# Some Physical Abilities and Their Relationship to the Accuracy of the Smash Serve in Volleyball

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### Abstract

Teaching a skill requires achieving accuracy in the flow of movement and not strength at the beginning of each learning, so the researcher found it necessary to study the relationship between some physical abilities and the accuracy of the skill of smash serve because this skill requires accurate technical performance, which was a primary goal of the research, and the researcher reached To the absence of a relationship between the physical abilities under study and the variable of the accuracy of the crushing transmission, as it is not needed at the beginning of learning, especially since the sample is students.

Keywords: Abilities , accuracy and smash serve.

# 1. INTRODUCTION

The methods used to arrive at facts differ about the nature of the variables that they want to find solutions to, so most researchers resort to scientific methods in order to solve a problem for a particular phenomenon by studying some of its variables.

Actual capacities are the basic guideline by which a player can continue on the field to accomplish extraordinary execution in every single engine expertise, and this presentation doesn't come besides through hard and consistent preparation on these abilities and their adjustment, and accordingly actual capacities are among the vital necessities that should be met by a volleyball player Any lack in the level of these characteristics prompts a lessening in the degree of engine expertise, which is the substance of execution in the game.<sup>1</sup>

In the volleyball match-up, there are various essential abilities that thus require an elevated degree of physical and expertise capacities, and among these abilities is the mind-boggling transmission.

Assuming he had the option to identify protective shortcomings in getting the rival group's transmission, he accomplishes the immediate focuses for his group, through which the group can settle the point and consequently settle the half and afterward choose the match in support of himself, given the significance of physical and expertise capacities that the two specialists attempted to study since it is the most effective way to accomplish the objective The ideal, as well as finding a relationship with some physical and expertise capacities. In this way, the significance of the exploration lies in raising the physical and expertise level of volleyball crews and players,<sup>2</sup> by placing those physical and ability capacities in the possession of mentors and players to be an arrangement for the start of work on fostering those abilities that add to creating execution and consequently creating game level.

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# 2. RESEARCH OBJECTIVES

• The research objectives to identify the relationship between some physical abilities and the accuracy of the skill of smash in volleyball.

# 3. RESEARCH METHODOLOGY

The researcher used the descriptive approach to describe the research variables in a way that suits the nature of the research procedures according to the contexts of scientific research.

# 4. COMMUNITY AND SAMPLE RESEARCH

The research sample included (300) fourth stage students, as (40) students were chosen from the research community in a random way to represent the community from which it was withdrawn.

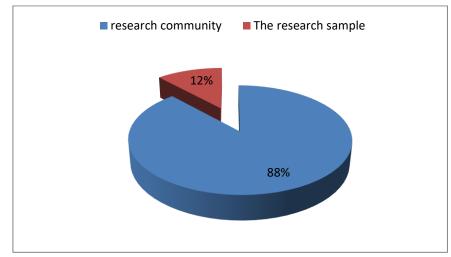


Figure 1: Shows the ratio of the research sample to the research community

# Equipment and tools used in the research

- Volleyball court.
- Volleyball number (6).
- Canon camera
- data dump forms.
- 10 pcs ink pens.
- whistle number (3).

# Tests used in research<sup>3</sup>

**1. The explosive power of the aiming arm muscles:** Test throwing a medical ball weighing (3 kg) from the shoulder with one hand from a standing position over the head.

2. Explosive ability test for the legs: The long jump test of stability (meters).

# 3. Accuracy measurement of the smash skill in volleyball

- The target of the test: to quantify the exactness of the ability of the crush serve.
- Instruments utilized: a legitimate volleyball court, (5) lawful balls, a hued tape to separate the field into regions, as displayed in the figure.
- Execution details: The player remains in the last line of the playing court, holding the ball, prepared to serve, to cross the ball to the half arranged, as displayed in the figure.
- Execution conditions: Transmission is performed inside the restrictions of the whole regulation.

• Scoring: The player is given (5) endeavors and takes in each endeavor the score of the area in which the ball falls on him. The most extreme score for the test is (25) degrees with marks. At the point when the ball falls on the line isolating two regions, the player is given the score of the greater zone.

### **Pilot study**

The pilot study was conducted on (4) of the fourth stage students, and they were isolated from the research sample on 01/02/2022. The purpose of it was to identify the obstacles that might encounter the application of the main experiment, as well as to know the appropriate conditions for conducting the tests.

### Statistical methods

The researcher used the statistical package (SPSS) to extract the search results.

### 5. RESULTS AND DISCUSSIONS

Variables	Mean	Std. Deviation	Ν
Accuracy of smash	13,48	1,037	40
Explosive ability of the legs	1,55	0,504	40
Explosive ability of the arms	2,43	0,501	40

**Table 1:** Show the Descriptive Statistics for research variables

Variables		Accuracy of smash	Explosive ability of the legs	Explosive ability of the arms
Accuracy of smash	Pearson Correlation	1	0,08	-0,25
	Sig. (2-tailed)		0,64	0,12
	Ν	40	40	40
Explosive ability of the legs	Pearson Correlation	0,08	1	-0,24
	Sig. (2-tailed)	0,64		0,138
	Ν	40	40	40
Explosive ability of the arms	Pearson Correlation	-0,25	-0,24	1
	Sig. (2-tailed)	0,12	0,14	
	Ν	40	40	40

#### **Table 2:** Show the relationship between the accuracy of crushing multiplication and some ability

Through the outcomes introduced in Table (2), it was observed that there is no relationship between's a few actual capacities and the exactness of the presentation of the devastating serve among understudies of the fourth stage in volleyball. Dangerousness, as it is significant during preparing and coordinates, on the grounds that the exactness of playing out the expertise of the devastating serve should be done without limit and as per extraordinary precision so the understudy can accomplish the ideal objective of the devastating serve,<sup>4</sup> which is to accomplish exactness in execution, as strength is a significant capacity for all rivalries for all From people, muscle strands in the muscles answer when they are exposed to the impact of weight or opposition,<sup>5</sup> and this reaction makes the muscle more ready to answer and better to the focal sensory system.<sup>6</sup>

The nature of performance for the student is limited to knowing the correct technique of performance without the need for strength in performance,<sup>7</sup> as strength in performance is not the only way to achieve the goal, the possibility of achieving performance with high flow and high accuracy has a major role in achieving the desired goal of the skill.<sup>8</sup>

# 6. CONCLUSIONS

Through what was found of the relationships between the physical abilities in question and the accuracy of the skill of overwhelming transmission, it did not appear that there is a clear correlation relationship, and this is the result of the fact that the research sample is students, and this means that they need to achieve fluidity in performance without the need for force, and this is what It justifies the absence of a clear correlation between the variables under study.

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