the body position movement when sliding, 1 student (5%) was classified as inappropriate, 4 students (20%) were classified as less appropriate, 15 students (75%) were classified as appropriate. It was concluded that the initial movement (gliding) of UMS Physical Education students was classified as appropriate. In leg movements, 3 students (15%) were classified as inappropriate, 7 students (35%) were classified as less appropriate and 10 students (50%) were classified as appropriate. It was concluded that the leg movements of UMS Physical Education students were classified as appropriate. In hand movements, 4 students (20%) were classified as inappropriate, 5 students (25%) were classified as less appropriate and 11 students (55%) were classified as appropriate. It was concluded that the arm movements of UMS Physical Education students were classified as appropriate. In taking breaths, 6 students (30%) were classified as inappropriate, 6 students (30%) were classified as less appropriate and 8 students (40%) were classified as appropriate. It was concluded that the breathing of UMS Physical Education students was classified as appropriate. In the coordination movement, 6 students (30%) were classified as inappropriate, 7 students (35%) were classified as less appropriate and 7 students (35%) were classified as appropriate. It was concluded that the coordination movement of UMS Physical Education students was classified as appropriate.

From the evaluation results, it can be concluded that swimming movement abilities still need to be improved. The gliding movement reached a score of 80, but the movements of the legs, hands, breathing and coordination of movements were still relatively low with scores of 50, 55, 40 and 35. Overall, the average score obtained was 52. Therefore, it is necessary to carry out further training and evaluation to improve swimming movement abilities.

From these results, it can be concluded that most students have the appropriate breast stroke swimming ability, but there are also those who have less appropriate and inappropriate abilities. This shows that there is variation in the level of ability in performing breast stroke swimming movements. Which is the basis for developing training in MBO hours in order to improve students' abilities in breast stroke swimming.

Judging from the description above, the average level of mastery of the techniques that occur in swimming technique movements as a whole is categorized as less appropriate while the purpose of basic swimming is an understanding of swimming techniques and regulations as well as breast stroke and crawl swimming skills with gross motor coordination. But in reality, the techniques used by UMS PENJAS swimming MBO students still have errors that occur in each indicator. Swimming is a sport with activities in the water, so an athlete must be able to float.

There are several factors that cause errors when performing the breast stroke swimming technique, one of which is the limited time for students to swim, this may be due to poor transportation or the long distance from the lecture location to the residence to go to the swimming pool, because students spend a lot of money which is then used for transportation costs and consumption needs. In addition to the supporting facilities and infrastructure needed in the breast stroke swimming training process, to improve motor skills or motor educability and student confidence, routine drill training is needed.

According to Artha's opinion (2021) Drill method is a regular unity in training. Drill method (repetitive training method) is a method commonly used to master movements automatically to achieve proficiency, skills in a sport. So to help students succeed in learning breast stroke swimming, training activities must be repeated by giving students the opportunity to repeat the sequence of breast stroke swimming procedures.

Thus it can be stated that many factors can affect the level of mastery of breast stroke swimming technique of students of MBO Renang PENJAS UMS. Therefore, it is inseparable from the evaluation that must be carried out by lecturers and students to improve the breast stroke swimming technique that they previously had, in order to achieve better learning outcomes.

CONCLUSION

Breast stroke swimming skills in students of the Swimming Talent Interest of Physical Education, Muhammadiyah University of Surakarta is classified according to the initial gliding position, classified according to leg movements, classified according to hand movements, classified according to breathing techniques, and

classified according to movement coordination techniques. Some students still need more guidance and training to improve breast stroke swimming movements that are still less appropriate and inappropriate, while some students have also shown their abilities and practiced but have not reached the desired level.

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