

## The Effect of Saq Training on Developing Transitional Speed, Agility and Performance of Volleyball Reception Skill

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**Abstract.** *The researcher used the experimental method in the pre- and post-measurement method. The number of training units reached was eight weeks, and the research sample consisted of ten players who represented the Najaf breeding team. The study's objectives were to determine the effect of SAQ training in developing transitional speed and agility among the Najaf breeding team and to determine the impact of these exercises in improving the skill performance of the skill of receiving volleyball. The study's findings, which were obtained using SPSS, indicated that SAQ exercises had a significant effect on the development of transitional speed and agility as well as improving the skill performance of the reception skill. The researcher suggested that physical and skill variables be given special attention because they are important in raising the level of performance of players. Additionally, the researcher suggested that SAQ training be given special attention because it is an effective training method in all situations of play to raise the physical and skill responses of volleyball players.*

**Keywords:** *agility, reception skill, SAQ instruction, transitional speed, volleyball.*

### 1. OVERVIEW OF THE STUDY AND ITS SIGNIFICANCE

Sports training based on sound scientific foundations is one of the factors that increase and improve functional indicators, physical and skill abilities, and thus improve sports achievement, and that the exercises are only muscle contractions against certain resistances may be prolonged or shortened in the time of their performance and this depends on the goal of training and the quality to be developed.

Sport in general has many different benefits depending on the type of event and its requirements, volleyball is one of the games that give the individual benefits and personal and distinctive traits, from a physical point of view, it strengthens the muscles of the arms and wrist in particular, benefits the body in general, and restores its physical fitness and feeling comfortable, mentally, it is one of the activities that develop the intelligence and intuitiveness of the player and the speed of reaction and response at the same time.

Volleyball is one of the fun and important team games with a wide public follow-up that has undergone experiments and work, so the work was not limited to developing methods of play or skills and physical abilities, but also to pay attention to mental processes and psychological state, and knowing its impact on improving performance and ways to develop it accurately, which is very important in this game because of its exciting features represented in the speed of movement of the ball and the nature of the law of the game, which requires the players not to keep the ball and the need to end trading or pass the ball to the opposing team

with three touches of the ball in addition to the multiplicity of its basic skills, therefore, it requires attention and concentration of motor responses and a quick ability to perceive the fine details in play and quick action that helps to perform and quickly achieve the desired goal, which is to reach the high level, mental processes and important mastering the basic skills of sports, especially volleyball, one of these processes is divided attention, which is one of the visual mental processes and a manifestation of attention and an important indicator of the psychological state of the player " It is considered one of the abilities that allow the player to perceive and focus on two things at the same time" (Hamdi Abdel Moneim, 1997, p. 415) terms of skill performance, but if the skill of reception with volleyball is linked to sports training, the work will be accurate because it is based on certain stresses and repetitions and is associated with a type of exercise based on sound scientific foundations, among these exercises that have been associated with the skill of reception are SAQ exercises, by practicing them it is possible to know the amount of level that a person has of physical fitness, Therefore, determining how SAQ training affects the development of transitional speed, agility, and performance of the volleyball receiving skill is crucial.

### **Research Problem**

The diversity of exercises regarding stress, repetitions, and downtime works on their different effects and the need of athletes during the period of physical preparation commensurate with their capabilities and abilities according to the requirements of the effectiveness and the effort needed in developing the elements of physical fitness, based on the researcher's limited background in this area, he found that there is a lack of interest and lack of use of this type of training that needs to make a high, continuous and diverse effort that parallels the requirements of this effectiveness and its own abilities, which thus affects the physical abilities.

Through the practice and interest of the researcher, he noticed that this game requires high physical preparation because of what this game needs from many movements, changing directions and running to take the space inside a small space as well as jumping, frequent jumping and speed of movement, as well as the continuous exchange of positions and the implementation of basic skills, through the researcher's follow-up of the development in the physical exercises of the game of volleyball and found deficiencies in the players and this is what calls for thinking and finding a solution to this deficiency in performance, this is done by relying on a new method, which is SAQ training that aims to enhance the physical capabilities of volleyball through several exercises that improve transitional speed and agility, therefore,

the researcher sought in the preparation of these workouts to improve agility, transitional speed, and the ability to receiving volleyball.

### **Goal of the Research**

1. Preparing SAQ training for those who play volleyball.
2. Determine how SAQ training affects the development of transitional speed and agility.
3. Identify SAQ training's effect in improving the performance of the volleyball reception skill.

### **Research Hypothesis**

1. The pre- and post-measurements show statistically significant variations in the development of transitional speed and agility of the Najaf breeding team.
2. The evolution of the skill's performance before and after measurements shows statistically significant variations receiving volleyball in the Najaf breeding team.

### **Limits of Research**

Human Field: Najaf Education Team.

Time Range: 1\_ 10, 2023, to 20-12 - 2023.

Al Salam Hall in Najaf is the spatial field.

## **2. METHODS OF RESEARCH AND FIELD OPERATIONS**

### **Methods of Research**

The researcher's choice of the experimental method, which "includes an attempt to fully adjust the main factors affecting the experiment except for one factor that the researcher controls and changes in a certain way with the intention of determining and measuring its effect on the dependent variable or variables," was motivated by the nature of the problem, the research's objectives, and its hypotheses. (Wajih Mahjoub, 1988, p. 325.)

In addition, the experimental method "deals with the influencing phenomenon and its causes, which is the process of interpreting the results that occur about a particular situation and verifying its causes because it deals with facts" (Paul D. Leedy, 1980, p. 167), it is also "the most accurate and efficient scientific research method in reaching accurate results" (Wajih Mahjoub, 1993, p. 221). The researcher chose the system of equivalent experimental groups as a basis for the implementation of his research and the method of rotating groups and eliminating the need for.

### **The Scientific Community and Its Representatives**

The members of the research community were chosen among the participants in the Najaf breeding team, which numbered (15) players.

## **1. Sample uniformity:**

For the purpose of completing the research requirements, a sample must be selected from the original population to which the researcher applies the steps or vocabulary of his research, the In physical education, the sample is "the model on which the researcher performs the totality and the emphasis of his work on it, the sample is the human being" (Qais Naji and Shamil Kamel, 1988, p. 12).

Using a methodical approach, the Najaf breeding team's players chose the sample. which numbered (10) players, (5) players were excluded due to their inability to perform training due to their special circumstances.

### **Research Methods, Instruments, and Devices:**

- Stopwatch.
- A leather measuring tape.
- A medicine ball that weighs two kilograms.
- The game of volleyball.
- Pens.
- The chair.
- Rope.
- Whistle.
- Various heights of Swedish chairs.
- Barriers (contraindications).

### **Determine The Physical and Skill Test**

1- Running test 20 m from the flying start (Kamal al-Din Abd al-Rahman Darwish, 2002, p. 187)

Purpose of the Test: Measurement of the transitional the two legs' pace. Instruments: tape measure, chalk, 2 stopwatches, whistle.

Performance Description: We draw 3 parallel lines on the ground, with 10 meters separating the first and second lines and 20 meters separating the second and third lines. The lab is situated behind the beginning line, and it starts high at the signal and proceeds from there. incrementally at a maximum speed at the second start line and ends at the end of the third line.

Registration: The laboratory records the time taken from the beginning of the second line until the moment of crossing the finish line by the second and its parts .

The laboratory is allowed to perform two attempts after giving a standard rest, provided that the best of them are recorded, ten seconds of arm bending and extension (front support) (Qais Naji and Bastawisi, Ahmed, 1987, p. 353).

### **T-test for Agility (Ahmed Shehab, 2021, p. 71)**

Purpose of the Test: Agility measurement.

Tools Required: tape measure, 4 cones, stopwatch

Performance Specifications: Set four cones, When the whistle sounds, the tester is standing at funnel A. He immediately runs to funnel B and touches it with his right hand, then runs sideways to funnel C and touches it with his left hand, then runs sideways back to funnel B and touches it with his right hand, then runs sideways to funnel D and touches it with his left hand, and finally returns to funnel A. As you can see, there are 9.14 meters between funnels A and B, 4.57 meters between funnels C and B, and 4.57 meters between funnels D and B. Registration: The best time in three successful attempts will be counted to the closest (0.1) second. If the effort is erroneous, crosses one foot in front of the other, or fails to touch the cones, it will not be counted.

### **Skill Test**

First: The test of passing the reception of the ball from the bottom with the arms (Mohamed Sobhi, 1997, pp. 230-231)

Purpose: Measuring the ability of the tested player to quickly pass the ball received by the volleyball

Tools: smooth wall, volleyball, stopwatch, whistle.

Performance requirements: The tester positions themselves behind the scroll line, which is 180 cm from the wall. and facing the wall, he grabs the ball with the hands to throw it to the wall and then receives it by passing with the hands from the bottom to the wall to bounce back behind the passing line to continue the passing process again, and so the performance continues for (30 seconds).

Conditions:

1. All periods of performance are passed from behind the passing line.
2. The time is calculated for 30 seconds, commencing at the commencement of the first pass.
3. If the ball falls after bouncing off the wall before the passing line on the tester, Start by holding the ball. passing from behind the passing line as at the beginning of the test.
4. If the player makes a mistake while performing above the passing line, the pass is not counted.
5. The skill of passing from under the hands must be used without many kinds of passes.
6. The lab must stop performing immediately after the announcement of the judgment (30 seconds)

Registration: The quantity of times the ball makes contact with the wall in a period of (30 seconds) is calculated for correct attempts only according to the aforementioned conditions, then (multiplied by 3 for each correct attempt is 3 points), and the number of accurate tries within 30 seconds determines the test's final score.

### **Scientific Basis of Tests:**

#### **1. Legitimacy**

The test's purpose is to measure the field or phenomena being researched, or to measure what was intended to be measured (Kadhim Karim Redha Al-Jabri, 2011, 217). The use of virtual validity for physical tests and skill testing.

#### **2. Stability**

A static in order to ascertain the test's stability, the researcher employed the Pearson correlation coefficient between the test results, which revealed a "significant" correlation between them. A test is one that yields the same or comparable results if it is administered and under the same conditions.

### **Survey Try This Out**

- In order to confirm the following, the researcher administered the study tests to five players who were not part of the initial study sample:
- Verify the suitability and validity of the tests being administered, as well as how long they take.
- Verify the accuracy and suitability of the measuring instruments and the instruction provided.
- Recognize the challenges and barriers the researcher could encounter during the testing so that they can be avoided when putting the program into practice.

### **Prior to tests:**

The research sample (10) participants participated in skill and physical activities, and the pre-test circumstances were documented as much as feasible and used in the post-tests. The pre-test was administered to them on 10/5/2023.

### **Program of Training:**

In order to improve the accuracy of skill performance in the game of volleyball, the training program uses SAQ exercises to develop transitional speed and agility. The researcher built the SAQ training's content using the principles of sports training science, and the exercises lasted for eight weeks, with three training units per week and the time of the training unit. amounted to (60) minutes. The main experiment was applied to the research sample on 6/10/2023 for a period of 8 weeks.

## Following Tests

The post-test was applied to the research sample under the same conditions on 7/12//2023. Following the execution of the researcher's program on the research sample, post-tests were administered. The researcher had previously planned the proper time, location, and equipment for the post-tests and, with the assistance of the same assistant team from the pre-test, carried out the same procedures as in the pre-tests.

## Approaches

The researcher employed the statistical bag (SPSS) to determine the findings of the tests.

## 3. RESULTS PRESENTATION AND DEBATE

This section presents the findings and discusses them in light of the data gathered following the execution of the researcher's program during the administration of post-tests for the control and experimental research groups. The data has also been transformed into tables as a research illustrative tool.

### Display of the findings of the variations between the study sample control's pre- and post-tests for skill and physical testing

Table 1

Tests	Measurement Unit	Pre-test		Post-test		Calculated T value	Tabular T value
		+Q	±p	+Q	±p		
Running test 20m from flying start	Second	3.14	0.71	4.54	0.74	3.11	2.26
T-Fitness Test	Second	9.14	0.52	9.32	0.48	2.63	2.26
Ball Receiving Pass Test from Below	Reiteration	14.28	3.13	16.72	4.34	2.85	2.26

### Presentation of the findings comparing the experimental study sample's pre- and post-test results for the physical and skill test

Table 2

Tests	Measurement Unit	Pre-test		Post-test		Calculated T value	Tabular T value
		+Q	±p	+Q	±p		
Running test 20m from flying start	Second	5.81	0.78	7.23	0.80	5.32	2.26
T-Fitness Test	Second	9.20	0.54	10.13	0.50	3.23	2.26
Ball Receiving Pass Test from Below	Reiteration	15.38	4.72	20.84	5.86	4.91	2.26

## Analysis of The Findings

Table (2) shows that there is a development in the running test for the purpose of measuring the transitional speed, this development is due to the nature of the Cardio exercises used in the training unit, and apply these exercises well and work on the pupil's access to

adaptation through good and codified coordination of the basic components of the training load of intensity, size and comfort, this led to a positive evolution in the variables, and this is what we can see from the results reached, this reflects the harmony of mental processes and nerve urges with the required rapid motor work, and with high amounts of strength when working with these. The development of leg muscle groups and increased muscle contraction activity through repetitions during exercise performance were impacted by the use of these resistances against the body's movement during skill training and high-strength, high-speed exercises. This resulted in the development of neuromuscular compatibility, which made performance easier. Therefore, the more compatible the muscles involved in motor performance are with the muscles that lead to movement and the muscles that oppose them, the more muscular capacity (Adel Abdel Basir, 2000, p. 108).

The process of developing physical abilities depends mainly on the intensity used, that the amount of intensity of as the scientific controls of SAQ exercises have resulted in the development of the strength characteristic of speed of the muscles, the special exercises that were utilized during the main portion of the training units also had an effective effect on increasing the player's efficiency in other abilities, particularly the explosive ability of the arms and legs muscles. of the arms and muscles of the legs, taking into account the scientific method of different stresses, sufficient rest periods to recover and the number of repetitions that were proportional to the intensity of each exercise was one of the reasons for the development of this ability, "The importance of exercises lies in employing as many muscles as possible while improving skills and developing fitness qualities for skill preparation and reaching automatic compatibility", as well as the good choice of the quality of the exercises gave the player a good interaction with the training atmosphere during the spirit of seriousness and suspense without the appearance of boredom or fatigue during the performance as well as the number of repetitions in the re-exercises, which supports the assertion that the trainer should give as many repetitions as possible when performing any exercise to develop the required quality (Muhammad Ahmed Muhammad Al-Hefnawi, 1991, p. 180).

The procedure by which the player sends the ball to the other team with the arms and forearms area requires delivering it to the prepared player at an appropriate height and speed, in order to be able to use effective attack vehicles and configure them easily and appropriately for the attacking player, the skill of receiving the transmitter is one of the important defensive skills in volleyball, it is the first touch of the receiving team, which should be carried out accurately and accurately in order to be followed by the process of preparing for the attack,



any mistake will give the opposing team an opportunity to gain points or attack the team" (Hossein Sobhan Sakhi, 2011, pp. 39-40).

Receiving the ball with the arms from below is actually the safest way to receive transmitters nowadays, this type is used by about (90%) of the players due to the large reception area with the forearms, which helps to receive the ball well and faithfully and then go to the player prepared in the form of an arc, and help him to act in preparation as he wishes and according to the requirements of play (Zaki Muhammad Muhammad Hassan, 1998, p. 168).

The skill of receiving is one of the crucial defensive techniques employed against the sending of the other side, and it is the initial stage in creating a successful offensive. Any error that results in the opposing team winning a point, as the defending player needs in his performance to "skill, physical and mental abilities characterized by such as strength characterized by speed, agility, speed of motor response, motor expectation, concentration, attention, accuracy in movement and directing balls to the specified place, in addition to self-confidence and tactical knowledge (Riyadh Khalil Khamas et al., 2012, p. 72). And an integrated performance and proper movement towards the ball for the purpose of receiving and directing it to the colleague prepared accurately to build a sound and integrated attack, this means investing the high technical abilities of the players to receive the balls well so that various offensive combinations are made against the sending team (Saad Hammad Al-Jumaili, 2012, p. 107). Getting the ball from the player who gave it to the other team so that it may be readied for the player or teammate on the pitch by absorbing its speed and strength and by passing it from the bottom up with the forearms and fingers from above" (Azad Hassan Qadir, 2003, p. 30).

#### **4. CONCLUDING REMARKS AND SUGGESTIONS**

##### **In conclusion**

One of the specifications that must be distinguished by the volleyball player is the physical fitness to receive volleyball to avoid the competitor getting a point. There is a development in the transitional speed and agility due to the utilization of SAQ exercises. The experimental group's dominance using the experimental program, which contains the exercises of the SAQ on the control group that used the program followed.

##### **Suggestions**

The need to use SAQ training for its effectiveness in developing transitional speed and agility, which led to raising the level of volleyball players. Training in order to develop and improve the skill of receiving transmitters by receiving different transmissions. Conducting

similar studies and research in other ways on different age groups in order to reach the players to the best levels. Giving special importance to SAQ training as it is an effective training method in all cases of playing in volleyball. The need that coaches focus on SAQ activities and incorporate them into training graded difficulty to make them more interesting and similar to the situations of competition.

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