

# Determine a Benchmark for Predicting Skill Performance in Terms of the Offensive Tactical Behavior of Futsal Players

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## Abstract

The research aimed to derive predictive equations for the skill performance in terms of the offensive tactical behavior of futsal players, while the research areas included the human field, which was represented by futsal players, and determined the time range for the period from (5/1/2023) until (15/3/2023). The researcher used the descriptive approach in the style of correlation and predictive relations, and the research sample consisted of (100) players from the clubs of Maysan province futsal, and the researcher applied skill performance tests and tactical behavior; Predictive equations were also extracted through which skill performance can be predicted in terms of offensive tactical behavior, and the researcher recommended the need for coaches to pay attention to offensive situations because of their great role in the performance of skills being one of the basic requirements that affect sports performance.

**Keywords:** futsal players, offensive tactical behavior, skill performance.

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## 1- DEFINITION OF THE RESEARCH:

### 1.1 Research Introduction and Importance:

Futsal has evolved in recent years, making those working on it to find effective solutions, by developing training methods in its modern form and using senior coaches to reach a brighter future, and the aspect of tactical behavior is one of the important and main factors of superiority in the game, the player, no matter how much physical and skill abilities he possesses, it will be limited to achieving superiority unless he can recognize the tactical aspects associated with the game and employ that knowledge and ability for the benefit of the team, which It means achieving superiority and winning.

Studies have proven that the superiority of most players in sports competition situations depends mainly on the correct behavior during the competition and how to build attacks correctly and quickly.

The researcher believes that the more the player's preparation physically, psychologically, skillfully, and cognitively, the more willing he is to meet the tactical requirements of the game and more able to understand and implement them, hence the importance of research in identifying the level of skill performance and offensive tactical behavior of futsal players, as well

as devising predictive equations to be a scientific guide for coaches and players to benefit from in the future.

### 1.2 Research Problem:

Through the researcher's review of the results obtained by the clubs during the previous years, which was not the share of the clubs of Maysan province in qualifying for the Premier League, hence the research problem arises and can be summarized in the form of the following question: What is the level of club players in skill performance and offensive tactical behavior;

### 1.3 Research Objectives:

- ❖ Identify the relationship between offensive tactical behavior and skill performance of the research sample.
- ❖ Identify the percentage of the contribution of offensive tactical behavior to the skill performance of futsal among the research sample.
- ❖ Extracting predictive equations for skill performance in terms of offensive tactical behavior in the research sample.

**1.4 Research areas:**

**1.4.1** human field: a sample of players clubs Maysan futsal and the number of (100) players.

**1.4.2** Spatial area: Halls of clubs surveyed in futsal.

**1.4.3** Time Domain: Period from (5/1/2023) to (15/3/2023).

## **2- RESEARCH METHODOLOGY AND FIELD PROCEDURES:**

**2.1 Research Methodology:**

The method is the scientific path followed by the researcher to solve a specific problem and that the research methodology fits with the objectives and the problem to address it [1], and therefore the researcher used the descriptive approach in the style of correlational studies.

**2.2 Research Community and Sample:**

One of the things that must be taken into account in the field of research is the selection of the sample that represents a real representation of the research community, as it is "the part that represents the community of origin, or the model on which the researcher conducts the entirety and the focus of his work" [2].

The research sample was determined according to the scientific methods used in this based on a special equation, and to use it, the size of the total community and the level of error required must be known, and after inquiring about the size of the total community from the sub-federation in Maysan Governorate in football, it was found that they are (120) players, noting that these numbers for the sports season (2022-2023) were extracted scientific foundations and exploratory experiments on a sample of (15) players, while (5) players were excluded for not attending the tests.

**2.3 Means of gathering information, devices and tools used:****2.3.1 Means of collecting information:**

- ❖ Scientific sources (Arab and foreign).
- ❖ Observation.
- ❖ Testing and measurement.
- ❖ Internet.
- ❖ Auxiliary staff.
- ❖ Information registration forms.

**2.3.2 Devices and tools used:**

The researcher used the following devices and tools: (1 electronic clock), 1 manual electronic computer, 1 electronic computer, 10 legal footballs, 5 signs, whistle, adhesive tape, futsal field.

**2-4 Determination of futsal skill performance tests:**

The researcher adopted the tests of performance skill futsal by distributing a set of tests to a number of experts and the number (15) experts in the specialty of tests, measurement and futsal and experts agreed on

some tests for (Ahmed Fahim Ngeish 2009) [1] which are respectively (test handling from the corner mark to different distances, side scoring test from a distance of (12) m, test rolling and scoring).

**2.5 Determination of the Offensive Tactical Conduct Test in futsal:**

The researcher adopted the scale of offensive tactical behavior of (Laith Sahib Saleh) [1], which is applied to the Iraqi environment, which includes (25) positions and alternatives answer (1-2-3), with a minimum degree (25) and higher (75).

**2.6 Exploratory Experiment:**

The exploratory experiment was conducted on a sample of (15) players, in order to find out the time it takes to carry out the tests, the difficulties that the researcher may face, and to know the possibility of the team working on how to use the devices and tools, as well as the time taken by the tests.

**2.7 Scientific Foundations of Tests:**

After the tests under study were applied in the exploratory experiments, the scientific foundations were extracted through appropriate statistical means and it was found that they have high correlation coefficients of truthfulness, consistency and objectivity.

**2.7.1 Honesty:**

The researcher used the sincerity of the content or content through the questionnaire form that was distributed to experts and specialists, to survey their opinions on the ability of the test to measure what was developed for it, as it " aims to show the link of the measured side with other aspects of the phenomenon and this type of honesty is also called) logical honesty)" [2].

**2.7.2 Persistence:**

The stability of the test means "the availability of conditions that include the accuracy of the application of the performance of the evaluation more than once or more than one individual to obtain the same data, and if the test is repeated for an equal group of individuals, it gives almost the same results" [3], and adds (Mohammed Jassim Al-Yasiri 2010) that stability expresses "the accuracy of the test in measurement and the consistency of its results when applied multiple times to the same individuals" [4].

On this basis, the stability coefficient was extracted using the correlation coefficient (Pearson), as the results showed high stability coefficients by observing the significance values, which are less than the significance level (0.05), which indicates the significance of the correlation.

**2.7.3 Objectivity:**

The objectivity of the test "is concerned with describing the capabilities of the individual as they actually exist, not as we want them to be; that is, the

estimators do not differ in judging something or a particular subject" [5], and objectivity was extracted through the adoption of the scores of two judges and finding a link between the two degrees, and it appeared that the correlation is high for all tests is very high.

**2.8 Main experience:**

The researcher applied the tests to the main research sample of (100) players.

**2.9 Statistical media:**

The ready-made statistical kit (SPSS) (vr21) was used for statistical treatments:

**3- PRESENTATION, ANALYSIS AND DISCUSSION OF RESULTS:**

After the researcher conducted tests and measurements of the research variables, the results were treated statistically, and the results are presented in tables, analyzed and discussed.

**3.1 Presentation of the results of the arithmetic means and standard deviations of the research variables:**

**3.1.1 Statistical parameters of research variables (skill performance tests and offensive tactical behavior)**

**Table 1: Shows the statistical parameters of the search variables**

Variables	Unit of measurement	Arithmetic mean	Standard deviation
Handling from the corner marker to different distances	degree	16.48	2.240
Lateral scoring test from Distance (12) m	degree	18.48	3.179
Ro-Ro and scoring test	degree	22.66	6.856
Tactical disposition	degree	37.42	7.112

**3.2 Present, analyze and discuss the results of the predictive value of the skill performance of the handling test from the angle mark in terms of offensive tactical behavior:**

The researcher applied the handling test from the science of angle to different distances on the

application sample of (100) players in order to obtain degrees that are treated statistically to extract the predictive value in terms of offensive tactical behavior, so the researcher used the simple linear regression equation to derive the predictive equation:

**Table 2: Shows the simple linear correlation coefficient and the contribution ratio and standard error of the estimate between the handling test of angle science and the offensive tactical behavior**

Model	Link	Contribution Percentage	Standard error of estimation
1	0.935	0.874	0.547

Through the above table, the value of the simple linear correlation is (0.935) and the contribution ratio (0.874) and a standard error has reached (0.547), and in order to identify the regression coefficient for the

contribution of the independent variable (offensive tactical behavior scale) to predict (skill performance) as a dependent variable, the researcher used a test (variance analysis) as shown in Table (3).

**Table 3: Simple linear regression variance analysis to examine the compatibility quality of the simple linear regression model shows skill performance and offensive tactical behavior**

Model		Sum of squares	Degree of freedom	Average squares	(f) Calculated	Significance level
Angle marker handling test	Regression	4294.216	1	4294.216	589.283	0.000
	Remaining	714.144	98	7.287		
	Total	5008.360	99			

Through Table (3), it is found that the independent variable (offensive tactical behavior) is suitable for predicting (skill performance) for futsal players through the moral value (F calculated), as it

amounted to (589.283) and an error rate of (0.000), and in order to reach the equation of a simple linear regression line, the researcher used the test (T) as shown in the table.

**Table 4: Shows the values of the fixed limit and inclination (impact) of skill performance in terms of offensive tactical behavior and its standard errors, calculated (t) value and significance level**

Model	B	Standard error	calculated) i)	Significance level
1 (Constant)	-11.02	2.014	5.474	0 000
Offensive tactical disposition	2.940	0 121 .121	24.275	0.000

The above table shows the value of the fixed limit (Constant), which amounted to (-11.02), while the regression coefficient for the test was (2.940) with a level of significance (0.00), and therefore the predictive regression equation for the offensive skill performance in terms of the effective estimates (offensive tactical behavior), so the predictive equation can be derived using the simple linear regression equation as follows:

**Predictive value of skill performance = -11.02 + 2.940 × Player's score in offensive tactical behavior.**

Accordingly, the researcher has devised a predictive equation for skill performance in terms of the offensive tactical behavior infutsal.

### 3.3 Presentation, analysis and discussion of the results of the predictive value of the skill performance of the side scoring test from a distance of (12 m) in terms of offensive tactical behavior:

The researcher applied the side scoring test from a distance of (12 m) on the application sample of (100) players in order to obtain degrees that are treated statistically to extract the predictive value in terms of offensive tactical behavior, so the researcher used the simple linear regression equation to derive the predictive equation:

**Table 5: Shows simple linear correlation coefficient, contribution ratio and standard error of estimation between the lateral scoring test from a distance of (12 m) and the offensive tactical behavior**

Model	Link	Contribution Percentage	Standard error of estimation
1	0.897	0.804	0.875

Through the above table, the value of the simple linear correlation is (0.897) and the contribution ratio (0.804) and a standard error has reached (0.875), and in order to identify the regression coefficient for the

contribution of the independent variable (offensive tactical behavior scale) to predict (skill performance) as a dependent variable, the researcher used a test (analysis of variance) as shown in Table (6).

**Table 6: Simple linear regression variance analysis to examine the compatibility quality of the simple linear regression model shows skill performance and offensive tactical behavior**

Model		Sum of squares	Degree of freedom	Average squares	(f) Calculated	Significance level
Side scoring test from a distance of (12m)	Regression	4027.555	1	4027.555	402.425	0.000
	Remaining	980.805	98	10.008		
	Total	5008.360	99			

Through Table (6), it is found that the independent variable (offensive tactical behavior) is suitable for predicting (skill performance) for futsal players through the moral value (F calculated), as it

reached (402.425) and an error rate of (0.000), and in order to reach the equation of the simple linear regression line, the researcher used the test (T) as shown in Table (7).

**Table 7: Shows the values of the fixed limit and inclination (impact) of skill performance in terms of offensive tactical behavior and its standard errors, calculated (t) value and significance level**

Model	B	Standard error	calculated) t)	Significance level
1 (Constant)	0.351	1.875	0.1872	0.042
Offensive tactical disposition	2.006	0.100	20.061	0.000

The above table shows the value of the fixed limit (Constant), which amounted to (0.351), while the regression coefficient of the scale reached (2.006) with a level of significance (0.00), and therefore the predictive regression equation for skill performance in terms of the influential estimates (offensive tactical behavior) so the predictive equation can be derived using the simple linear regression equation as follows:

**Predictive value of skill performance = 0.351 + 2.006 × Player's score in offensive tactical behavior.**

Accordingly, the researcher has devised a predictive equation for skill performance in terms of the offensive tactical behavior infutsal.

### 3.4 Present, analyze and discuss the results of the predictive value of the skill performance of the roll-out and scoring test in terms of offensive tactical behavior:

The researcher applied the rolling and scoring test on the application sample of (100) players in order to obtain degrees that are treated statistically to extract the predictive value in terms of offensive tactical behavior, so the researcher used the simple linear regression equation to derive the predictive equation:

**Table 8: Shows simple linear correlation coefficient, contribution ratio and standard error of estimation between ro-ro-scoring test and offensive tactical behavior**

Model	Link	Contribution Percentage	Standard error of estimation
1	0.932	0.868	0.657

Through the above table, the value of the simple linear correlation is (0.932) and the contribution ratio (0.868) and a standard error has reached (0.657), and in order to identify the regression coefficient for the

contribution of the independent variable (scale of offensive tactical behavior) to predict (skill performance) as a dependent variable, the researcher used the test (analysis of variance) as shown in Table (9).

**Table 9: Simple linear regression variance analysis to examine the compatibility quality of the simple linear regression model shows skill performance and offensive tactical behavior**

Model		Sum of squares	Degree of freedom	Average squares	(f) Calculated	Significance level
Ro-Ro and scoring test	Regression	4349.292	1	4349.292	646.718	0.000
	Remaining	659.068	98	6.725		
	Total	5008.360	99			

Through Table (9) it is shown that the independent variable (offensive tactical behavior) is suitable for predicting (skill performance) for futsal players through the moral value (F calculated), as it

reached (646.718) and an error rate (0.000), and in order to reach the equation of the simple linear regression line, the researcher used the test (T) as shown in Table (10).

**Table 10: Shows the values of the fixed limit and inclination (impact) of skill performance in terms of offensive tactical behavior and its standard errors, calculated (t) value and significance level**

Model	B	Standard error	calculated) t	Significance level
1 (Constant)	15.515	0.900	17.248	0.00
Offensive tactical disposition	0.967	0.038	25.431	0.00

The above table shows the value of the fixed limit (Constant), which amounted to (15.515), while the regression coefficient of the scale reached (0.967) with a level of significance (0.00); so the predictive equation can be derived using the simple linear regression equation as follows:

#### Predictive value of skill

**performance** = 15.515 + 0.967 × Player's score in offensive tactical disposition.

#### Discussion of the results:

Accordingly, the researcher has devised predictive equations for the offensive skill performance (handling test from the penalty mark, side scoring test from a distance of (12 m) and rolling and scoring test) in terms of the offensive tactical behavior in futsal, and when returning to the above tables, it becomes clear to us that the offensive tactical behavior has a major role in the performance of futsal players, as players can understand multiple situations and choose the correct tactical response, which needs speed of thinking and the ability to make the appropriate and appropriate decision.

This is confirmed by (Mufti Ibrahim, 1997) that the offensive tactical behavior is the means to use the mental, physical and psychological abilities of the team's players through certain movements according to the conditions of the match in order to weaken the capabilities of the opposing team and take advantage of

its weaknesses to achieve victory for the team within the legal framework of the game [1].

In conclusion, it turns out that the correct and codified scientific planning makes the players able to absorb the information given by the coach, which helps in overcoming the situations that arise during the matches; and this is what was pointed out by (Hanafi Mahmoud, 2005) that the ability of the players to think quickly, deducing what to do and executing the required movement at the right time has an impact on their proper performance during the match, as the coach must train the player to quickly understand the playing conditions and the speed of action. In a proper manner, with the repetition of tactical exercises and continuous feedback, which is similar to what is in play in particular, and the diversity of these exercises, the player's perceived time can be shortened and his ability to act quickly [1]. He adds (Throp, 1994) "Each increase in the tactics of play through the assimilation and use of educational tactical approaches gives a strong motivation to solve the tasks and problems of play easily and with high skill, and after a period of practicing this exercise will help the coach to identify the individual differences between players with good ability and thus the coach finds that the players become more efficient in the implementation of skills and at the same time we note that some of them have more efficient performance in play in decision-making and choosing the appropriate skill in Responses to specific locations and these reflect more knowledge" [2].

## 4- CONCLUSIONS AND RECOMMENDATIONS

### 4.1 CONCLUSIONS:

1. The offensive tactical behavior test contributed significantly to the skill performance and the three skill tests.
2. Deriving predictive equations through which the values of some skill tests can be predicted in terms of the offensive tactical behavior of the research sample.
3. The study proved the adequacy of the sample and the sincerity of its representation of the community from which it was taken.

### 4.2 RECOMMENDATIONS:

According to the results and conclusions reached by the researcher, the following recommendations were made:

1. The need for coaches to pay attention to the offensive tactical behavior as one of the basic requirements that affect the performance of sports skills.
2. Adopting predictive equations as an indicator of the status of players in future tests.
3. Conducting similar studies for other stages according to other variables and for both sexes.

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