

# The Impact of SQ3R Strategy in Developing the Accuracy of Receiving Volleyball for Students

Ehab Salman Jawad Shamriu\*, Dr. Hatim Falayh Hafiz and  
Dr. Habib Ali Taher

**Abstract** ---The goal of the research is to identify the impact of the strategy beyond knowledge according to (SQ3R) in the development of the accuracy of the reception of volleyball transmissions for students, and the researcher assumed that the strategy beyond knowledge according to (SQ3R) positive effect in the development of the accuracy of the reception of volleyball transmissions for students, the researcher touched on Theoretical studies that contained multiple investigations related to the subject of research) strategy beyond knowledge according to (SQ3R), reception of volleyball transmissions, as well as previous studies. The researcher used the experimental method by designing the "two equal groups" with pre and posttests to suit the nature of the research, and identified the research community represented by the fourth-year students in the Faculty of Physical Education and Sports Sciences at the University of Karbala, who numbered 92 students. For the academic year (2018-2019), for the availability of research requirements, the researcher chose the main research sample in a simple random way and in the method of lot, and the size of (28) students, and used appropriate statistical treatments to reach the results, after which the results were presented, analyzed and discussed.

**Keywords**--- SQ3R Strategy, Accuracy and Receiving.

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## I. INTRODUCTION

Our current world is witnessing a tremendous development of information in the educational process, and in the face of this development must have a strong scientific base, it needs learners with a high ability to perceive and think, and this is not achieved without learning to keep pace with the requirements of the times, and this learning began to evolve through Adopt some different strategies in which learners understand the facts and how they think about them. Modern learning strategies are an appropriate knowledge means that enable students to acquire information and knowledge that will help them cope with different situations, as a strategy beyond knowledge is a process of drawing attention during learning. Also included is the Strategy (SQ3R), which is a reading understanding strategy that is used integrated when you want to study or understand a particular subject in depth, ranging from the general view of the subject to a deep understanding but in a step-by-step form and in concrete and specific steps. Volleyball is one of the group games characterized by rapid and sudden changing attitudes and a variety of motor performance for all its different skills, it is of physical and mobility value<sup>(1)</sup>. The transmission reception skill is an important defensive technical skill because of its specificity associated with other skills, as its success is the basis for building offensive play vehicles. Hence the importance of research in the possibility of using

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Ehab Salman Jawad Shamriu\*, University of Kerbala, Faculty of Physical Education and Sports Sciences, Iraq.  
E-mail: ehab.salman201820@gmail.com  
Dr. Hatim Falayh Hafiz, University of Kerbala, Faculty of Physical Education and Sports Sciences, Iraq.  
Dr. Habib Ali Taher, University of Kerbala, Faculty of Physical Education and Sports Sciences, Iraq.

the strategy beyond knowledge according to (SQ3R) accompanying it to know its usefulness in learning and developing the accuracy of the reception of transmission volleyball, with the aim of developing and enriching the educational process by finding effective means that lead to the excitement of the mind of the learner, which helps to facilitate Acquire, store and retrieve information with minimal effort and time.<sup>(2)</sup>

### ***Research Objectives***

1. Preparing educational units for the strategy beyond knowledge according to (SQ3R) in the development of the accuracy of receiving the transmission of volleyball to students.
2. Learn about the impact of (SQ3R) strategy in developing the accuracy of volleyball transmission reception for students.

## **II. RESEARCH METHODOLOGY**

The approach is to follow certain logical steps in dealing with problems or phenomena or to address scientific issues to reach the discovery of the truth.

The researchers used the experimental method to design the two equal groups with pre and posttests to suit the nature of the research, and the researchers chose the research community of fourth-year students at the Faculty of Physical Education and Sports Sciences - Karbala University, numbering 92 students. For the academic year (2018-2019), due to the availability of search requirements. The researchers selected the main research sample in a simple random way, in a lottery style, and by the size of 28 students.

### ***Homogeneity of the Sample***

Before starting to implement the strategy beyond knowledge according to (SQ3R) prepared by the researcher, and in order to adjust the variables that affect the accuracy of the results of the search, the researcher resorted to check the homogeneity of the research sample in the variables related to morphological measurements namely length, body mass and time age, as shown in the table (1).

Table 1: Shows the Homogeneity of the Research Sample in Variables (Height, Body Mass and Time Age)

Variables	Units	Mean	SD	Mode	Skewers
Length	Cm	171.28	1.44	170	0.88
Body mass	Kg	73.22	2.56	71	0.87
Age	Year	20.41	0.45	20	0.91

### ***Identify Search Variables***

After scientific advice by the Chairman and members of the Scientific Committee to approve the title of the letter, gentlemen supervisors, and conduct some personal interviews with the experts and specialists in the fields of tests, measurement, motor learning and volleyball tests were selected (accuracy of the transmission reception from Down with the forearms and from the top with the fingers with the volleyball).

### ***Determine the Accuracy Tests of the Transmission Reception from the Bottom of the Forearms and from the Top with the Fingers of the Volleyball***

After reviewing the sources, studies and scientific research of the tests of the accuracy of the reception of the

transmission of volleyball, the researchers prepared a questionnaire, which was presented to a group of experts and specialists in the fields of (testing, measurement, motor learning and volleyball), to express their opinion in determining the validity of the test of the accuracy of the reception of the aircraft transmission, which numbered 10 experts and specialists, the results of the questionnaire were extracted using the code of good conformity (CHI SQUARE) and after the data were sorted the test was approved for the calculated (6.4) calculated (CHI SQUARE) value, which is greater than its scheduled value Adult (3.84) at a level of significance (0.05) and below the degree of freedom(1), as shown in the table(2).

Table 2: Shows the Calculated Chi Square Values for Determining the Accuracy of Receiving Down and Up Transmission Volleyball Tests.

Tests	Agree	Disagree	Value( Chi square) calculated	Validity	
				Yes	No
Receiving serve from down with forearms	9	1	6.4	√	-
Top-fingered serve receiving	10	0	10	√	-

**Test Description :**

***Precision Assessment Test for the Skill of Receiving Transmissions from Below with the Forearms of the Volleyball***

Test name: Test accuracy performance for the skill of receiving transmission from the bottom with the forearms of the volleyball. The goal of the test: Measure the accuracy of the skill of receiving transmission from the bottom with the forearms of the volleyball. Used tools: Legal volleyball court, legal volleyball number (10), metal measuring tape, colored chalk to divide the pitch, pre-prepared registration form. Performance method: The test student performs (5) attempts from area (A) to the centers (2, 3, 4), as well as performance (5) attempts from area (B) to centers (2, 3, 4), the laboratory student must commit to receiving transmissions from the bottom with the forearms from the designated area and directing the ball towards the area.

Method of registration: The student lab takes the degree of the center where the ball is located, as follows:<sup>(5)</sup>

1. The ball in the center(4) the laboratory (1) takes a degree.
2. The ball in the center (3) the laboratory (2) takes two degrees.
3. The ball in the center (2) the laboratory (3) takes degrees.
4. If the ball falls on the line between two areas, the upper area is calculated.
5. The total degree of the test.

***Precision Assessment Test for Top-Fingered Message Reception Skill with Volleyball***

Test name: Test accuracy performance for the skill of receiving transmission from the top with the fingers of the volleyball. The goal of the test: Measure the accuracy of the skill of receiving transmission from the top with the fingers of the volleyball. Used instruments: Volleyball court, legal height grid, and volleyball number (10), draw two(a, b) in the two corners of the pitch so that the distance between the center of the circle and the side line (1) m

while the distance between its center and the finish line (3) m, marked (x) in the opposite half of the field and at a distance(3).From the finish line and (4.5) m from the side line, the 3 m area is divided into three equal areas, a pre-prepared registration form.

### ***Performance Specifications***

The student stands laboratory inside circle (a) which is facing the net, and the teacher should send the ball to him while he is in this place to receive it to be directed to inside the area (1) and so on in the next three balls so that he went to the area (2) as well as with the next three balls so that he went to Area (3) repeats the action with the same number of attempts from Circle B.

### ***Conditions***

1. Each student has a laboratory (9) attempts from within the circle (a) and (9) attempts from within the (b) circle.
2. All attempts are used to receive transmissions from the top with fingers.
3. The attempt in which the ball is sent from the teacher to the tested student is cancelled in an inappropriate manner or outside the circle in which the laboratory student stands.
4. The sequence of performance of attempts must be adhered to:

## **III. MAIN SEARCH PROCEDURES**

### ***Pretests***

The researchers conducted pretests of the accuracy of receiving transmissions from the bottom of the forearms and from the top of the fingers with the volleyball of the students after giving them two identification units for the skill of receiving transmission volleyball.

### ***Equalization of the Two Research Groups***

Before starting the implementation of the SQ3R strategy, the researchers verified the parity of the control and experimental research groups in the dependent variables related to the volleyball transmission reception accuracy tests, as shown in the table.

Table 3: Shows the Parity of the Research Groups (Control and Experimental) in the Variables Examined

Variables	Units	Control group		Experimental group		Calculated (t) value*	Type of significance
		Mean	SD	Mean	SD		
Receiving serve from down with forearms	Grade	9.79	1.42	10.29	1.54	0.86	Non sig.
Top-fingered serve receiving	Grade	18.71	1.59	18.57	1.28	0.25	Non sig.

\* Table (t) value (2.06) at freedom (26) and below the indication level (0.05).

Table 4: Shows the Results of the Values of the Mean and the Standard Deviations and their Differences between the Pre and Posttests of the Accuracy

Variables	Units	Pretest		Posttest		Calculated (t) value*	Type of significance
		Mean	SD	Mean	SD		
Receiving serve from down with forearms	Grade	9.86	1.56	15.86	1.09	4.33	Sig.
Top-fingered serve receiving	Grade	18.57	1.59	24.71	1.14	4.60	Sig.

\*Table (t) value (2.16) at freedom (13) and below the indication level (0.05).

Shows the results of the values of the mean and the standard deviations and their differences between pre and posttests of the accuracy of the reception of the flying ball of the control group, and to find out the truth of these differences and their statistical significance, the researchers used a test (t) for analog samples, as they showed. The results show that all the calculated t values were greater than their scheduled value of (2.16) at a degree of freedom(13) and below the level of indication (0.05), indicating moral differences between pre and posttests and in favor of post tests.<sup>(7)</sup>.

#### IV. RESULTS AND DISCUSSIONS:

##### *Presentation of the Results of the Differences between Pre and Posttests of the Accuracy of the Reception of the Flying Ball Transmission of the Experimental Group and its Analysis*

Table 5: Shows the Values of Mean, the Standard Deviations and the Values of (t) Calculated between the Pre- and Post-Tests of the Accuracy of the Receiving Volleyball Transmission of the Experimental Group

Variables	Units	Pretest		Posttest		Calculated (t) value*	Type of significance
		Mean	SD	Mean	SD		
Receiving serve from down with forearms	Grade	10.29	1.54	19.14	0.86	6.85	Sig.
Top-fingered serve receiving	Grade	18.57	1.28	28.43	0.86	8.45	Sig.

\*The value of (t) tabular (2.16) at the degree of freedom (13) and below the level of significance (0.05).

Table (5) Shows the results of the values of the mean and the standard deviations and their differences between pre and posttests of the accuracy of the reception of the volleyball transmission of the experimental group, and to find out the truth of these differences and their statistical significance, the researchers used a test (t) for analog samples, The results showed that all calculated t values were greater than their scheduled value of 2.16 at a degree of freedom (13) and below the level of indication (0.05), indicating moral differences between pre and post tests and in favor of post tests.<sup>(8)</sup>

##### *View and Analyze the Results of the Differences in the Posttests of the Accuracy of the Reception of the Flying Ball between the Control and Experimental Groups*

Table 6: Shows the Values of the Arithmetic Media, the Standard Deviations and the Values of (t) Calculated in the Post-Tests of the Accuracy of Receiving the Volleyball Transmission between the Control and Experimental Groups.

Variables	Units	Control group		Experimental group		Calculated (t) value*	Type of significance
		Mean	SD	Mean	SD		
Visual tracking	Number	8.21	1.25	10.07	0.73	4.63	Sig.
Receiving serve from down with forearms	Grade	15.86	1.09	19.14	0.86	8.52	Sig.
Top-fingered serve receiving	Grade	24.71	1.14	28.43	0.85	9.44	Sig.

\*Tabular value (t) of (2.16) at the degree of freedom (26) and below the level of significance (0.05).

Table (6) Shows the results of the values of the mathematical and the standard deviations and their differences in the post tests of the accuracy of the reception of transmission between the control and experimental groups, and to find out the truth of these differences and their statistical significance, researchers used a test (t) for independent samples, as the results showed that All calculated (t) values were greater than their scheduled value of 2.16 at a degree of freedom (26) and below the level of indication (0.05), indicating moral differences between the control and experimental groups and in favor of experimental tests. the results of the percentage values of evolution in the post tests of the accuracy of the reception of the volleyball transmission of the control and experimental groups, and to find out the truth of these percentages the researchers used the test (x) The difference factor, as the results showed that the values of the difference factor calculated all of the experimental group were smaller than the values of the difference factor of the control group, indicating the homogeneity of the experimental group and therefore its evolution in these indicators.<sup>(9)</sup>

## V. CONCLUSIONS

1. For the strategy beyond knowledge according to (SQ3R) effect and a positive role in the development of the accuracy of the reception of transmission from the bottom of the forearms and from the top fingers with the volleyball of the members of the experimental group.
2. The strategy beyond knowledge according to (SQ3R) helped members of the experimental group to read the skills texts in an effective way, which increased their understanding of the precise details of the skill of receiving transmissions from below and above and solidifying their information better than the strategy followed.
3. The experimental group achieved superiority over the control group in the post tests of the accuracy of receiving transmissions from the bottom of the forearms and from the top of the fingers of the volleyball .
4. The experimental group achieved a greater development than the control group in the post tests of the accuracy of the reception of transmissions from the bottom of the for ears and from the top of the fingers of the volleyball.
5. The control group achieved a remarkable superiority and sophistication in the post tests of the accuracy of receiving transmissions from the bottom of the forearms and from the top of the fingers of the volleyball.

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