

## **The effect of (S.W.O.M) strategy on developing agility and accuracy of students' volleyball court defense skill**

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### **Abstract**

The purpose of this paper is to identify the effect of the (S.W.O.M) strategy and the strategy followed by the subject teacher in developing the agility and accuracy of the skill of defending the volleyball court for students, identify the advantage of effect of between the strategy of (S.W.O.M) and the strategy followed by the subject teacher in developing agility and accuracy of the skill of defending the volleyball court for students. The researchers used the experimental approach by designing two equal groups with pre and post-tests to apply the vocabulary of the strategy (S.W.O.M), and the research community was determined to apply the strategy (S.W.O.M) to the third stage students of the University of Kufa / College of Physical Education and Sports Sciences, for the academic season 2020-2021, totaling (28) students. The sample was divided equally into two experimental and control groups, and after conducting the tribal tests, the members of the experimental group began to apply the units prepared by the researchers and continued for eight weeks, each week three developmental units. Statistically processed using spss program. As for the most important conclusions the (S.W.O.M) strategy prepared by the researchers helped greatly in developing the students' agility, and the time period in which the strategy of the metacognitive learning course was applied greatly helped in developing the accuracy of the students' volleyball court defense skill. As for the most important recommendations necessity of using the (S.W.O.M) strategy in developing students' motor abilities, conducting similar studies on other individual and team activities, and on different age groups.

**Keywords: Strategy (S.W.O.M).**

### **Introduction:**

Physical education and sports sciences are important areas in developing skill performance, preparing learners physically and professionally, and helping them to communicate with the community and the world. In addition, the various educational methods and methods, which are one of the components needed by any educational curriculum in physical education and sports, and the teacher's duty is to be fully conversant in terms of their organization and the

rules necessary for their practice. This is because the educational material (kinetic skill), the specific objectives and the characteristics of the learners are what determine the appropriate and effective methods of kinetic learning.

The (S.W.O.M) strategy is one of the important strategies in the success of the educational process through which the interaction between the teacher and the learner and the educational process is achieved, and its purpose is to prepare a generation of productive learners who are characterized by thinking and continuous self-learning. By integrating them with a set of skills and mental processes in a natural way in teaching various educational materials through clear and practical procedures enable the strategy to achieve many of the goals that educators are looking for.

Among the sports that have received more attention and development is volleyball, which is one of the team games that has spread widely in various countries of the world. In all its technical and schematic aspects, and the use of such educational strategies that work to create a state of mixing everything that is new in the process of kinetic learning, and to encourage the learner to learn through excitement and suspense, and the application of the new thing that differs from the method used in the educational process.

One of the important skills that need a lot of time while learning and mastering is the skill and defense of the stadium because they are difficult and complex skills and require high level physical and motor abilities, hence the importance of research in the use of the SWOM strategy and knowing its effect on developing agility and accuracy of defense skill About the volleyball court for students .

### **Research problem:**

Through the field experience of the researchers and their presence in the educational process and their observation of the educational units and their knowledge of many research studies, they noticed that there is a large number of students (the learners) in the third stage who face difficulty in learning the skill of defending the volleyball court because they are complex skills and they need a large time in Learn it and master it correctly, and through the foregoing, the research problem can be summarized in the following question:

Does the use of the (S.W.O.M) strategy have an effect on the development of agility and the skill of defending the volleyball court for students?

### **Research objective:**

- Identify the effect of the (S.W.O.M) strategy and the strategy followed by the subject teacher in developing the agility and accuracy of the skill of defending the volleyball court for students,
- Identify the effect between the (S.W.O.M) strategy and the strategy followed by the subject teacher in developing agility and the accuracy of the skill of defending the volleyball court for students.
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**Research hypotheses:**

That there is an effect of the strategic strategy (S.W.O.M) in developing the agility and accuracy of the skill of defending the volleyball court for students.

**Research fields:**

- Human field: Students of the third stage of the College of Physical Education and Sports Sciences / University of Kufa ,
- Time field: (1/3/2021) to (30/7/2021)
- Spatial field: The sports hall of the College of Physical Education and Sports Sciences / University of Kufa.

**Research methodology and field procedures:**

**Research Methodology:**

The researchers used the experimental method because it fits with the nature of the research problem, and by designing the method of two equal groups (experimental and control) with pre and post-tests.

**Community and sample research:**

The research community was identified with students of the third stage of the College of Physical Education and Sports Sciences / University of Kufa, for the academic season 2020-2021, whose number is (28) students, and they were divided into two equally control and experimental groups, as the experimental group used the (S.W.O.M) strategy, while the control group was The usual strategy was used by the subject teacher.

**Devices, tools and means used in the research:**

**Means of data collection:**

- 1- Arabic and foreign sources and references.
- 2- Personal interviews.
- 3- Tests and measurements.
- 4- Special forms for recording the results of the tests for the players.

**Tools and devices used:**

1. The legal volleyball court.
2. Cones (10).
3. Rings with a diameter of (50 cm) number (10).
4. An electronic device for measuring height and weight.
5. Flying balls (10) of a type (Molten).

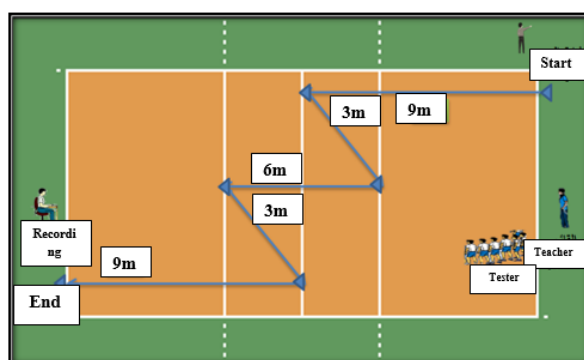
6. Polish (1) Dell laptop.
7. Whistle (2) type (Fox).
8. Measurement requirement in centimetres.
9. Sports stopwatch number (3).

### Field research procedures:

### Tests and measurements used in the research:

#### First: The shuttle run test of different dimensions (9-3-6-3-9 meters): <sup>(1)</sup>

- **Purpose of the test:** to measure agility.
- **Tools:** volleyball court, electronic stopwatch, (6) cones.
- **Test administrator:** an administrator who calls the testers and a recorder who records the time of performance.
- **Description of the performance:** The tester stands behind the starting line of the playing field and when he hears the start signal he runs in a straight direction to touch the funnel above the centerline 9m with his right hand and then turns to run towards the 3m line located in the middle of the playing field from which he started running to touch the funnel above the line with his right hand 3m and then turns Towards the 3m line in the second half of the playing court, touching the funnel above the 6m line with the right hand, heading to the center line 3m, touching the funnel above the 3m line with the right hand. Each time with the right hand as it must cross the finish line with both feet.
- **Recording:** records the time from start to finish line, as shown in Figure (1).



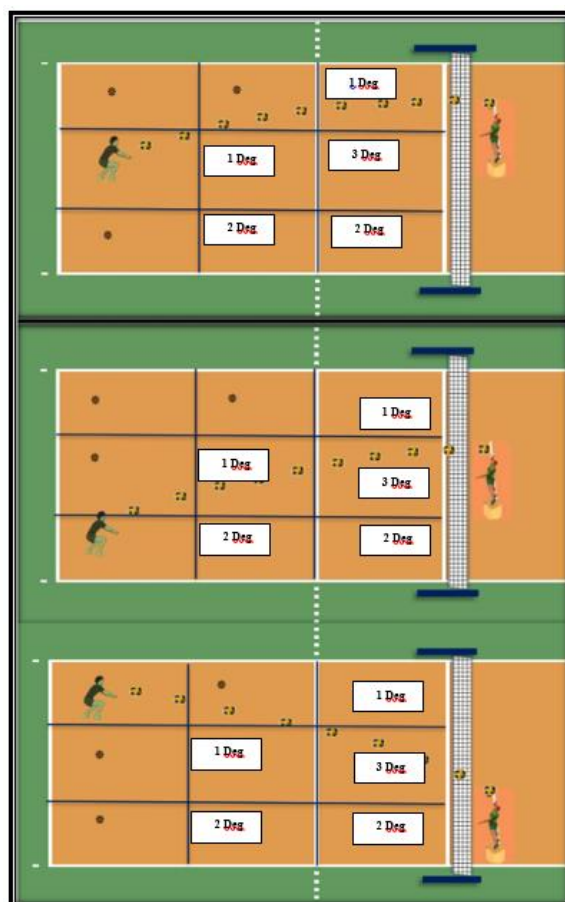
**Fig. (1) show the shuttle-running test shows different dimensions (9-3-6-3-9) meters to measure agility**

#### Second: Test the accuracy of the skill of defending the court: <sup>(2)</sup>

#### Accuracy assessment test of the skill of defending the playing court from the back area. <sup>(3)</sup>

- **Purpose of the test:** to measure the accuracy of the skill of defending the court.
- **Tools:** a legal volleyball court, (5) balls, and a colored tape to divide the field as shown in Figure (2) below:

- **Description of the performance:** The player stands ready to defend against the balls that are crushed in the center (1) and the coach stands in the opposite court on a table to perform the crushing strike towards the back area, so the player performs the defense as required by the situation.
- Performance conditions: Each player is given (3) attempts for each zone (1, 6, 5) so that the maximum score is (27) degrees, but in the event that the defending ball goes outside, it is given (zero) for the attempt.
- **Recording:** The player is given the score of the area in which the ball falls.



**Fig. (2) Shows test the accuracy of the skill of defending the court**

#### **Exploratory experience of the tests used in the research:**

The exploratory experiment was conducted on 7/3/2021 at ten in the morning in the hall of the College of Physical Education and Sports Sciences / University of Kufa on a sample of (8) players from the research community. The aim of this experiment was as follows:

- Ensure the validity of the playing field and the tools used and their suitability for the tests.
- Determining each exercise used in the educational units.
- Knowing the response of the research sample to the tests.
- Practical training for researchers and the assistant work team, to find out the negatives and positives that accompany the application of the tests in terms of requirements and method of work.

- Knowing the field difficulties that researchers may face during the application of the exercises in the educational units.

### **Main Experiment Procedures:**

#### **Pre-tests:**

The researchers conducted pre-tests on the research community for the two groups (control and experimental) for the study variables on 3/15/2021.

#### **Preparation and implementation of the (S.W.O.M) strategy:**

The researchers prepared the strategy (SWOM), as the lesson begins after the students arrive in the hall, they rush to change their clothes and prepare for the lesson. The educational program according to the (SWOM) strategy prepared by the researchers, as the researchers applied the experiment according to the following steps:-

- After reviewing the vocabulary of the program for students of the third stage at the Faculty of Physical Education and Sports Sciences - University of Kufa, the development program was developed in the form of developmental units and began to apply the experiment to the students of the research group on (22/3/2021), in the closed sports hall of the Faculty of Physical Education and Sports Sciences The University of Kufa has an average of one developmental unit each week, with a duration of (90) d, and it continued until the end of the experiment on (10/5/2021), and its number was (8) development units.

- **The research groups were taught as follows:-**

- The experimental group: It was taught according to the weekly plans and the S.W.O.M strategy, at the rate of (one teaching class per week), and in the entire main section.

- The control group: it was taught according to the weekly plans according to the adopted strategy, which was prepared in advance by the subject's teacher (one teaching class per week).

The researchers prepared a SWOM strategy to develop the technical aspects of the skill of defending the court and began implementing the strategy in the main section of the development unit, by providing an explanation and presentation of the educational situation to help students identify the correct form of the skill situation, and then the SWOM strategy is applied through the distribution of pictures and illustrations To solve the situation for skills, and after choosing the best solutions that are agreed upon by all students, it is implemented by them and under the supervision of the subject teacher and researcher. As for the control group, the strategy followed by the teacher of the subject was applied, and the researcher prepared 18 developmental exercises and situations, with an average of (5) exercises for each developmental unit.

#### **Post-tests:**

The researchers, with the help of the assistant work staff, conducted the post-tests of the research community after the completion of the application of the (S.W.O.M) strategy, on

(16/5/2021), as the researchers took into account the same conditions in which the tribal tests were conducted in terms of the sequence of tests.

**Statistical methods:** The search data was processed through the Statistical Package for the Social Sciences (SPSS).

**Presentation, analysis and discussion of the results:**

**Presenting the results of the pre and post-tests for the control and experimental groups for the variables under study:**

Table (1) shows the arithmetic means and standard deviation in the results of the two tests, pre and post-tests for the control group for the variables investigated.

Variables	Measuring unit	Pre-test		Post-test		T value	level Sig	type Sig
		Mean	standard deviation	Mean	standard deviation			
agility	Sec	11.86	0.73	11.06	0.58	3.85	0.002	sig
Accuracy of court defense skill	Degree	12.333	1.032	15.166	2.136	2.629	0.047	sig

Table (2) shows the arithmetic means and standard deviation in the results of the pre in addition, post-tests of the experimental group for the variables under study.

Variables	Measuring unit	Pre-test		Post-test		T value	level Sig	type Sig
		Mean	standard deviation	Mean	standard deviation			
agility	Sec	11.82	0.62	10.67	0.45	5.91	0.000	sig
Accuracy of court defense skill	Degree	11.833	2.136	18.5	2.167	5.822	0.002	sig

Table (3) shows the arithmetic means and standard deviation in the results of the post-tests of the control and experimental groups of the variables under study.

Variables	Measuring unit	Control		Experimental		T value	level Sig	type Sig
		Mean	standard deviation	Mean	standard deviation			

Agility	Sec	11.06	0.58	10.67	0.45	4.015	0.001	sig
Accuracy of court defense skill	Degree	15.166	2.136	18.5	2.167	5.365	0.000	sig

### Discuss the results:

Through what was presented in Tables (1 and 2), we note that there are significant differences in the tribal and remote tests in favor of the members of the control and experimental groups and in favor of the post-tests. And the dimension, including repetition, practice and feedback, as had an effective role, as the feedback in the strategy followed by the subject teacher is given directly to the learners during the performance, and it can be given at the end of the educational unit, and this was confirmed by (Ali Al-Diri and Ahmed Batanieh) "after the expiration of a period of Application and preparation for the end of the unit The teacher or coach corrects the mistakes of the learners or players" <sup>(5)</sup>, and this was also confirmed by (Schmidt) "that feedback increases the energy and motivation of individuals, enhances correct performance and avoids wrong performance" <sup>(6)</sup>.

The researchers also attribute the reasons for these differences to others that contributed to the process of improving learning, including following the principle of gradualism in learning motor skills as well as practice, as continuing to repeat the skill helps learners to increase their motivation and then have positive effects in the learning process. While the significant differences shown by the above tables for the members of the experimental group are attributed by the researchers to the use of the (SWOM) strategy in terms of planning and implementing the educational units, as the exercises developed by the researchers using the (SWOM) strategy have moved the learners from the classical pattern, which makes them recipients of the information presented by the teacher moved to the modern style based on asking the question and making the learners choose the appropriate solutions, and this is what motivated the learners to respond to this strategy, trying to succeed, to demonstrate their abilities, assert themselves, and prove their capabilities, which are often viewed with inadequacy and indifference, which facilitated and helped in the process of developing agility through ground ladder exercises. And the funnels that contributed to the development of this ability and also contributed to understanding the requirements for defending the field in volleyball, in addition to the reasons for these differences due to the new educational situations that the learners were exposed to, which are characterized by the clarity of the goal and what the learners are required to achieve, and it was not common in the educational units. Ordinary, This led to a clear improvement in their performance and this is what was indicated by (Fouad Suleiman Al-Qalada) "The clarity of the goals and their identification in the light of certain behaviors or performance levels, they are meaningful and effective" <sup>(7)</sup>, and the interaction between the members of the same group and their active discussions about the educational task What they do has an impact on their understanding of the educational material. The researchers attribute the reason for the development of the experimental group to the various exercises that were applied by the research sample throughout the duration of



the curriculum. The prepared (SWOM) strategy focuses on the strength and speed of the striking arm because the nature of the performance of defending the playing field in volleyball requires speed and strength as well as awareness of distance and place to direct the ball to the appropriate place on the opposite court and that the experimental group outperforms the control group in agility and accuracy of the skill of defending the field with the ball. The plane also goes back to the use of the (SWOM) strategy, which allows the learner to take enough time to learn according to his own capabilities and abilities and in the way the educational material is presented, and this is consistent with what he said (Dhafer Hashem, 2002) “One of the natural phenomena of the learning process is that there must be development In learning, as long as the teacher follows the steps of the sound foundations of learning and teaching, and for the beginning of learning to be sound, the explanation must be clarified Presentation and rehearsal on correct performance and focus on it until the consolidation and stability of performance, and providing the learner with feedback increases the learner’s motivation and urges him to perform correctly with desire and impulse”<sup>(8)</sup>.

The presentation of the educational material, whether in written text, static and moving images, or video clips, enables him to use more than one sense in the learning process, and this has contributed in an influential way to the diversity of sources of knowledge and the increase in opportunities for good learning, and this improvement in the technical performance and accuracy of the skill of tennis transmission with the ball. The plane came as a result of moving away from the norm in education through the use of the metacognitive learning cycle, which has the role of making the learner the focus of the educational process, and his performance is organized and arranged according to the steps of the strategy, in addition to the use of various positions, and the continuous guidance of the observers supervising the performance of those exercises, which helped in reducing the errors that the learner may make in his performance of the exercises during the educational unit. The researchers also attribute this to the time of using the (SWOM) strategy that they prepared, which had a significant impact on making the kinesthetic learning process more effective and positive through strategies that provided the learner with the opportunity to be an active element in the educational process, and this is what was indicated by (Mohammed Mahmoud, 1999). When the curricula are implemented effectively according to the allotted time, the general performance of the student improves a lot and then provides a better level of performance”<sup>(9)</sup>.

As well as following the steps of applying exercises after their explanation and presentation using educational means and training on defending the stadium, and providing learners with feedback continuously, which increases learners’ motivation and leads them to the accuracy of skill performance, as well as its independence in making decisions about its performance. Teaching aids work to achieve communication and transfer educational goals from the teacher to the learner, and they increase the effectiveness of the learning process and improve it, and motivate learners to more participate in educational situations and make it interesting to participate for more learning and continue in it, and it also facilitates the process of remembering by recalling information.<sup>(9)</sup>, and this helps to acquire a kind of fixation of motor programs in the minds of the learners as a result of the time that the program took,

which led to the first beginnings of acquiring a kind of experience and this is another and important factor in developing the level of learners (liba)<sup>(10)</sup> and (mohr)<sup>(11)</sup> “Training for a specific period leads to an improvement in accuracy, and that experience is directly proportional to accuracy.”

### **Conclusions and Recommendations:**

#### **Conclusions:**

Based on the research results that were reached within the limits of the research community, the following conclusions were reached:

- The (S.W.O.M) strategy prepared by the researchers greatly helped in developing the agility of students.
- The time in which the (S.W.O.M) strategy was applied greatly helped in developing the skill of defending the volleyball court for students.
- The superiority of the experimental group that used the (S.W.O.M) strategic strategy over the control group in the agility and accuracy of the skill of defending the field of volleyball in the post-tests.

#### **Recommendations:**

- The necessity of using (S.W.O.M) strategy in developing students' motor abilities.
- Emphasis on the use of the metacognitive learning cycle strategy in teaching applied study subjects because of its role in developing effective education, creating a favorable atmosphere for learners and creating their motivation for the learning process.
- Conducting similar studies on other individual and team activities, and on different age groups.

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