



RESEARCH PAPER

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## Designing, building and standardizing the speed test for the football players of the preparatory training center in Baghdad Governorate

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### Abstract

The aim of the research was to design, construct and standardize a test to measure the motor speed of the football player for the preparatory stage in Baghdad governorate, and to find standard levels and levels that depend on the trainers in the test results and the researcher used the descriptive approach. The research community represented the two training centers of the preparatory stage of the Ministry of Education In the province of Baghdad, which has been tested by the number of (150) players, and was extracted scientific basis (sincerity, stability, objectivity) and the ability and standard excellence standards using the ready statistical bag (SPSS.Ver14) for the proposed test, A researcher designed the test to measure the speed of motor football player stage junior high validity, and through that the researcher recommended the use of the test is designed to measure the speed of motor football players.

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## Introduction

Football has attracted the attention of researchers, observers and observers in all fields and sectors of sports and media because of the excitement and excitement and enjoyment by the employees and fans and the masses of performance in football matches and the development of the football game did not come from mirage, but came from an integrated work and in parallel with the science of education (Such as training, biomechanics, physiology, anatomy, etc.), and that the use of these sciences is a strong basis through which we can reach the highest levels of sports and The physical and skill tests are the correct scientific method in planning and organizing the training process during the football season. It is possible to know the efficiency of the football player and to measure the abilities of the players to perform technical efforts and choose the best and the best that serves the game or effectiveness. Through objective tests, you can know the correct exercise performance, quick recovery of the recovery, and distinction between high-level players and low-level players.

The importance of research is through finding a scientific means to assess the motor speed of the football player through a test that is characterized by economy time and effort and facilitate the work of those involved in the training process in the game of football to know the level of players and develop appropriate solutions through the correct training curricula commensurate with the capabilities of players And through it can identify the strengths and weaknesses of the players and then develop appropriate scientific solutions through special exercises to solve them on the one hand and develop the basic skills of the football player on the other and The aim of the study is to design, construct and standardize the speed test for football players of the preparatory training centers.

## Materials and methods

### *Previous studies*

Previous studies in the design of tests (physical and professional) in football, the study of Abdul Muttalib

Abdul Hamzah (2011) The study of Ayed Ali Azab Saadi (2014), the study of Saher Mohammed Hamid Dulaimi (2016), previous studies on students, the study of Zia Munir Fadel Shawkat (2006), the study of Haider Taha Abdul Redha (2014)

### *Research Methodology*

The researcher used the descriptive approach to suit the nature of the research.

### *Search community and sample*

The research community was determined by the two training centers of the Ministry of Education in Baghdad Governorate for the year 2017 and 2018. The total of the total research sample was (150) players divided into three groups. The following are the first group of ten players for the exploratory experiment and the second group (60) and the extraction of scientific transactions (sincerity, stability, objectivity) and the ability of excellence, and the factors of ease and difficulty, while the third group reached (80) players used for codification.

### *Means of gathering information, tools and devices used in research*

- 1-Arab and foreign sources.
- 2-Registration form for test results.
- 3- Interviews with the specialized football game.
- 4-Football.
- 5-Characterization.
- 6-Electronic sensors (electronic gate) for measuring time

### *Field research procedures*

#### *Design test*

The researcher designed the motor speed test in a questionnaire form and was presented to the experts and specialists in training, testing, measurement and football to determine the validity of the tests and after taking the opinions of experts by collecting the forms. The test was finalized after the experts agreed that the test can be applied and valid after the rationing process.

Test search: test the motor speed of the 30-meter football player

-Objective of the test: measuring the motor speed ball without it.

-Level: Preparatory students.

-Tools used: football, fig. number (8), whistle, time measuring device.

-Method of performance: The laboratory stands from the position of the bird near the starting line between two persons (a distance between two people 1.5 meters on which there are electronic sensors), which starts from the people number (1) and straight towards the number (2) before arrival turn around the person number (2) and then run in a straight line towards the number 3 and then rotate around fig. 3 and run in a straight line towards number 4 and then rotate around fig. number 4 and thus pass between two persons number 6, Then perform the player's test again with the football.

-Calculate the time taken from the moment of departure between the two people starting line through electronic sensors and until the traversal No. 6 in any part of the body (stands for timing sensors).

-Test conditions.

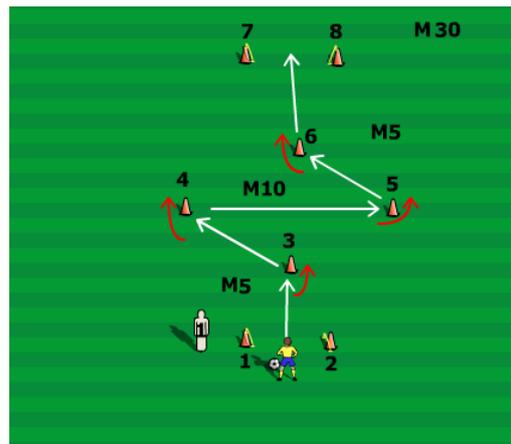
-The distance between the characters (5) meters.

-The distance between a person (3) and (4) distance (10) meters.

-The characters are placed within the specified distance.

Note: There must be complete rest between the first test without the ball and the second test with the football

The total time = (the first test time without a ball + the second test time with a ball 2) ÷ (The arithmetic mean of the performance time of the two tests)



*Scientific foundations for testing*

*Sincerity test*

The honest test is "which accurately measures the phenomenon that is designed to measure and does not measure anything in its place or in addition to it" (Mohamed Hassan Allawi and Mohamed El-Din Radwan, Measurement in Physical Education and Sports Psychology, 1987).

To verify the validity of the test, the researcher used the method of verifying the content (content) of the test by interviewing a group (7) of the experts and specialists in the field of measurement and testing in general and training in football (in particular), and discuss with them the details of the test and clarify the modifications made to some of the test, and have all agreed to this test, with the approval of (100%), They confirmed the veracity of the content of this test.

*Distinguished honesty (discriminating ability of testing)*

After the researcher conducted the construction experiment, and after collecting the data, and unloading the special search variables to test the motor speed of the player's football (30) meters, the researcher conducted the ability to test the special speed of the football player (30) meters by arranging grades sequentially from the lowest to And 27% of the highest and 27% of the minimum were adopted to identify the ability of the test to distinguish between the high-level group and the low-level

group. The total sample consisted of 16 players and the total minimum sample was 16 players. The researcher used the t-test for independent samples (asymmetric). The data were then statistically treated. The researcher showed that the t-value of

the tertiary at the degree of freedom (30) at the level of significance (.050) was significant between the two groups (upper and lower) Which confirms that tests have the ability to excel, as described in

**Table 1.** shows the discriminating ability of a footballer's own speed test.

Significance	Value t Calculated	Minimum		Minimum		Measuring unit	Statistical landmarks test
		P	S	P	S		
Moral	11.348	0.350	11.586	0.337	10.206	second	Special motor velocity test

*Stability test*

In order to establish the stability of the test, the researcher used the method of retesting, after the completion of the pilot experiment was re-test the speed of motor mobility of the football player after five days, and on the same sample of 20 players, and used the researcher statistical law of simple correlation coefficient (Pearson) to know Whether there was a correlation between the first and second tests. The results showed a high correlation coefficient of (0.908) as shown in Table (2).

*Objectivity test*

"Objectivity means freedom from prejudice, intolerance, and non-inclusion of subjective factors in the researcher's judgment" (Qais Naji and Bastoise Ahmed, Tests and Principles of Statistics in the Field of Sports, 1987) and verifying the objectivity of the test was the inclusion of arbitrators on the sample tests. When processing the results, the coefficient of correlation (0.964) The test used in the research is objective.

**Table 2.** Shows the scientific basis for testing the motor speed of the football player.

Objectivity	Stability coefficient	Honesty coefficient	Measuring unit	Name test
0,964	0.908	100%	second	Special motor velocity test

*Difficulty level for testing*

"If the tests used are suitable for the sample of the research in terms of ease and difficulty, this will normally distribute them and obtain the shape of the average data curve" (Wadih Yassin and Hassan Mohammed Al-Obaidi, Statistical Applications and Computer Applications in Physical Education Research, 1999).

Therefore, the researcher used the law of torsion coefficients to verify the suitable test for the sample of the research. The sample of the research was distributed naturally and by the results showed that the value of the torsion coefficient is less than ( $\pm 1$ ) Which indicates that the tests have a difficulty level suitable for the members of the research sample, as shown in

**Table 3.** Shows the level of difficulty and ease of testing the motor speed of the football player.

Torsion coefficient	Mediator	standard deviation	Middle of arithmetic	measruing unit	Name test
0.320	11.30	0,812	11.095	second	Special motor velocity test

*Testing experience*

After confirming the scientific basis of the test and the validity of the test and its suitability, the researcher applied these tests on the standardization sample, which includes (80) players on Monday, 2/4/2018 A selection of players was selected.

The following statistical systems were used:  
Finished statistical bag (SPSS.Ver14)

**Result and discussion**

After applying the test to the sample, the results were obtained and processed statistically to facilitate the analysis process. The researcher obtained the

*Statistical means*

arithmetical averages, deviations and standard errors of the candidate test

**Table 4.** Shows Metadata for standard and percentage.

percentage	The number	Standard level	Raw grade
5%	4	very good	less 9.642
31.3%	25	good	10.478-9.643
32.5%	27	Average	11.314-10.479
28.7%	22	Acceptable	12.149-11.315
2.5%	2	Weak	12.145 And more
100%	80	$\pm p = 0.835$	$s = 10.897$
		the level= 0.835	Term = 3.17

The level (very good) obtained (4) frequency in the measurement of the test, by a percentage of (5%). The level (good) obtained 25 recurrences, 31.3% (28), and the (weak) level was (2) recurrences, and by a percentage of (2), the rate was (2) 5%) of the total sample of (80) players.

*For standard grades in sequence to test*

The results showed that the fixed number = 0.08

**Table 5.** The value of the standard and raw grades to test the motor speed of the football player.

Raw grades for test	Standard grades
8.49	100
8.41	99
8.33	98
8.25	97
8.17	96
8.09	95
8.01	94
7.93	93
7.85	92
7.77	91
7.69	90
7.61	89
7.53	88
7.45	87
7.37	86
7.29	85
7.21	84
7.13	83
7.05	82
6.97	81
10.09	80
10.01	79
9.93	78
9.85	77
9.77	76
9.69	75
9.61	74
9.53	73
9.45	72

Raw grades for test	Standard grades
9.37	71
9.29	70
9.21	69
9.13	68
9.05	67
8.97	66
8.89	65
8.81	64
8.73	63
8.65	62
8.57	61
11.69	60
11.61	59
11.53	58
11.45	57
11.37	56
11.29	55
11.21	54
11.13	53
11.05	52
10.97	51
10.89	<b>50</b>
10.81	49
10.73	48
10.65	47
10.57	46
10.49	45
10.41	44
10.33	43
10.25	42
10.17	41
13.29	40
13.21	39
13.13	38
13.05	37
12.97	36
12.89	35
12.81	34
12.73	33
12.65	32
12.57	31
12.49	30
12.41	29
12.33	28
12.25	27
12.17	26
12.09	25
12.01	24
11.93	23
11.85	22
11.77	21
14.89	20
14.81	19
14.73	18
14.65	17
14.57	16
14.49	15
14.41	14
14.33	13
14.25	12
14.17	11
14.09	10
14.01	9
13.93	8
13.85	7
13.77	6

Raw grades for test	Standard grades
13.69	5
13.61	4
13.53	3
13.45	2
13.37	1

Table (5) shows that there is a difference in the percentage of the standard levels obtained by the players compared to the normal distribution curve. The highest percentage achieved is the average level (32.5%) followed by the good level (31.3%). Which indicates the mean level of the motor speed index in the high-level research sample. The index of motor speed has to do with the efficiency of the musculoskeletal system as well as the training situation of the players to perform a physical effort with high intensity for a short period of time. This is confirmed by Youssef Kamaz as "raising the requirements of motor speed gradually to suit the skill level, (Yousef Kamaz, Fitness for players in football, 2002) and that the speed of the motor performance as seen (Mufti Ibrahim) (depends on the perfection of the player performance of the motor automatically so as not to give him any attention to focus all his thinking and his duty to try to reach the maximum speed of performance).

The researcher believes that the use of modern equipment and aids and exercises for the ball and without them have a direct impact on the level of players to the speed of movement within the stadium during the competitions, and must work by trainers training centers to raise the level of players to reach the high levels of the sports community football, especially the school community for students (Mufti Ibrahim, Modern Mathematical Planning Planning, 2001). The training of continuous motor speed ball for the players, during the period of time in the special preparation period, which led to the lifting of the physical and professional side of the players training center football, in addition to the development of a curriculum by the coach taking into account the difficulty of the training module, which led to the development of physical qualities and skill, (Mufti Ibrahim) "If the difficulty of the exercise in the training module itself is increased, it is necessary to consider the gradation from easy to

harder and is known to the unknown" (Mufti Ibrahim, Youth Sports Trainer and Successful Trainer, 2009).

And that the modern training according to the scientific foundations, which is one of the modern training methods in the daily training modules with the training of speed with the ball to develop the motor speed of the player with the ball, which add some kind of excitement and excitement and desire for the players have the performance of special exercises on the one hand and on the other hand away players from routine and boredom Exercises used. This was confirmed by Mohammad Reza Ibrahim and Mehdi Kazem Ali in "the introduction of various exercises in the training curricula in a precise manner in order to maintain the desire of the athlete to implement the difficult training requirements and turn them from boredom and boredom to the state of happiness, joy and pleasure during the training. (Mohammed Reza Ibrahim and Mahdi Kazem Ali, Foundations of Sports Training for Different Ages, 2013).

**Conclusions**

- The test proved to be valid for measuring the speed of a football player's mobility for a junior high school in Baghdad.
- The test designed by the researcher was drawn (5) standard levels
- Players at standard levels were distributed naturally
- The accuracy of the results in the motor velocity test with the ball was demonstrated by the use of a motor speedometer.
- The test carried out by the researcher was objective and suitable for football players for the preparatory stage in the province of Baghdad.

*Endorsement*

- Use the test designed by the researcher to measure the motor velocity of the football player's junior high school in Baghdad.
- The allocation of some of the training modules in the development of motor speed and without a ball to contribute effectively to the results of matches.
- Achieving standard levels and grades for intermediate stage players in Baghdad and Iraq.

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