

## **The Accuracy of Serving Direct from the Top and its Relationship with the Sensorimotor Perception of Young People for the Volleyball Al-Sinaa Sport Club Team**

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### **Abstract**

The purpose of this paper is to study the accuracy of serving direct from the top and its relationship with the sensorimotor perception of young people for the Volleyball Al-Sinaa sport club team .The nature of motor performance (technical performance) in volleyball imposes on the player to perform a set of sequential and connected movements to each other and we call them technical skills of volleyball, the first of which is the skill of serving and the performance of each of these skills does not exceed a fraction of a second. A significant impact on the performance of these skills, whether positive or negative. The two researchers used the descriptive approach in the (survey) style. The research community was selected from budding players for Al-Sinaa Volleyball Club for the year 2021 in a deliberate way, and their total number is (20) players. As for how to choose the sample of (10) and after excluding (2) players from them because they are libero players (the free player) the number the sample (10) players from the total, and the sample of the pilot experiment was (8) players from outside the main sample, the percentage of the sample (3.33) .Among the most important results reached by the researchers, where it was found that there are significant differences in favor of the two tests, the accuracy of the transmission facing from the top, and the sensory-motor perception. In addition to that, the sense of sight actually plays a role when performing the skill, as it helps to perform and master the skill better. The test sample group also achieved a simple development in the amount of training and the detection of the strengths and weaknesses of the players and the knowledge of their high ability when performing the skill.

### **Introduction:**

Volleyball in the world occupies a special place in the hearts of its fans and sports lovers, and the number of its practitioners in the world until this date has reached the range of 350 million people, and it is like other sports and it topped the position of the global sports level and the International Volleyball Federation. The sporting progress that we observe these days on a global level is remarkable, and through the technical performance presented by teams and players in international and Olympic competitions<sup>(1)</sup>.

The global achievement is a summary of the scientific methods and methods used in training for all the requirements and requirements of the game and the game of volleyball depends on many technical skills that are closely interconnected with each other as well as sequential and overlapping with each other so that if one of these skills is lost or the technical level is weak in it, it will lead to successive losses and failures if discovered by the opposing team

It is noted that the kinesthetic awareness of the skill of developing, improving and integrating the movements of the work of using the tool through the stages of training in

volleyball has constantly developed the sense of the ball and through these stages the movements of the hand and fingers and the level of vision that are formed as a result of muscular ability and perception of kinetic sense of performance and the skill of sending is one of the technical skills. In the game of volleyball, it is one of the important skills of this game, and that any error that can occur during the service results in the team losing by adding a point directly to the opposing team with possession of the ball. The importance of research lies in identifying some of the kinesthetic perception abilities and their importance in the skill of serving in volleyball and have impact on match results.

### **Research problem:**

The sciences of physical education are always changing with changing lifestyles and scientific progress in the field of education. Thus, the need to confront and overcome problems remains an urgent necessity in order to reach the best possible level. Perception, kinesthetic and sense of movement may be able to perform this skill in a way that others cannot perform.

Through our observation of the teaching and training of volleyball in the faculties of physical education, the University of Baghdad and other universities outside Iraq, and a difference in the level of performance of the player's serving skill in volleyball, and the reason may be that the players did not reach the ideal performance for poor kinesthetic perception, so the researchers worked to find out a correlation with the abilities of Kinesthetic perception skill with the accuracy of serving from the top with the diagnosis of strengths and weaknesses, and may we succeed in presenting what is new.

### **Research objective:**

- Identifying the level of perception of the kinesthetic sense of the skill of the accuracy of the serving from the top in volleyball for the emerging players, the industry team
- Identifying the relationship between some aspects of kinesthetic perception and the accuracy of serving from the top in volleyball for the research sample.

### **Research hypotheses:**

- There is a discrepancy in the level of kinesthetic perception and serving accuracy skill for the research sample
- There are statistically significant differences between some aspects of kinesthetic perception and serving accuracy skill among the research sample.

### **Research fields:**

- Human field: - The sample consisted of (12) junior players for the Al-Sinaa team
- Time field: 1-2-2021 until 16-2-2021
- Spatial field: Al-Sinaa Club Hall – Baghdad

### **Research methodology and field procedures:**

#### **Research Methodology:**

The two researchers used the descriptive approach using the (survey) method, as follows:

- To suit the objectives of the research
- To suit the nature of the research problem
- Describe the phenomenon by collecting and tabulating data
- Interpreting these data and identifying the type of relationship between them after analyzing them

**Community and sample research:**

After defining a community and its sample, the research is one of the most important priorities that fall on the shoulders of the researcher, because the sample (the part that represents the community of origin or the model that the researcher conducts as a whole and the focus of their work). Therefore, the research community was chosen from among the budding players for the Volleyball Industry Club for the year 2021, in a deliberate and adult manner. Their total number (20) players as for how to choose the sample of (10) and after excluding (2) players from them because they are libero players (the free player) the number of the sample (10) players from the total and the pilot experiment sample was (8) players from outside the main sample percentage (3.33).

**Determining the tests (related to the skill of the accuracy of the serving directed from above and the tests of sensory-motor perception):**

After the researcher reviewed a number of volleyball tests, two tests were selected from some of the skills of volleyball, as shown in Tables (1)

Table 1 show tests of skills and of sensory-motor perception

skills and of sensory-motor perception	Indications	Tests
Basic skills	serve	serving test from below
Sense-motor skills	Hitting the serve ball from below	Sensory-motor perception test of the ball throwing distance with the striking arm in the skill of serving

**Exploratory experience:**

In order to obtain accurate and reliable results, the main researchers, who numbered (8) players from the Al-Sinaa Club team, conducted on 1-2-2021 on Thursday, the test applied the accuracy of measuring the serving skill from the bottom, and the transmission skill test was applied to the perceptual-motor in a training unit in Al-Sinaa Club.

The purpose of the exploratory experiment was to:

- Identify the main obstacles and errors that may occur during the application of the test to avoid them.
- Make sure that the equipment and tools used when conducting the test are valid.
- Knowing the time period to carry out the tests.

**Specifications of the vocabulary of the sensory-motor skill tests:**

In order to give a clear, accurate and understandable picture of the vocabulary of the skill test and the sensory-motor perception test used in a study in terms of its purpose, method of performance, and tools used as in the appendices.

**Implementation of vocabulary for learning the skills under study in the training modules:**

The implementation of the two tests on the research sample group was started on Friday, 8/2/2021, with the occurrence of two tests as follows:

- first test: the accuracy of the transmission directed from the top is practised. The test was conducted for the accuracy of the transmission directed from the top of the research sample during training, as in Appendix (1).
- second test: exercises sensory-motor perception the test was conducted on the players of the research sample on the same day in the training unit as in Appendix (2).

#### **Data collection and unloading:**

After completing the application of the two tests, the registration forms for the two skills tests (skills, measurement accuracy and kinesthetic perception skill) were unloaded in a special form in preparation for submitting data for statistical treatments as in Appendix (3).

#### **Main tests:**

The main tests procedures were implemented on Tuesday 9/2/2021 in carrying out the necessary skill tests on the research sample. The researchers collected data and processed them statistically to reach results from these tests.

#### **Statistical means:**

- Arithmetic mean
- standard deviation
- Simple Correlation Equation

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

#### **Presentation and analysis of the results of the correlation between the skill of accuracy, kinesthetic perception and serving direct from the top:**

Table 2 shows a correlation between the accuracy of serving direct from the top and the kinesthetic perception.

Tests	Arithmetic mean	standard deviation	correlation coefficient	F value	Type sig
Sensory-motor perception test, serving direct from the top	1.3	3.30	0.943	0.632	Sig
kinesthetic perception	4.2	2.25			

Through our observation of Table (2), it becomes clear to us that there are statistically significant differences between the two tests: the test of the accuracy of the transmission from above and the sensory-motor perception

If we review the results of the sensory-motor perception test for the distance of throwing the ball to pass it from the top, we find that the calculated F value for the first test group (3.30), which is greater than the tabular value (0.632) at the degree of freedom 8 and the level of significance (0.05), which indicates that there are statistically significant differences morale.

### **Discussing the results in terms of skill, kinesthetic perception and serving direct from the top:**

found through the presentation of Table 2 that the skill set for the study has developed through the effectiveness of exercises and the education of sensory-motor perception, which helped in understanding the recognition of the skill from all its aspects, through the detailed explanation of the skill, the presentation of exercises and the presentation of the skill as well as the trainee doing attention and relaxation exercises and then photographing himself, while he was performing the skill, which led to the ease of performance of the trainees and its smooth flow<sup>(2)</sup>.

The approach used in developing sensory-motor perceptual abilities has proven to be very effective if it contributes to developing the skill in question. In its performance, the trainee depends on isolating the role of the sense of sight and relying on sensory receptors in muscles, joints and tendons in order to become responsible for sending neural instructions to the central nervous system Which thus directs the body to perform the required movements, if the development of volleyball skills in order to advance the level of skill performance. (Mattel 1987) confirmed that increasing the exercise leads to the improvement and integration of motor<sup>(3)</sup>.

As shown by the presentation of Table 2 that practicing and exerting effort through training and continuous repetitions is necessary for the learning process, and the trainee, when performing a skill, depends on the role of the sense of sight to be an auxiliary and necessary factor in the process of interacting with the skill and controlling the movements and achieving consistency between the movements that make up the skill in proper performance and sequence and the right time for continuous training and unit to increase skill development<sup>(4)</sup>.

### **Conclusions and Recommendations:**

#### **Conclusions:**

- It is clear that there are significant differences in favour of the two tests, the accuracy of the serving direct from the top, and the sensory-motor perception
- The sense of sight really plays a role when performing the skill, as it helps to perform and master the skill better
- The test sample group achieved a simple development in the amount of training and the detection of the strengths and weaknesses of the players and knowing their high ability when performing the skill

#### **Recommendations**

- Recommend diversifying the training methods by explaining the visual aids and motor development as an integral part of the skill training
- The necessity of developing exercises to develop the kinesthetic awareness of the game of volleyball because of their effective impact in developing skills more quickly.

#### **Reference**

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#### Appendix (1)

Accuracytest of the serving direct from the top

Purpose of the test: Measure the accuracy of the transmission from the top of the face

Tools: divide the playing field, as in the drawing, 3 volleyballs, compact volleyballs, tape measure

Determine the points in the target areas according to what is shown in the drawing

Specifications: The sample performs 3 consecutive serves from the bottom in an attempt to direct the ball to

The interior space is the highest grade (8) as show in the figure (1)

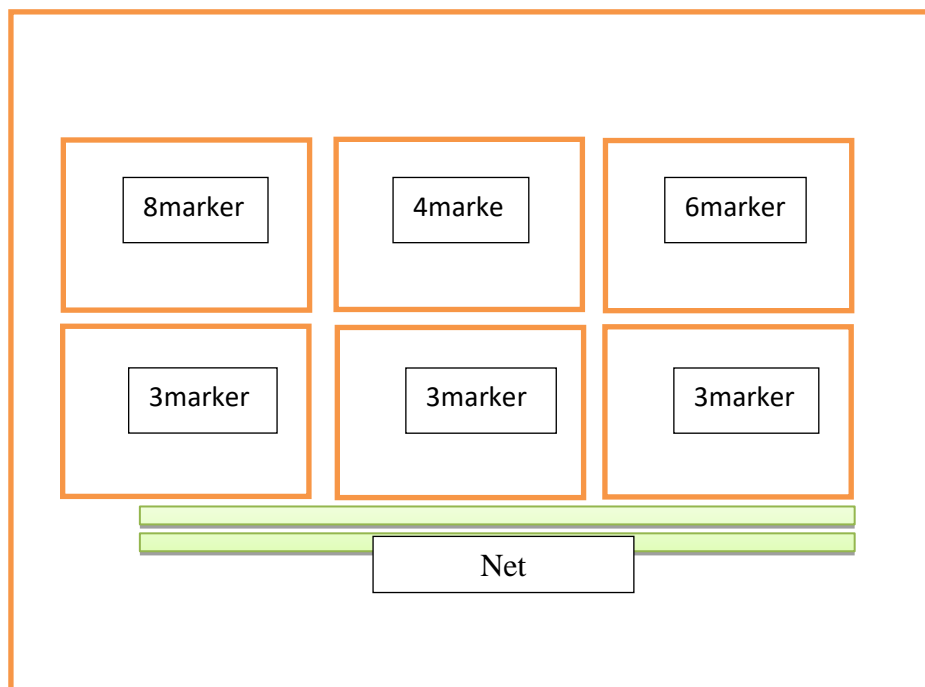
Specifications

Points are calculated according to the ball falling in the specified area of the field so that it gets the degree that is inside the area in which the ball fell

If the ball comes out of the can, the sample gets a zero degree

If the ball falls on the line, it is counted as if it fell in the area specified by this line.

Registration:records for the sample the grades he obtained in the 3 attempts he made, bearing in mind that the final score is (80).



#### Appendix (2)

### The sensory-motor perception test

Sensory-motor perception test with the distance of throwing a ball with a pass from the top

The purposes of the test: measuring the ability to perceive live-motor with the distance of throwing the ball from the top

Equipment: a volleyball court with a legal net and a volleyball blindfold

Performance specifications: The sample stands at the first meter of the playing field and hits a ball with the hands of the two in the exercise position from the top. Then the eyes are blindfolded with an impermeable piece of cloth and left in this position for 3 minutes. He throws the ball in the specified area, which is within the seventh meter of the playing field.

Specifications: Each sample has 3 trials

Registration:

Give a score of zero to the sample when the ball falls in the specified area

- An increase of one degree for every meter of increase or decrease from the specified area, meaning that every meter of increase or decrease gives a degree so that the order of degrees becomes zero 1.2.3 After the specified area is 9.8 meters and the soil is given before the specified area and according to its proximity to the area 1.2 in 6.5 meters respectively
- The final sample score is the sum of the scores of the three attempts

The test can be performed from any location of the first meter, and as the distance decreases, all this indicates the presence of the sensory-motor perception of the passing distance.

### Appendix (3)

Data registration form in terms of skills, serving accuracy and sensory-motor perception

Tests	Attempt 1	Attempt 2	Attempt 3	result
Accuracy of serving direct from the top				
Sensory-motor perception test of the ball throwing distance with the striking arm in the skill of serving				