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The relationship between the explosive ability of the two men and the accuracy of the consistent scoring of the players of the Dhi Qar University football team

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ABSTRACT

The current research aims to identify the relationship between explosive ability and the accuracy of fixed scoring in football among the members of the research sample, and the research population represented the players of the Dhi Qar University football team for the academic year 2024-2025, which were (32) players who were selected deliberately, and their percentage was (100%) from the original population. The importance of the research lies in providing information on the relationship between explosive power and the accuracy of static scoring in football and how one of them affects the other, as it makes the training process a sound process and thus saves effort and time, which improves skill performance. The research problem was to notice a clear weakness in the accuracy of static scoring, this may be the result of the weak explosive ability of the students while kicking the ball, they do camouflage and change direction, as not improving it will lead to the performance of the static scoring skill in an incomplete way, so the research problem is manifested in knowing the extent of the relationship and the correlation between the explosive ability and the performance of the skill of scoring accuracy from set pieces, considering that fixed shots, especially from long distances, need a high level of explosive ability in the performance of this skill. In order to reach a specific area in the goal. The researcher used the descriptive method to suit the research objectives. In light of the results obtained, the researcher found that there is a significant correlation between the explosive ability and the skill of scoring accuracy from set kicks in football in the research sample, and the explosive power of the muscles of the legs is considered a physical effect of this effectiveness because it is involved in all skills and movements that perform with high strength and speed, as it contributed to the development of the accuracy of static scoring. Based on the conclusions reached, the researcher recommends that sports workers, whether coaches or teachers, focus on identifying the appropriate capabilities for each event for the purpose of developing it and working to improve them to raise the level of performance.

1- Introducing the research:

1-1 Introduction and Importance of the Research:

The great development that the world is witnessing in all fields, including the sports field, has led to the development of sports levels and the achievement of great achievements of various sports events, and these achievements did not come by chance or in a vacuum, but were achieved thanks to the ability of researchers and specialists to employ various sciences and through proper scientific planning to serve the achievement in these events.

Football is one of the prominent sporting events that has received increasing interest from different countries and at all levels, and such interest has made researchers always seek to develop the game by raising the levels of players physically, planning and psychologically, in addition to developing their skill aspect.

The skill of scoring in football is one of the most important basic skills because of its great role in achieving winning the match, and it has been found through the analysis of hundreds of matches and for the higher levels that it is difficult for a team to lose as it has scored ten successful goals towards the goal, and all of this shows the importance of the scoring skill, which requires focusing on it and mastering it properly. Because all teams seek to win over the opposing team, and winning requires putting the ball in the opponent's goal, and this undoubtedly requires the proficiency of scoring towards the goal from the stability and movement of the ball with both feet.

The relationship between physical qualities and scoring accuracy has a great impact and the motor flow of the football players and the physical qualities of the great technique that enters into the scoring movement and gives a fluidity and aesthetic to the movement performed by the player during scoring with football, as the game of football is characterized by its dependence on the explosive ability of the two legs, as the skill of static scoring needs the quality of muscular strength in general and explosive ability in particular.

The importance of the research lies in providing information about the relationship between explosive power and the accuracy of static scoring in football and how one of them affects the other, and the explosive ability is the maximum resistance that can be overcome in the shortest possible time, as it makes the training process a sound scientific and thus saves the economy of effort and time, which improves skill performance.

1-2 Research Problem:

The nature of the game of football is in continuous motion, and this requires the players to master all skills, especially offensive skills, as they are the most related to the course of play during matches, and the skill of static scoring is one of the important skills through which to save physical effort even in the offensive movements of the players and penetrate the defensive methods of the team through their implementation individually, where a clear weakness was observed in the accuracy of fixed scoring, this may be the result of the weak explosive ability of the students while kicking the ball, they camouflage and change direction. Failure to improve it will lead to the performance of the static scoring skill in an incomplete way, so the research problem is manifested in knowing the extent of the relationship and the correlation between the

explosive ability and the performance of the skill of scoring accuracy from set pieces, considering that set pieces, especially from long distances, need a high level of explosive ability in the performance of this skill in order to reach a specific area in the goal, and thus achieve a successful injury against the opposing team, which is the required result in the game of football, so the researcher decided to study This problem is to find out its causes.

1-3 Research Objective:

To identify the relationship between explosive ability and the accuracy of static soccer scoring among the members of the research sample.

1-4 Imposing the Research:

There is a significant correlation between explosive ability and the accuracy of static soccer scoring among the research sample.

5-1 Research Areas.

5.1.1 Human Field: Dhi Qar University National Football Team 2024-2025.

5.1.2 Temporal Domain: 7/12/2024 until 15/4/2025.

5.1.3 Spatial Field: The Stadium of the Faculty of Physical Education and Sport Sciences - Dhi Qar University.

2. Research methodology and field procedures:

2-1 Research Methodology:

- Choosing the appropriate method is one of the most important steps that results in the success of the research, and optionally depends on the method of the problem to be studied and the goal to be achieved, as "the nature of the problem determines the research methodology in order to reach the truth and reveal it to reach a certain result", so the researchers adopted the descriptive approach with the method of the appropriate relational relationship with the nature of the problem and the objectives of the research.⁽¹⁾

2-2 Research Population and Sample:

For the purpose of conducting the research and implementing its vocabulary in an accurate scientific manner, the research sample must be selected from the original community, as the researcher applies the steps and vocabulary of the research to it, and the selection of the sample represents a great necessity of the main scientific research vocabulary, and the sample is the model on which the

(1) Abdul Rahman Badawi : Methods of Scientific Research, 1st Edition, Kuwait, Dar Al-Publications, 1977, p. 5 .

researcher conducts his entire work." ⁽²⁾ The research population and sample shall consist of the players of the Dhi Qar University football team for the academic year 2024-2025, which are (32) players and were selected deliberately, and their percentage is (100%) from the original population.

The researcher relied on the homogeneity of the research sample by using the coefficient of difference, as it is used to compare in the dispersion of groups in the case of different units of measurement used in each group, and the closer the coefficient of difference is to (1%), the higher the homogeneity is and if it exceeds (30%), it means that the sample is heterogeneous. Table (1) shows this.

Table (1)

	Divergence coefficient	Standard deviation	Arithmetic mean	Unit of Measurement	Variables
2-3	%3,7	5,19	171,41	Poison	Length
	% 2.30	1.69	65.40	kg	Weight
	% 5.19	1.60	23.9	Year	Age

Methods, devices and tools used in the research:

2.3.1 Means of Information Collection:

Research tools are the means by which a researcher can solve his problem, whatever those tools, data, samples, and devices." The selection of appropriate data collection devices and tools is essential to achieve the research objectives.

1. Arab and foreign sources.
2. Observation and experimentation.
3. Personal interviews.
4. Measurements and tests.

2.3.1 Devices and tools used in the research:

- 1- Tape Measure
- 2- Whistle (1)
- 3- Wood panel
- 4- Football (3)
- 5- Bless
- 6- Medical Scale

(2) Muhammad Hassan Allawi and Osama Kamel Rateb: Scientific Research in Physical Education and Sport Psychology , Cairo, Dar Al-Fikr Al-Arabi, 1999, p. 140.

(3) Wadhi Yassin Muhammad and Hassan Muhammad Al-Qbaidi: Statistical Applications in Physical Education Research , Mosul, Dar, Al-Kitab, 1996, pp. 161-162.

(1) Wajih Mahjoub: Methods and Methods of Scientific Research , 2nd Edition, University of Mosul, Directorate of Dar Al-Kutub for Printing and Publishing, 1988, p. 173.

- 7- Football Goal
- 8- Slings to divide the goal

2-4 Physical tests used in the research:

2.4.1 Physical Tests:

2.4.1.1 Vertical Jump Test of Stability Sergeant: ⁽¹⁾

Purpose of the test: To measure the explosive ability of the legs in the vertical jump upwards.

Necessary tools: A board of wood (blackboard) half a meter wide and a meter and a half long, on which the distance between each line and the last 2 cm is drawn. A smooth wall that is not less than the ground in height. Chalk pieces. 360 سم.

Procedures: The board or piece of wood is fixed to the wall with the bottom edge at a height that allows the shortest laboratory to perform the test.

Performance Description: The tester holds a piece of chalk and then stands facing the board and extends the arms as high as possible and marks the chalk while noting that the buttocks are adjacent to the ground where the testator stands facing the board to the side, then the testator swings the arms down and backwards with the torso bent forward and down, and the knees bent to the right angle position only, and the testator extends the knees and pushes the feet together to jump upwards with the arms swinging strongly forward and up to reach them to the maximum possible height. He marks the board with chalk at the highest point he reaches.

Calculation of Grades: The lab score is: the number of centimeters between the line he reaches from a standing position and the mark he reaches as a result of jumping up. Each tester performs three attempts and takes his best attempt.

2.4.2 Skill Tests:

2.4.2.1 Test of Skill of Scoring Accuracy from Set-Pieces :⁽¹⁾

Test Name: Scoring accuracy from second shots to goal.

Purpose of the test: Measuring scoring accuracy from second shots to goal

Tools used :

- 1- Football Goal
- 2- Football Balls (3)
- 3- Tape Measure
- 4- Slings to divide the goal
- 5- Bless
- 6- Whistle (1)

(1) Muhammad Hassan Allawi and Muhammad Nasr Al-Din Radwan: Motor Performance Tests, 3rd Edition, Cairo, Dar Al-Fikr Al-Arabi, 1994, p. 84.

(1) Qais Naji and Bastoiel Ahmed: Tests and Principles of Statistics in the Field of Sports , Baghdad, Higher Education Press, 1987, p. 49.

Method of Performance: The balls are placed on the scoring point, which is far from the middle of the goal at a distance of (16.5) and aim the ball hard while it is fixed on the ground with the inside of the right foot to the following parts:

- 1- The right side of the goal.
- 2- The left side of the goal.
- 3- In the middle of the goal.

Scoring: The test score shall be (100) degrees for each of the right parts (40) degrees in the middle of the goal (20) degrees, and the player's score shall be the sum of the three attempts, where the player is given two attempts for each of the three parts, and the best attempt of the two attempts for each part is calculated if the ball enters the square.

• 2-4 Exploratory Experiment:

In order to identify the difficulties that appear during the main experiment, the researcher conducted a survey experiment as "a preliminary experimental study carried out by the researcher on a small sample before conducting his research in order to choose research methods and tools. ⁽¹⁾ The researcher conducted her exploratory experiment on 10/1/2024 in order to identify:

- - Knowing the time taken to do the tests and their smoothness.
- - Identify the safety of devices and tools.
- - Knowing the extent of the sample experiments and the ease of the tests.
- - Knowing the negatives and obstacles that may hinder the way the tests are conducted.

• 6.2 Main Experience:

- The main experiment was conducted on 13/1/2024 on the research sample, as the physical tests included testing the explosive ability of the muscles of the legs, skill tests to choose the skill of scoring accuracy from set pieces.

2.7 Statistical Methods Used:

The researcher used the SPSS statistical package to extract the research results and used the following methods:

- Arithmetic mean.
- Standard deviation.
- Divergence coefficient.
- Correlation coefficient (Pearson).
- Percentage.

(1) Dictionary of the Arabic Language: Dictionary of Psychology and Education, vol. 1, Cairo, General Authority for Amiri Printing Presses, 1984, p. 70.

3- Presentation, analysis and discussion of the results:

3.1 Presentation, analysis and discussion of the results of the physical and skill test:

Table (2)

Shows the arithmetic averages, standard deviations, the calculated value (t) of the explosive power of the legs, and the accuracy of the fixed scoring

Statistical Significance	Value (t)		Standard deviation	Arithmetic mean	Variables
	Tabularity	Calculated			
Moral	0,48	0,89	5,13	39,65	Explosive Ability of Legs
			16,80	48,65	Scoring accuracy

*The value of the degree of freedom (14) at the significance level of $(0.05) = 0.48$

It is shown through Table (2) that the calculated value of (t) is greater than the tabular (t), which means that there is a correlation between the explosive ability of the two legs and the accuracy of scoring, as the researcher attributes this to the fact that the football player needs a certain level of explosive ability as a basis for developing his ability to perform fast and strong movements, whether it is from movement or stability during the match, including the accuracy of scoring from set pieces. The player's need for the explosive ability of the two legs to overcome the opponent appears, and according to the above, there is a relationship between the explosive ability of the two legs and the accuracy of consistent scoring in football, the higher the explosive power of the player, the higher the degree of scoring and accuracy. Also, the training of the skill of scoring in football is a training of competition in terms of strength and speed in performance, in order to raise the standard and planning level of the skill of scoring. ⁽¹⁾

The development of physical abilities is moving towards building a player who is prepared to develop his basic skills easier and faster, as "the basic physical abilities are what enable the player to perform the various motor skills required by the game he practices correctly, as they constitute the cornerstone of the player's access to high sports levels, they are necessary abilities for the player and determine the importance of one or more other physical abilities according to the nature and requirements of the game being practiced. Bearing in mind that there are close correlations between different physical abilities."²

Raysan Khraibet and Abul Ela Abdel Fattah (2016) point out that "the performance of some technical skills may require a high degree of physical quality such as strength, flexibility or speed, and here the coach must work to prepare the athlete and provide him with the required degree of

⁽¹⁾ Hanaf Mahmoud Mokhtar: The Annual Training Program in Football, Cairo, Dar Al-Ghar Al-Arab, p. 83, 1997.

²Imad al-Din Abbas Abu Zayd: Source previously mentioned, 2005, p. 82.

physical quality that will ultimately enable him to perform the required technical skill with a high degree of mastery." (3)

The interdependence and integration of abilities is a reason for improving performance in general and even contributes to the development of common abilities, especially that some physical traits are a combination of two or more abilities, such as strength characterized by speed that is combined, which in turn is reflected in the level of skill performance, as Hanafi Mukhtar (1974) pointed out: "Strength, speed and agility play an important role in the composite skill performance of the player." 4Al-Basati (1998) therefore points out that "there is a significant relationship between rolling skill and the element of force characteristic of speed." (5)

The explosive force trait is one of the physical qualities that requires training in the gym with weights as noted by Al-Mawla et al. (2017), "There are two types of explosive force training, namely explosive force training by weights and explosive force training by plyometric jump".⁶

4. Conclusions and Recommendations:

4.1 Conclusions:

In light of the results obtained, the researcher reached the following conclusions:

- 1- There is a significant correlation between explosive ability and the skill of scoring accuracy from set pieces in the research sample.
- 2- The explosive power of the muscles of the legs is a physical stimulus for this event because it is involved in all skills and movements that perform with high intensity and speed and have contributed to the development of consistent scoring accuracy.

5.2 Recommendations:

Based on the conclusions reached, the researcher recommends the following:

- 1- The researcher recommends that sports workers focus on identifying the appropriate capabilities for each event for the purpose of developing it and working to improve it to raise the level of performance.
- 2- The researcher also recommends paying attention to the explosive ability training of the two men in developing the skill of scoring from stability in football.
- 3- The researcher also recommends conducting similar studies on other basic skills or one of the sporting events.

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³Raysan Khraibet and Abu Ela Abdel Fattah: **Sport Training**, 1st Edition, Cairo, Al-Kitab Center for Publishing, 2016, p. 516.

⁴Hanafi Mukhtar: **op. cit.**, 19-74, p. 112.

⁵Amr Allah Al-Basati: **Rules and Foundations of Sport Training and its Applications**, Alexandria, Ma'arif Foundation, 1998, p. 60.

⁶Muaffaq al-Mawla et al.: **Ibid.**, 2017, p. 108.

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