

# The Relationship Of Some Body Measurements And Physical Abilities And The Percentage Of Their Contribution To The Skill Of Scoring Beach Soccer

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**Abstract:***The process of reaching the higher levels and achieving victory over the sports teams depends on many elements, including the training process that is constantly developing, the diagnosis of playing requirements and the mistakes that the player may make, in addition to studying the physical requirements and physical abilities that help raise the level of achievement. Among the differential games that are characterized by the multiplicity of their skills, their sequence, and the possession of physical abilities and physical measurements, which are the cornerstone of the process of success of training, as whatever the training capabilities of the trainer, he cannot be considered a hero without their availability. We find that the overall height, leg height and other measures positively affect the acquisition of skill faster and the good disposition of it within the required duty and the integration of these qualities with the physical abilities such as the explosive power of the two men and creates an integration of the image of the scorer in beach soccer, as football scoring is the primary means for achieving goals With which it is possible to end the effort expended in initiating, building and developing the attack. In addition to this field intelligence, which is the safety valve for the success of offensive opportunities.*

## 1. INTRODUCTION

1- Identify the relationship of anthropometrics and some physical abilities in the performance of the scoring skill

2- Knowing the percentage of the contribution of anthropometric measurements and some physical abilities in the performance of the scoring skill

The two researchers used the descriptive approach in a random manner to suit the nature of the research, as for the research sample, it was represented by (10) players from the Wasat al-Wasat beach ball players in Baghdad governorate, and the following tests were used:

1- The long jump test (to measure the explosive power of the two men): The long jump from stability and recording the best attempt of a player to perform two attempts, as described by Barham (1995).

*Scoring from the movement.*

Introduction to research and its importance.

It has been proven through scientific research and studies that each activity has special physical requirements that distinguish it from other activities, and these requirements are

reflected in the physical measurements and specifications that must be provided when practicing, and the differences in height, weight, body shape, bone length, and body weight distribution are among the clear characteristics that Affects the person's appearance and his ability to affect athletic performance, "It has been clearly proven in various sports that there is a relationship between body building characteristics such as height, weight, and limb length and between the high athletic level, and that each game has specific physical characteristics that must be noted when athletes choose games and events. Different ". The process of reaching the higher levels and achieving victory over the sports teams depends on many elements, including the training process that is constantly developing, the diagnosis of playing requirements and the mistakes that the player may make, in addition to studying the physical requirements and physical abilities that help raise the level of achievement. Among the team games that are characterized by the multiplicity of their skills, their sequence, and the possession of their players, the physical capabilities and physical measurements, which are the cornerstones in the process of success of training, as whatever the training capabilities of the trainer cannot be considered a hero without their availability. We find that the overall height, leg height and other measures positively affect the acquisition of skill faster and the good disposition of it within the required duty and the integration of these qualities with the physical abilities such as the explosive power of the two men and creates an integration of the image of the scorer player in beach soccer, as football scoring is the main means for achieving goals With which it is possible to end the effort exerted in starting, building and developing the attack, and it has become important to know the physical measurements and physical specifications that must be provided to reach the athlete to the highest possible level. A sports game similar to well-known football, but it is held on sports sands prepared for this sport. This game is recognized by FIFA, the Iraq national beach soccer team), as the national beach soccer team in Iraq, Iraq participated in the World Cup Beach Soccer Championship Once in 2009 AD, which reached the ninth rank of the championship.

The game consists of two teams, each of which has five players, including a goalkeeper or four players, the goalkeeper or three players, a goalkeeper or two players only, and a goalkeeper (for each team). This depends on the area of the stadium and the laws applied by the competent authority. The idea of beach soccer is a sport that allows us to break through the minor rules of the sport of regular football so that the team does not have to move away from this sport under the pretext of the numerical shortage of players in the team, and this is what can be seen in mini beach soccer .... In addition, the teams have additional reserve players. . However, the weight of the ball ranges from 400 to 440 grams, while its diameter is 68 cm, so this allows for greater control such as scoring and passing. There are other sports similar to beach soccer such as futsal and indoor football. These games formed the basic rules of indoor futsal.

### *Research problem*

Scientific progress in the fields of sports in general is one of the most important factors essential to achieving the highest levels, and despite all the studies that have been carried out to the present time to develop various practical aspects of the football game, there are still many problems that require research and study, and through the researcher's practice As a national team player, she represented some Iraqi clubs and participated in (beach soccer) championships at the club level and being a student in the College of Physical Education and Sports Sciences, I noticed the lack of a special study in this game, and after conducting personal interviews with some coaches for this game and seeing some special scientific recommendations With the football game in general, I concluded that there was no study of beach soccer. In addition, the coaches and professors' most advice was on conducting the

study on anthropometric measurements, because the method of selecting players depends on determining physical measurements first and physical and skill tests in the game of beach soccer, hence The idea of the research came as the two researchers decided to conduct this study in order to identify the relationship of some body measurements, physical abilities and proportion Her contribution to beach football among the players of the Masafi club.

research aims

Learn about the relationship of anthropometrics and some physical abilities in performing the scoring skill

Learn about the contribution of anthropometric measurements and some physical abilities to the performance of the scoring skill

Research hypotheses:

The researchers assume that:

There is a statistically significant correlation between physical measurements, physical abilities and scoring skill in beach soccer

Physical measurements and physical abilities contribute in varying degrees to the skill of scoring beach soccer

Research areas.

The human field. Players of Al Wasat Masafi club in Baghdad governorate

Temporal domain. From 2/15/2020 until 6/24/2020

Spatial domain. Beach ball courts behind Al Shaab International Stadium

*Defining terms:*

1- The concept of anthropometrics

Anthropometry is the science of measuring the dimensions of the body, as the measurement is an estimate of objects and levels, a quantitative estimate according to a specific framework of the listed measurements. And anthropometrics as "the science that studies the measurements of the human body and its parts and shows the structural differences in it" (1)

2- The concept of physical abilities:

There are many and varied requirements that all sporting events need, and each one differs from the other according to the type of activity practiced because each game has its own characteristics and features (2), as physical abilities are "one of those requirements that differ from one sport to another" (3), as It is "part of a comprehensive physical fitness that includes all psychological, social, physical and health aspects because the human body is an integrated unit that needs running and jumping."

Types of physical abilities:

(Speed - force characterized by velocity - explosive force. Carrying speed. Accuracy)

3- Scoring:

It is the strong weapon that the team possesses to threaten the other team, and the player who is good at scoring is a player feared by other teams, and scoring goals becomes the game not exciting. "(1) Scoring is not a stand-alone skill, but rather a set of overlapping skills, among the most important of these skills are (passing and hitting the head) .

Scoring requirements:

Accuracy

Strength

Speed

Theoretical and similar studies:

The study (Muhammad, et al.) (2) aimed to identify the relationship of some physical measurements to the ability to counteract the crushing skill of the players of the Iraqi national volleyball team, in addition to knowing the level of skill performance of the players. The

researchers used the descriptive approach to suit the nature of their studies. The study sample consisted of (11) players, and some physical measurements were taken (such as total length, arm length, palm length, and shoulder width), and the results showed a significant correlation between the physical measurements and the level of skill performance of the players, so the researchers recommended the necessity to choose volleyball players according to the physical measurements, and the need to conduct studies similar to other skills in volleyball, such as the skill of serving and others.

## 2. RESEARCH METHODOLOGY

The two researchers used the descriptive approach to suit the nature of the research.

Research community and sample:

Identifying the community is the most important step, given that the results of the study will be presented

Because the research community was identified for the players of the Wasat Refineries in beach soccer in the governorate of Baghdad, if the research sample reached (10) players who were chosen randomly, as the two researchers relied in their selection on their ability to form the sample that they see as the most appropriate for their study.

Devices, tools and means of gathering information:

*Hardware and Tools:*

Footballs (10).

Beach soccer field

Medical scales

- a measuring tape

Centimeter device for measuring overall length

Colorful adhesive tape

- One (1) electronic computer (Hp4) from Korea.

- Manual cartoon calculator, type (Ucenko), Chinese-made.

-Pencils.

Methods of collecting information:

Arab and foreign sources.

Registration and data dump forms.

Personal interviews of experts

field research procedures:

Determining the variables related to the research: The questionnaire form was designed to survey experts and specialists in the field of physical education in the beach soccer game, including physical and physical measurements and the test for scoring skill and explosive strength test for the purpose of choosing them, and after collecting the questionnaires, the two researchers identified the most important variables according to the relative importance they achieved. The two researchers relied on the variables obtained by (75)% and above from the group of experts numbering (7), as shown in Table No. (1). In this area.

Table (1) shows the research variables, the most important of which were selected			
Num	Variables	Relative importance	percentage

1	Total length	28	88.57%
2	Upper limb length	28	82.85%
3	The length of the lower limb of the leg	27	85.7%
4	weight	27	85.7%
5	Explosive force	28	75.88%
6	Scoring test of movement	28	88.57%

### 3. METHODS OF MEASURING STUDY VARIABLES

Physical measurements used: The anthropometric measurements mentioned in the sources and references that were agreed upon by (Khater and Alpik, 1984), (Hassanein, 1995), and (Allawi and Muhammad Nasreddin, 1987) were relied upon, with the addition of age and weight to these Measurements All these measurements were taken for the research sample from the anatomical points agreed upon in the scientific sources.

- 1- Body Weight: The body weight of all players was taken using a medical scale.
  - 2- Overall length measurement: A centimeter device was used to measure the total length. .
  - 3- Measuring the length of the lower limb (leg): The lower extremity was measured using a tape measure from the large trochanter of the upper head of the thigh joint to the floor. (The explosive force of the legs,). The long jump test (to measure the explosive force of the legs): the long jump from stability and record the best attempt of a player if he makes two attempts, (1)
- Movement scoring test: (2)  
 Test name: scoring from movement.  
 The aim of the test: to measure the movement scoring factor.  
 Tools used: (10) five-foot ball balls, five-foot ball goal.  
 Method of performance: The laboratory rolls the ball in the designated area (3) meters, then straightens it on divisions whose dimensions are (50x85) cm and (30x50) drawn on the target from a distance of (10) meters, then the ball returns and runs on the second run. In the same way and so on, the tester scores 10 balls.

### 4. TEST CONDITIONS

Scoring must be from within the rolling zone.  
 The laboratory has the freedom to use various technical methods in the rolling process, with both feet.  
 The laboratory is free to use either foot in scoring and on any part of the foot.  
 Registration:  
 The tester will award a score of 5 if the ball touches the divisions at the top corners of the target.  
 The tester awards a score (4) if the ball touches the divisions at the bottom corners of the goal.  
 The tester is awarded a score of 3 if the ball touches the divisions in the upper or lower corners inward.

The tester awards a score (2) if the ball touches the divisions at the center corners on either side of the goal.

The tester awards a score of (1) if the ball hits the center of the goal or touches the crossbar or two goalposts.

The tester is awarded a zero if the ball does not touch any of the scoring divisions, or the tester scores the ball from outside the rolling area, or the ball is rolling on the ground during scoring.

The tester is awarded the highest score if the ball touches the line between the target divisions.

The total score of the test is (50).

Number of attempts: The tester has two attempts, which counts as the best attempt.

Exploratory experience:

In order to avoid aspects of deficiencies and weak capabilities, as well as identifying the time taken to take physical measurements, physical abilities, skill testing and extracting the reliability, stability and objectivity coefficient, the two researchers conducted an exploratory experiment for the period from 6/18/20 to 6/23/20 on the sample of the research. 10) Players from the research sample, and the interval between the test and its repeat does not exceed (7) days.

(Honesty - Consistency):

To calculate the validity coefficients of physical abilities and skills, the two researchers arranged the sample scores in a descending order and then divided them, and the comparison was made, which indicated that the physical tests are honest in distinguishing them between the upper and lower levels of the sample. As for the stability of the tests, the test method was used and repeated, where the correlation coefficient was extracted between the results of the two tests, and then the value of the correlation was calculated by means of the significant correlation tests. Table (2)

Table (2) shows the scientific parameters (honesty - consistency) of the research variables				
Num	Variables	Honesty coefficient	Stability coefficient	The calculated value (T)
1	Total length	0.81*	0.83	4.93*
2	Upper limb length	0.522*	0.88	4.56*
3	The length of the lower limb of the leg	0.566*	0.86	4.25*
4	weight	0.63*	0.83	3.99*
5	Explosive force	0.51*	0.84	4.66*
6	Scoring test of movement	0.54*	0.89	4.18*

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