

THE Effect Of using specific exercises on improving the skill performance level of the first stars skills in synchronized

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Specific exercises are the kind of exercises that are called in swimming Drills, and they are concerned with momentary or phased exercises that stem from the same nature of skillful performance and its precise details so that they include all parts of the actual performance. These exercises will raise the level of skillful performance of swimmers by including them in training programs during the seasons different training sessions so that the swimmers can reach the highest possible skill level (6:45)

The researcher believes that using the method of specific exercises similar to the skills of synchronized swimming, whether in training or education, can occupy an important role in the speed of learning and improving the level of skillful performance, and to increase the high level of this training method, the following principles should be followed.

- Interest in this method when the goal is to develop the physical capacity with the improvement of skillful performance
- If facilities are given for implementation, they should not be at the expense of the essential part of the exercise.
- The number of repetitions depends on the ability of the swimmer.

Specific exercises and skill performance technique are an integral part of most of the synchronized swimming programs, as each coach has his favorite exercises and his favorite technique designed to raise the level of performance in synchronized swimming skills.

The exercises also play a key role in assessing the level of progress or the rate of progress in developing the synchronized swimming method, by identifying both the positive and negative elements of the swimmer's skill level, that is, identifying the weaknesses that may lead to a slow rate of progress of the swimmer in one of the synchronized swimming skills. Likewise, the exercises or the basket of exercises that are quoted or invented from observing or watching highly skilled swimmers and mature coaches, and there is no error or defect in that. In other words, the coach must learn from watching a new exercise model, taking into account the existence of several considerations that must be stopped. Before applying this exercise:

If a separate exercise is used without realizing its position in the overall education process, i.e. without employing it in its correct place, it can have an ineffective effect and even weaken the desired level of performance in the event that the trainer does not have sufficient experience on how to adapt these exercises to serve the skills. , or in the case of placing an exercise for it in a logical sequence within the learning series. (1:60, 61)

Before the trainer implements a new exercise, it must be taken into account that the exercise is suitable for the skill level of the learner, as well as the requirements of this exercise in terms of strength and flexibility, and that the level of this exercise be at a certain level to achieve the desired results.(6 : 45, 46).

The skillful performance of synchronized swimming skills is considered an essential factor affecting the speed of the swimmer, as the skillful performance depends on the physical and anatomical capabilities of the swimmer and observance of sound mechanical laws and principles of movement. The lack of one of these factors may affect the final outcome of performance, which is represented in the skill level (2: 106).

In view of the synchronized swimming skills and their requirements, and based on the fact that they are methods that require the correct connection between all parts of the body and its members in complete harmony during performance, the motor coordination has a great role in that and is one of the most essential elements for the good performance of synchronized swimming skills, as there is no synchronized swimming skill that does not require A certain amount of movement compatibility among its practitioners so that the movements can be performed in the best way, in complete harmony and coordination, and in an economical manner for the effort required to perform them and the appropriate time

for this performance.

Synchronized swimming is one of the sports activities that require the performance of skills with specific specifications and precise technique accompanied by music and needs motor capabilities and special requirements to perform its skills. Therefore, care must be taken when planning to teach it to direct the students' intellectual and motor : the aims of search

activity accurately, with an explanation of all parts of the targeted skills. Teaching it so that the teacher organizes, monitors and continuously directs the way students perform the skills effectively while ensuring their positive participation during the educational process (11: 113).

Star 1 includes two modes: back layout and tub, and six skills: head first scull, foot first scull, back crawl, back flutter kick, and somersault. tuck, water wheel (7:34)

Search goal:

The research aims at the effect of using specific exercises on improving the skill performance level of the first star's skills in synchronized swimming.

Research hypotheses:

1- There are statistically significant differences between the averages of the pre and post measurements for one group that used specific exercises in the skill performance level of some synchronized swimming skills.

Specific exercises:

A set of positions and physical movements that aim to shape and build the body and develop its various motor and skill capabilities to reach the individual to the highest possible level of sports performance in various fields based on scientific foundations of movements to facilitate and master the performance of movement (skill) in a non-traditional way, whether with or without tools (7: 15).

Skill performance level:

It is the degree or rank that the learner reaches from the motor behavior resulting from the learning process in order to acquire and master the movements of the practiced activity, provided that it performs in a manner characterized by smoothness, accuracy, and a high degree of motivation for the individual to achieve the highest results while saving

effort (8: 186).

The methodology:

They are sports movements that are performed in the aquatic environment and combine gymnastics, modern dance, ballet, as well as swimming, water skiing, diving, acting, directing, and musical taste. They are performed in fast rhythms (3: 39).

Previous studies:

1- Rami Abdel Hamid Ali 2022 AD, the effect of a qualitative exercise program on improving the level of performance of swimmers, the research aims to identify the effect of specific exercises on improving the level of performance of a swimmer, and the researcher used the experimental method, the research sample included 30 students, that the specific exercises have a positive effect To improve the performance level of swimmers. (5)

2- Muhammad Ibrahim Mowafi 2022 AD, influence

The use of specific exercises in the development of some special physical capabilities of the two men, the physiological and digital level of crawling swimming on the belly, the research aims to identify the effect of specific exercises in completing the special physical capabilities of the two men, the researcher used the experimental method, and the research sample included 40 students, that the specific exercises have an effect Positive for the development of physical abilities. (9)

3-Dina Metwally Ahmed 2018, the effect of some specific exercises in a self-directed learning method on the level of physical and skill performance and cognitive achievement in belly crawl swimming. The research aims to identify the effect of specific exercises in a self-learning method in belly crawl swimming. The research sampled it on 30 swimmers, that the specific exercises had a positive effect on the physical and skill levels. (4)

Search procedures :

Research Methodology:

The researcher used the experimental approach due to its suitability to the nature of the research, and she used one of the experimental designs, which is the experimental design for one group, following the pre- and post-measurement.

Research community and sample:

The research community included female students of the second year at the Faculty of Physical Education, Minia University, whose number is (204) students for the academic year 2022/2023, and the researcher chose a deliberate sample of (10) female students from the research community as a basic sample, and the number (3) irregular female students Also, the number of (10) female students was withdrawn as an exploratory sample to find the scientific transactions for the research.

Moderation of the distribution of the research sample

Measurements were made for the research sample by finding torsion coefficients before starting the application of the proposed educational program, in order to ensure moderation in the research variables that may affect the results of the research, as this was done in age, height, weight, physical variables and skill variables, and the following table (1) shows that.

Table (1)

The arithmetic mean, median, standard deviation, and skewness coefficient for the research

Experimental group (n = 14)				variable
skewness	standard deviation	median	mean	
1.51	0.43	19.00	19.21	age
0.24	4.43	164.00	164.36	height
-0.68	5.69	67.00	65.71	weight
-0.55	4.26	15.00	14.21	Oblique flatness
0.70	7.37	234.00	235.71	Vertical jump
-0.13	17.60	178.50	177.71	Broad jump
-0.64	3.36	18.50	17.79	Sit up from lying down
0.26	0.83	7.00	7.07	Shuttle run
-0.17	2.48	10.00	9.86	Mechanical flexibility
1.04	0.83	2.00	2.29	Floating on the back
1.04	0.83	2.00	2.29	Move forward towards the head
0.86	0.99	2.00	2.29	Move forward towards the float
-0.21	1.02	2.50	2.43	Swimming on the back using the strokes of the legs
1.06	1.01	2.00	2.36	Crawling on the back
0.50	0.86	2.00	2.14	Rotation
0.00	0.55	2.00	2.00	Back flip
0.72	0.89	2.00	2.21	Water wheel
1.44	0.74	2.00	2.36	The kinetic sentence

It is clear from Table (1) that:

The values of the skewness coefficients in the variables under study ranged between (-1.70, 1.51), that is, they were confined between (± 3), and this indicates that the distributions are close to moderation in each of age, height, weight, physical and skill variables, which indicates Moderation of the distribution of the research sample.

Data collection tools:

- 1-Restameter device for measuring length in centimeters.
- 2-A medical scale to measure weight in kilograms.
- 3-sStop Watch to measure time to the nearest 0.01/sec.
- 4- Measuring tape (to the nearest cm).
- 5- cones

Second: skill variables tests:

- 1- Floating on the back.
- 2-Moving forward towards the head.
- 3-Moving backward towards the feet.
- 4- Swimming on the back using the strokes of the legs.
- 5- Crawling on the back.
- 6- Spinning.
- 7- Back somersault.
- 8 - Water wheel.
- 9- Kinetic sentence

Scientific transactions for tests in research:

1- Honesty:

To calculate the validity of the tests, the researcher used the validity of differentiation, where the researcher applied these tests to the exploratory sample of (6) female students, and they were divided into two groups, one of which was distinguished with a high level in swimming and the other with a lower level, then the researcher calculated the significance of the differences between the two groups, and this explains Schedule (2) .

Table (2)

The significance of the differences between distinguished and less distinguished female students in synchronized swimming

In the skill tests under study (n = 6)

t value	Advantages		least distinguished		the test
	standard deviation	SMA	standard deviation	SMA	
3.54*	0.58	3.33	0.58	1.67	Floating on the back
4.00*	0.58	3.33	0.01	2.00	Move forward towards the head
3.54*	0.58	3.33	0.58	1.67	Move backward towards the feet
3.54*	0.58	3.33	0.58	1.67	Swimming on the back using the
4.00*	0.01	3.00	0.58	1.67	strokes of the legs Crawling on the back
3.54*	0.58	3.33	0.58	1.67	Rotation
4.00*	0.01	3.00	0.58	1.67	back somersault
5.00**	0.58	2.67	0.01	1.00	water wheel
4.00*	0.01	3.00	0.58	1.67	kinetic sentence

:The dimensional measurement

Tabular (T) value at the significance level (0.05) = 2.78 (0.01) = 4.60

* D at the level of (0.05) ** D at the level of (0.01)

It is clear from table (2) the following:

- There are statistically significant differences between the distinguished and less distinguished students in the tests of skill variables in favor of the distinguished students, which indicates the validity of the tests under discussion and their ability to distinguish between the two different groups.

2- Persistence:

To calculate the stability, the researcher used the method of applying the test and re-applying it, where she conducted the first application of the tests on the exploratory sample of (6) female students, then she re-applied the tests for the second time on the same sample with a difference of three days between the first application and the second application, then she calculated the correlation coefficient Between the two implementations, this is shown by a table (3).

Table (3)

Correlation coefficient between the first application and the second application of the sample under study In tests of skill variables (n = 6)

Value r	The second application		The first application		the test
	standard deviation	SMA	standard deviation	SMA	
0.92**	1.03	2.33	1.05	2.50	Floating on the back
0.93**	1.05	2.50	0.82	2.67	Move forward towards the head
0.93**	0.82	2.67	1.05	2.50	Move backward towards the feet
0.92**	1.03	2.67	1.05	2.50	Swimming on the back using the
0.89*	0.55	2.50	0.82	2.33	strokes of the legs Crawling on the back
0.94**	1.21	2.67	1.05	2.50	Rotation
0.88*	0.84	2.50	0.82	2.33	back somersault
0.91*	0.82	1.67	0.98	1.83	water wheel
0.87*	0.75	2.17	0.82	2.33	kinetic sentence

Tabular t value at the significance level (0.05) = 0.811 (0.01) = 0.917

* D at the level of (0.05) ** D at the level of (0.01)

It is clear from the table (3) that:

The values of the correlation coefficients between the first application and the second application in skill variable tests ranged between (0.87: 0.94), which indicates that the selected tests have high stability coefficients.

The statistical method used:

- SMA .
- Mediator .
- standard deviation .
- Torsion coefficient.
- Correlation coefficient.
- T-test.
- ETA coefficient.

The researcher accepted the level of significance at (0.05, 0.01), and the researcher used the Spss program to calculate some statistical coefficients

Presentation and discussion of results:**First: View the results:**

Table (4)
Significance of differences between the means of the pre and post measurements for one experimental group In the level of skillful performance of some synchronized swimming skills (n = 14)

ETA2 value	t value	Telemetry		Tribal measurement		the test
		standard deviation	SMA	standard deviation	SMA	
0.96	18.36**	0.56	7.39	0.83	2.29	Floating on the back
0.96	17.82**	0.51	7.21	0.83	2.29	Move forward towards the head
0.94	14.76**	0.53	7.14	0.99	2.29	Move backward towards the feet
0.96	17.42**	0.68	7.50	1.02	2.43	Swimming on the back using the
0.96	16.86**	0.79	7.39	1.01	2.36	strokes of the legs Crawling on the back
0.97	22.26**	0.61	7.29	0.86	2.14	Rotation
0.97	21.65**	0.58	6.93	0.55	2.00	back somersault
0.94	14.53**	0.86	7.14	0.89	2.21	water wheel
0.94	14.06**	0.80	7.21	0.74	2.36	kinetic sentence

Tabular (T) value at the level of significance (0.05) = 2.16 (0.01) = 3.01

* D at the level of (0.05) ** D at the level of (0.01)

It is clear from Table (4) that:

There are statistically significant differences between the averages of the pre and post measurements of the one experimental group in the level of skillful performance of some synchronized swimming skills in favor of the post measurement. .

Second, discuss the results:

The researcher attributes this progress to the use of the proposed specific exercises based on the skills of some other games that follow the same path and the motor duty of the body parts when training for swimming, on the physical variables under discussion and thus affects the skill level of the synchronized swimming swimmer, and for physical efficiency it is the amount of work that a swimmer can do. Performing it at maximum

intensity with an improvement in the functional condition and his ability to perform a greater work with the economy in the expended energy.

On the other hand, he believes that the specific exercises must partially match the movement track with the movement tracks used in competition and simulate the time course in some stages of performance. Raising the level of physical competence and skill level, and these results are consistent with the results of the study of "Nisreen Nabih" (2004) (49), "Shams El-Din Muhammad" (2002) (6), "Mohamed Gad" (2001) (50),

Conclusions and Recommendations:

First: Conclusions:

1- The use of specific exercises has a positive effect to improve the skill level of the first star's skills in synchronized swimming

Recommendations:

In light of the findings, the researcher recommends the following:

- 1- Invite those in charge of the educational process in the field of physical education to urge and encourage the use of specific exercises in training and teaching synchronized swimming skills.
- 2- Work on producing many researches that use qualitative exercises in training to improve the level of performance in synchronized swimming skills.
- 3- Spreading the use of specific exercises in all the first star's skills training in synchronized swimming

the reviewer:

- 1- Ahmed Mohamed Ahmed Aref: The effectiveness of a proposed training program to improve the digital level of short-distance swimmers, unpublished master's thesis, Faculty of Physical Education, Minia University, 2011.
- 2- Jamal Ismail Al-Namaki: Physical Preparation, Shajarat Al-Durr Library, Mansoura, Part Two, 2002 AD.
- 3- Doaa Muhammad Kamel Bayoumi: "The effectiveness of the educational props on the achievement motivation and the level of motor performance of the skills of the first star in the synchronized swimming," published research, the Journal of Physical Education Research, Zagazig University, 2022 AD.
- 4- Dina Metwally Ahmed: The effect of some specific exercises with a self-directed learning method on the level of physical and skill performance and cognitive achievement in belly crawl swimming." Faculty of Physical Education, Scientific Journal of Physical Education, Helwan University, 2018.

- 5- Ramy Abdel Hamid Ali: "The effect of a specific exercise program on improving the performance level of buds
- 6- Shams El-Din Mohamed Mahmoud: The effect of using a program for special purpose exercises on the level of technical performance of swimming breaststroke for buds, unpublished master's thesis, Faculty of Physical Education for Boys, Helwan University, 2002 AD. Swimming, Faculty of Physical Education, Cairo, Scientific Journal of Physical Education and Sports Sciences , 2022 AD.
- 7- Salah El-Din Mohamed Suleiman: Al-Tamreenat, Islamic for Printing and Publishing, Cairo, 2001 AD.
- 8- Essam El-Din Abdel-Khaleq: Sports Training, Theories and Applications, 12th Edition, Manshaet El-Maarif, Alexandria, 2003 AD.
- 9- Muhammad Ibrahim Mowafi: "The effect of using specific exercises on developing some of the physical, physiological and digital capabilities of the legs in crawling swimming on the belly," Faculty of Physical Education, Assiut University, Assiut Journal of Physical Education Sciences, 2022 AD.
- 10- Nadia Muhammad Taher Shousha 2008 AD "Synchronized Swimming", The Arab Center for Publishing, Cairo
- 11-Heacox, D. (2002): Differentiating Instruction in the Regular Clasroom; How to reach All Learners, grads 3-12 by .free spirit Publishing.
- Nadia Muhammad Taher Shousha 2008 AD "Synchronized Swimming", The Arab Center for Publishing, Cairo.