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Predicting physical abilities Contribute to the basic skills of players Youth football team

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ABSTRACT

The game of football is one of the collective games or one of the modern manifestations that reflect the extent of the progress of the state and its sophistication, the global, Olympic, international, continental and local meetings are forums that reflect the splendor of physical performance and its impact on basic skills, sports have become new landmarks that are made for continuous progress in all sciences associated with it and this is what contributes to the development of the physical aspects of specialized sports.

The study aimed to identify the goal of the research on predicting the physical abilities of contributing to the basic skills of football players, and to identify the standard degrees of physical abilities and skills of football players, and to achieve this the study was conducted on a sample of (25) players representing the youth team participating in the World Cup finals held in Argentina, where the exploratory experiment was on (5) players and after the completion of the experiment they were returned to the study, where the researcher used the statistical bag (spss) to process the data, and the researcher concluded that the standard scores were reached for each of the physical abilities and basic skills of the youth team players in football, as well as the existence of a statistically significant correlation between the physical abilities and basic skills of the youth football team players, and that the most important recommendations were the development of physical abilities in Taking into account during the planning of training programs, in proportion to their association with the basic skills of the youth football team players, the use of prediction equations extracted in this study to predict the level of physical abilities andbasic skills of the youth football team players in terms of the physical variables under study.

1- Definition of the research:

1-1 Introduction and importance of the research

The sport of football is considered the most popular at the local and global levels, which helps in preparing players in an integrated preparation, whether it is, if appropriate training programs are prepared for it according to their capabilities and abilities, on sound scientific foundations and rules, so developed countries are interested in the sports field using modern scientific methods for many different sciences to benefit from them in raising the level of the game and reaching the highest levels of sports

In light of this, football has developed and new games associated with it have emerged and have become one of the games that are practiced with the desire and enthusiasm of young people and adults, as it has become attracting many practitioners and local, international and continental championships have been held for it, in addition to granting many awards, and team games in general and football in particular are subject to different skill situations that highlight the importance of abilities. physical, moving in all areas of the pitch and the speed and intensity of these movements in all performance conditions that players are exposed to during the match are variable and not fixed because they are related to the movements and positions of competitors and colleagues,

Accordingly, physical abilities are one of the general indicators to determine the player who is characterized by a high level of growth in his physical abilities relative to the rest of his peers, and the basic physical abilities constitute the main course of individual access to the highest levels of sports, they are necessary variables for all types of sports activities, and determine the importance and sovereignty of one or more variables from other variables, and the researcher believes that it is important to determine the physical abilities contributing to The basic skills of the players of the youth football teamso that the players are trained to practice them and reach them to high sports levels, and it does not stop only when determining the physical variables in football, but the standard levels of those variables must be determined, as this leads to determining the potential of the players and their access to the desired goal.

1.2 Study problem

There is no doubt that each game has its own privacy and different abilities that distinguish it from other games, as the game of football still needs physical and skill abilities related to each other, due to the large size of the space in which the player moves and the requirements of rapid change and direct contact as a result of the proximity of the competitor, whether with or without the ball, Accordingly, the

basic physical abilities are what enable the individual to perform the basic skills multiple, the distinctive character of the basic skills is what determines the quality of the necessary physical abilities that must be available in the player, as each skill is associated with a special physical ability with a positive impact on the level of that skill, and therefore must be taken into account when conducting tests and measurement of the chosen skill, so that the skills whose level depends on the characteristic (speed, endurance or agility. etc.) whether Basic or vehicle.

Due to the experience of the researcher in different fields, whether he is a former player and different Sunni teams, a former coach and a technical analyst currently in television programs for league matches as well as national teams, the researcher noted that training programs for teams and teams are not suitable to raise the level of the game, and also noted the difficulties faced by some coaches in determining the physical abilities contributing to the performance of basic skills in football, And the impact of physical abilities on basic skills and their effective role in the performance of the requirements of the game during matches and the weakness of training programs at the level of teams and teams, the researcher studied and addressed this topic as an attempt to identify the relationship between physical variables and skill in football, hence the problem of the study and the need for it so that training programs can be developed in a codified scientific manner.

1-3 Objectives of the study

1. Predicting the physical abilities of contributing to the basic skills of the youth football team players.
2. Identify the standard grades of physical abilities and basic skills of football players
3. .Identify the physical abilitiesof the intention to contribute to the basic skills of football players.

1-4 Fields of study

1.4.1 Human field: Players of the youth football team participating in the World Youth Cup finals held in Argentina.

1.4.2 Time Range: For the period from 1/9/2022 to 1/3/2023.

1.4.3 Spatial area: Madinah International Stadium is the supposed stadium for youth team training.

Chapter Two

2- Research Methodology and Field Procedures

2.1 Research Methodology:

The researcher uses the descriptive approach for its suitability to the nature of the research.

2.2 Research community and sample

The research community was selected in a deliberate way, which included (25) players participating in the World Cup finals held in Argentina 2023, and they are the entire community of origin, and the goalkeepers and Albawere excluded from their number (3), as the exploratory experiment was with (5) players after the completion of the experiment, they were returned to the main experiment, thus the number of members of the actual sample reached (22) players, and this number constitutes (88%) of the community.

2.3 **Means of collecting information and tools used:**

2.3.1 Means of collecting information:

- ✓ Scientific sources (foreign and Arabic)
- ✓ Testing and measurement.
- ✓ Internet.
- ✓ Information registration form.

2.3.2 Tools used:

The study included two types of instruments : the tests used and the tools used in measurement.

2.4 Field research procedures:

2.4.1 Identification of research variables

The researcher identified the physical abilities and basic skills (and their tests) through a comprehensive survey of many Arab and foreign references and sources and previous studies that dealt with physical abilities and basic skills in football, it was presented to a group of experts and specialists in the field of football, testing, measurement and sports training in order to determine the most important of those physical abilities and basic skills, where the researcher chose the highest percentage Of the physical abilities and basic skills were nominated by specialists, where it was agreed on the physical abilities (transitional speed, speed endurance, motor speed) while the basic skills were (passing, rolling, scoring)

2.4.2 Physical testing used in research:

First: Transitional Speed: Enemy Test (30) m (2:75)

Test objective: Measurement of translational velocity

Tools used: 2 stopwatches, whistle, 3 signs, registration form.

Method of performance : The tester player stands behind the first sign and when he hears the whistle, he runs until he is to the second sign, which is (20) m away at

the first sign, and continues to run until he reaches the second sign, which is (30) m away from the second sign, so that the total distance traveled by the tester is (50) m.

Registration : The time is recorded for each laboratory from the moment of reaching the second sign until it crosses the finish line, i.e. the distance (30) m and the laboratory is given an attempt.

Second: Counter-running 180 m from the standing position (4:134).

The objective of the test: to measure speed tolerance.

Tools used: measuring tape - manual stopwatch - signs number (4) distance between one sign and another (15) m - whistle.

Performance Description: After giving the start signal (whistle), the player starts from the first sign (the beginning) to the second sign, returns to the beginning, runs towards the third sign, returns to the beginning, then runs towards the fourth sign and returns to the beginning, and thus the player has finished the test.

Registration :

- The registrar records the time taken in seconds and approximately 1% of the second.
- Each player makes one successful attempt.
- The attempt is repeated if the player fails to perform (the player falls during the rebound).

Third: Handling towards Mastaba for 30 seconds (3:80).

Objective of the test: Measurement of kinetic speed (passing speed).

Tools used: whistle, stopwatch, bench, football, tape measure.

How to perform: When the whistle is heard, the player hits the ball from a distance of (3) m towards a table of length (3) m and continues to handle after the ball bounces for (30) seconds.

Scoring: The number of passes performed by the player is calculated within (30) seconds.

2.4.3 Skill tests used in research:

First: Straight and winding rolling back and forth (3:99)

The objective of the test: to roll with the ball.

Capabilities and tools: 5 signs, football balls, stopwatch, tape measure and burke

Test description: Five plastic signs shall be placed in such a way that the distance between the signs is 1 m, the distance between the starting line and the first sign, and between the fifth and return signs is 3 m.

How to perform: The player rolls straight from the starting line to the first sign, then rolls between the signs, and when passing the last sign, he rolls straight for a distance of 3 m, and then he rotates around the sign and completes the test until the moment he crosses the finish line.

Test conditions:

* The ball must be rolled between the signs.
* Must cross the finish line completely in order to return and complete the test.
* If the tester loses control of the ball, he returns and completes the test from the place where he lost the ball and gives each tester two attempts.

Recording : The optimal time between the two attempts (best attempt) is calculated.

Second: Receiving and Passing (3:297)

Objective of the test: Measure scrolling accuracy.

Necessary tools: five players, five small targets with a width of (1) m and a height of (0.5) m, five legal footballs, a tape measure.

Test procedures: (5) players stand in a straight cross line and the distance between one player and another 2 m and the front of the players is the five goals that are away from them (30) m The tested player stands in the middle between player No. 1 and goal No. 1 and when hearing the start signal, the test player receives the ball from player No. 1 and then the rapid rotation within the specified distance 2 m located in the middle of the distance between the five goals and the latitude, then handling the ball towards the goal Qom 1 and so repeats the attempt with Fellow.

How to score: No score is counted if the target is not hit, while one score is calculated for each hit.

Third: Rolling the ball between the scoring poles **(2:163)**

Objective of the test: Measuring scoring accuracy.

Tools used: 5 legal football, goal division tape, measuring tape, 6 signs.

Test procedures: Layout of the test area 6 signs are placed, the distance between each sign is 2 meters and the total distance is 14 meters to the penalty arch, the target is divided into three sections, the first is 1 meter away from the column, as well as the third and the distance between the first and third section represents the second section.

Test description: The player starts rolling between the pillars from the starting line to the finish line and scores towards the goal.

Registration:

- The player is given one point in the second section.
- The player is given two points in the first and third sections.

- The player is given a zero in case the ball goes out of the goal.

2.5 Exploratory experiment

The exploratory experiment was conducted on a sample of (5) players from the youth team on Thursday, 15/9/2022, and after the end of the experiment, they were returned to the main experiment in order to know the time taken to perform the test, as well as the difficulties that the researcher may face, as well as to know the possibility of the assistant work team, as well as the time it takes to test, as well as knowing the sample's ability to perform the test and its suitability.

2.6 Main experience

The researcher applied the test to the research sample, which numbered (25) players in the period from 15/10/2022 to 28/1/2023.

2.7 Statistical methods

The researcher used the ready-made statistical bag (SPSS) (V 23) for statistical treatments , which are:

The arithmetic mean, median, torsion coefficient, standard deviation, predictive regression equation is:

y = a1 + b1 x1 + b2 x2 + b3 x3 where:

(r) = dependent variable, (a) = constant amount, (b) = regression coefficient for each contributing variable

(x) = Contributor coefficient according to its appearance in the contribution ratios (independent variable)

Chapter Three

3- Presentation and discussion of results

3-1 Presentation of the results of the tests of the physical abilities and basic skills of the members of the research sample.

Table (1)

Shows statistical description of physical abilities and basic skills

Torsion coefficient	Broker	Standard deviation	Arithmetic mean	Variables
0.97	3.50	0.33	3.90	Transition speed
0.57	31.00	0.82	31.18	Bearing speed
1.25	22.00	0.92	22.09	Kinetic speed
1.05	10.00	0.40	10.30	Rolling

0.85	3.50	0.53	3.05	Scroll
0.65	7.00	0.61	6.50	Scoring

3.2 Presentation of standard levels of physical abilities and basic skills under study

Table (2)

Shows the standard scores of the variables studied

Basic Skills			Physical abilities			Standard Grade
Scoring	Scroll	Rolling	Kinetic speed	Bearing speed	Transition speed	
9.50	5.55	8.30	26.59	27.18	2.40	100
9.44	5.50	8.34	26.50	27.26	2.43	99
9.38	5.45	8.38	26.41	27.34	2.46	98
9.32	5.40	8.42	26.32	27.42	2.49	97
9.26	5.35	8.46	26.23	27.50	2.52	96
9.20	5.30	8.50	26.14	27.58	2.55	95
9.14	5.25	8.54	26.05	27.66	2.58	94
9.08	5.20	8.58	25.96	27.74	2.61	93
9.02	5.15	8.62	25.87	27.82	2.64	92
8.96	5.10	8.66	25.78	27.90	2.67	91
8.90	5.05	8.70	25.69	27.98	2.70	90
8.84	5.00	8.74	25.60	28.06	2.73	89
8.78	4.95	8.78	25.51	28.14	2.76	88
8.72	4.90	8.82	25.42	28.22	2.79	87
8.66	4.85	8.86	25.33	28.30	2.82	86
8.60	4.80	8.90	25.24	28.38	2.85	85
8.54	4.75	8.94	25.15	28.46	2.88	84
8.48	4.70	8.98	25.06	28.54	2.91	83
8.42	4.65	9.02	24.97	28.62	2.94	82
8.36	4.60	9.06	24.88	28.70	2.97	81
8.30	4.55	9.10	27.79	28.78	3.00	80
8.24	4.50	9.14	24.70	28.86	3.03	79
8.18	4.45	9.18	24.61	28.94	3.06	78
8.12	4.40	9.22	24.52	29.02	3.09	77
8.06	4.35	9.26	24.43	29.10	3.12	76
8.00	4.30	9.30	24.34	29.18	3.15	75
7.94	4.25	9.34	24.25	29.26	3.18	74
7.88	4.20	9.38	24.16	29.34	3.21	73
7.82	4.15	9.42	24.07	29.42	3.24	72
7.76	4.10	9.46	23.98	29.50	3.27	71
7.70	4.05	9.50	23.89	29.58	3.30	70
7.64	4.00	9.54	23.80	29.66	3.33	69

7.58	3.95	9.58	23.71	29.74	3.36	68
7.52	3.90	9.62	23.62	29.82	3.39	67
7.46	3.85	9.66	23.53	29.90	3.42	66
7.40	3.80	9.70	23.44	29.98	3.45	65
7.34	3.75	9.74	23.35	30.06	3.48	64
7.28	3.70	9.78	23.26	30.14	3.51	63
7.22	3.65	9.82	23.17	30.22	3.54	62
7.16	3.60	9.86	23.08	30.30	3.57	61
7.10	3.55	9.90	22.99	30.38	3.60	60
7.04	3.50	9.94	22.90	30.46	3.63	59
6.98	3.45	9.98	22.81	30.54	3.66	58
6.92	3.40	10.02	22.72	30.62	3.69	57
6.86	3.35	10.06	22.63	30.70	3.72	56
6.80	3.30	10.10	22.54	30.78	3.75	55
6.74	3.25	10.14	22.45	30.86	3.78	54
6.68	3.20	10.18	22.36	30.94	3.81	53
6.62	3.15	10.22	22.27	31.02	3.84	52
6.56	3.10	10.26	22.18	31.10	3.87	51
6.50	3.05	10.30	22.09	31.18	3.90	50
6.46	3.00	10.34	22.00	31.26	3.93	49
6.42	2.95	10.38	21.91	31.34	3.96	48
6.38	2.90	10.42	21.82	31.42	3.99	47
6.34	2.85	10.46	21.73	31.50	4.02	46
6.30	2.80	10.50	21.64	31.58	4.05	45
6.26	2.75	10.54	21.55	31.66	4.08	44
6.22	2.70	10.58	21.46	31.74	4.11	43
6.18	2.65	10.62	21.37	31.82	4.14	42
6.14	2.60	10.66	21.28	31.90	4.17	41
6.10	2.55	10.70	21.19	31.98	4.20	40
6.06	2.50	10.74	21.10	32.06	4.23	39
6.02	2.45	10.78	21.01	32.14	4.26	38
5.98	2.40	10.82	20.92	32.22	4.29	37
5.94	2.35	10.86	20.83	32.20	4.32	36
5.90	2.30	10.90	20.74	32.38	4.35	35
5.86	2.25	10.94	20.65	32.46	4.38	34
5.82	2.20	10.98	20.56	32.54	4.41	33
5.78	2.15	11.02	20.47	32.62	4.44	32
5.74	2.10	11.06	20.38	32.70	4.47	31
5.70	2.05	11.10	20.29	32.78	4.50	30
5.66	2.00	11.14	20.20	32.86	4.53	29
5.62	1.95	11.18	20.11	32.94	4.56	28

5.58	**1.90**	**11.22**	**20.02**	**33.02**	**4.59**	**27**
5.54	**1.85**	**11.26**	**19.93**	**33.10**	**4.62**	**26**
5.50	**1.80**	**11.30**	**19.84**	**33.18**	**4.65**	**25**
5.46	**1.75**	**11.34**	**19.75**	**33.26**	**4.68**	**24**
5.42	**1.70**	**11.38**	**19.66**	**33.34**	**4.71**	**23**
5.38	**1.65**	**11.42**	**19.57**	**33.42**	**4.74**	**22**
5.34	**1.60**	**11.46**	**19.48**	**33.50**	**4.77**	**21**
5.30	**1.55**	**11.50**	**19.39**	**33.58**	**4.80**	**20**
5.26	**1.50**	**11.54**	**19.30**	**33.66**	**4.83**	**19**
5.22	**1.45**	**11.58**	**19.21**	**33.74**	**4.86**	**18**
5.18	**1.40**	**11.62**	**19.12**	**33.82**	**4.89**	**17**
5.14	**1.35**	**11.66**	**19.03**	**33.90**	**4.92**	**16**
5.10	**1.30**	**11.70**	**18.94**	**33.98**	**4.95**	**15**
5.06	**1.25**	**11.74**	**18.85**	**34.06**	**4.98**	**14**
5.02	**1.20**	**11.78**	**18.76**	**34.14**	**5.01**	**13**
4.98	**1.15**	**11.82**	**18.67**	**34.22**	**5.04**	**12**
4.94	**1.10**	**11.86**	**18.58**	**34.30**	**5.07**	**11**
4.90	**1.05**	**11.90**	**18.49**	**34.38**	**5.10**	**10**
4.86	**1.00**	**11.94**	**18.40**	**34.46**	**5.13**	**9**
4.82	**0.95**	**11.98**	**18.31**	**34.54**	**5.16**	**8**
4.78	**0.90**	**12.02**	**18.22**	**34.62**	**5.19**	**7**
4.74	**0.85**	**12.06**	**18.13**	**34.70**	**5.22**	**6**
4.70	**0.80**	**12.10**	**18.04**	**34.78**	**5.25**	**5**
4.66	**0.75**	**12.14**	**17.95**	**34.86**	**5.28**	**4**
4.52	**0.70**	**12.18**	**17.86**	**34.94**	**5.31**	**3**
4.58	**0.65**	**12.22**	**17.77**	**35.02**	**5.34**	**2**
4.54	**0.60**	**12.26**	**17.68**	**35.10**	**5.37**	**1**

3-3 Presentation of the matrix of correlation coefficient between physical tests and basic skills

Table (3)

Shows the matrix of correlation between physical abilities and basic skills

Scoring	Scroll	Rolling	Kinetic speed	Bearing speed	Transition speed	Variables
						Transition speed
					0.21	Bearing speed
				0.28	0.51	Kinetic speed
			0.64*	0.72*	0.72*	Rolling
		0.72*	0.85*	0.65*	0.65*	Scroll
	0.89*	0.62*	0.79*	0.70*	0.69*	Scoring

3-4 Presentation of the results of multiple regression analysis of physical and skill abilities.

Table (4)
Multiple regression analysis shows physical abilities and basic skills

Statistical Treatments						Basic Skills	Variables Physical
Contribution percentage	Regression coefficient	P value	Standard error	Constant magnitude	Contribution factor		
49.25	0.35	490.71	1.90	0.22	15.80	Rolling	Speed Transitional
45.29	0.25	168.96	1.63	0.16	11.12	Scroll	
41.62	0.33	134.52	2.01	0.06	10.12	Scoring	
91.46	0.37	501.62	2.40	0.20	28.88	Rolling	bear Speed
89.21	1.24	4.16	0.93	0.09	4.67	Scroll	
88.89	0.14	654.25	0.66	0.02	27.47	Scoring	
85.34	0.35	983.53	0.83	0.07	5.43	Rolling	Kinetic speed
98.18	0.48	623.54	0.58	0.10	30.57	Scroll	
95.46	0.37	505.70	2.43	0.20	28.88	Scoring	

3.5 Discussion of results

Table (2) shows the standard score corresponding to the raw grades of the physical abilities and skills under study in football and the researcher concluded that the level of physical fitness in the selected physical elements from medium to good. The researcher recommended the use of the above criteria for the purpose of evaluating players with the level of physical fitness.

As for Table (3) matrix correlation between physical abilities and basic skills that all physical abilities have a relationship with basic skills and the relationship is considered direct whenever players have high physical abilities had a significant impact on the development of basic skills.

"The link between the physical abilities of the basic skills of football, especially the offensive ones, has become one of the urgent necessities that football workers must pay attention to and focus on, as the coach must be aware and familiar with all that distinguishes the skills of physical abilities" (1:156) Studies and research have proven that each skill has physical abilities that distinguish it from other skills, which we tried in this research to prove, through the above predictive equationIt is clear that the physical level and skill level have a significant impact on the level of overall performance, as any decline in the efficiency of one of the components of physical fitness will negatively affect the skill side and thus the level of performance of the player will decrease, and the researcher attributes the reason for this that the relationship between physical qualities and basic skills in football is a direct relationship and any increase in the physical aspect will increase the skill side, "The physical qualities are what enable the athlete to be able to perform various motor skills The course forms the basis for reaching the highest levels of sports, as they are necessary for all types of sports activities, which makes the overcoming of one physical ability over another according to the nature of the activity practiced, taking into account the close relationship between the various physical abilities" (7:166), the more the qualities of strength, speed, stretching, flexibility and agility improve, they reach the level of good skill performance, so it is necessary to reach the physical abilities of the activity practiced to master the basic skills and then increase the effectiveness of skill performance (6:32).

The researcher attributes the reason for this to the fact that the nature of the performance of the skills investigated passing, rolling and scoring requires speed and power together in order to repeat the performance in them and they need the power characteristic of speed more than explosive power.

Chapter Four

4- Conclusions and recommendations

4.1 Conclusions

1. Reaching the construction of standard levels using standard grades for physical and skill variables among the juniors of the Premier League in Baghdad.
2. Reaching a predictive equation capable of predicting the physical abilities contributing basic skills.
3. The existence of a statistically significant correlation between the physical abilities and basic skills of the youth football team players

4.2 Recommendations

4. Using the prediction equations extracted in this study to predict the level of skill variables in football in terms of the physical variables under study.
5. Taking physical variables into account during the planning of training programs, commensurate with their association with skill variables in football.
6. Applying tests and measures for positive physical and skill variables as an indicator of technical progress in the program
7. Conducting similar studies that address other physical and skill variables.

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