



Building and standardizing skill tests based on visual scanning for players in the Iraqi Star League clubs

Saif El-Din Khaled Ahmed¹, Faleh Hashim Finjan²

^{1,2} University of Baghdad, College of Physical Education and Sports Sciences

DOI: [https://doi.org/10.37359/JOPE.V36\(4\)2024.2093](https://doi.org/10.37359/JOPE.V36(4)2024.2093)

<https://creativecommons.org/licenses/by/4.0/>

Article history: Received 20/ April/2024 Accepted 12/ June/2024 Available online 28/ September/2024

Abstract

To the research and its importance: Tests are considered as a contributing tool for evaluation in the sports field, on which the rest of the sciences are based, the most important of which are learning and training or evaluating the level of performance and revealing errors in competition conditions and working to develop them objectively and accurately. Sight is one of the most important sources of receiving information that serves all the functions of the body by identifying the external environment and giving us information about everything that is happening around us from movements or moving objects or objects passing in front of us or the flight of balls and their speed and approach, and the individual can also determine the locations of things and their position from him, whether in terms of their proximity or distance from him, as studies and research have proven that visual training has a direct impact on the accuracy of players' performance and the speed of motor response to technical skills. Skill performance includes a motor aspect and a visual aspect. If the visual aspect does not work efficiently, this will naturally affect the accuracy and speed of motor response to skill performance. It must be noted that many visual training exercises are linked to different aspects of the game of football, including the skill aspect. Therefore, we find that all skill requirements need a deep vision and correct reading of how to employ these requirements in order to reach the appropriate space in which the player moves freely and easily, away from obstructing competitors. A good and comprehensive visual vision of the field's surroundings prepares and employs the appropriate spaces from which the player can perform the appropriate skills that help in moving in these spaces freely with a slight

¹University of Baghdad, College of Physical Education and Sports Sciences,
Saif.Ahmed2104p@cope.uobaghdad.edu.iq

²University of Baghdad, College of Physical Education and Sports Sciences,
Faleh.Sultan@cope.uobaghdad.edu.iq



obstruction until the offensive movement is executed well. Some studies confirm that the best and most aware players are those who look at the game and do not follow or look at the ball only, as elite players always direct their face and eyes towards the players' movement quickly and continuously, and within ten seconds it reaches 7 or 10 times, so researchers and coaches must find tests similar to playing and competition situations, so the researcher resorted to designing skill tests according to the visual scanning of football players that are similar to playing during the match, and from here the importance of the study is evident in developing skill tests using the visual scanning of the field's surroundings and performing the skill during movement.

Keyword: standardizing skill, visual scanning, Iraqi Star League clubs.

Introduction

Through the researcher's experience as a former football player and his knowledge of many scientific sources and references such as similar research and studies, he did not find skill tests according to visual scanning, and because the game of football requires a visual scan of the field, which gives the player a better idea before receiving the ball about where to pass the ball to a colleague or in space or roll with it, and that the game of football requires speed in decision-making due to the number of players and pressure plans applied by the competing teams on the players who have the ball, which makes it difficult for the player to make the appropriate decision or perform the skill accurately during the pressure of competition, in addition to the rapid movement of the players and their constant change of places, which requires exploring the surroundings and scanning the field to facilitate decision-making after receiving the ball and evaluating the condition of the field and taking a proactive idea of what he will do after receiving the ball. All of this is facilitated if the player performs a visual scan, and through statistics conducted by the researcher on the number of passes in the Premier League, he found that most of the passes are not effective in building the attack quickly, and because the time factor has become a major factor in football, the visual scan process facilitates accelerating the rhythm. Designing skill tests according to visual scanning for Baghdad football club players.

Human field: - Football players of the Premier League clubs in Baghdad.

Time field:-10/11/2220-20/6/2320

Spatial field: - Club stadiums and training centers included in the research sample.

: Definition of terms

Visual scanning in football “It is the active movement of the player’s head where the player’s gaze is temporarily directed away from the ball to gather information in preparation for dealing with the ball later ”.(1)

Research Methodology:

The nature of the research problem determined the type of descriptive study using the survey method.

Research Sample:

-The researcher chose the research community represented by the players of the Premier League clubs in Baghdad Governorate, as the research community reached

-Total (263) players for the sports season (2022-2023), the research community and they were divided as follows as in Table(1) :

Table (1) sample numbers

n	Club name	Number of player	Exploratory experimentation	Number of building sample	Sample number of rationing	The excluded
1	Air Force	28		10	13	5
2	Al-Zawraa	27	15		26	1
3	ALshorta	32		10	15	7
4	ALKHARH	37	15		26	11
5	ALtalaba	36		10	18	8
6	alsanaa	33		10	13	10
7	alkahrabaa	36		10	16	10
8	alnaft	34		10	12	12
Total		263	30	60	140	63
Percentage		%100	%11.4	%22.8	53.2%	23.9%

1 -Gear Jordet and others: Scanning contextual, and Association with performance in English premier league footballers: An investigation across a season, movement science and sport psychology ,2020

Information collection methods, devices and tools used:

Information collection methods:

Methods, devices and tools used-:

The researcher used many methods, devices and tools as follows-:

Data collection methods-:

Personal interviews.

Scientific sources and references.

Tests and measurements.

Skills test results recording form according to the optical scanning of the football.

Devices and tools used-:

Stopwatches (3) type (Diamond).

Scientific calculator type (Sharp).

Computer (Pentium - 4).

Signs in the shapes of players.(12)

Light bulletins.(12)

Legal footballs.(10)

Plastic signs.(10)

Whistle.(5)

Small goals (1*1) number (6).

Research procedures:

Identification of football skills- :

The basic football skills were identified according to visual scanning, which are:

Extinguishing and handling:

1 -Test No(1) .

Test name: (Extinguishing and short handling with visual scanning).

Purpose of the test: Measuring the accuracy of short handling according to visual scanning.

Tools used: Football, number (3), human-shaped signs, number (10), light strips of one meter length, number (10), fixed on the back of the human sign, small target with dimensions (1*1 m), number.(6)

Description of performance: The tester stands behind the designated ball receiving area line (2*2) which is 10 m away from the ball thrower and (10) signs are placed 10 to 15 m away from the designated extinguishing area to the right and left of the tester and when the ball is launched from the ball thrower, the light signals placed on the backs of (4) human signs are turned on and when the ball is received by the tester, the light signals are turned off and a forward pass is made to the target placed in front of the sign which is the best option for the pass.

Performance conditions:

- The ball must be stopped in the designated area for receiving the ball.
- The pass must be performed quickly to the small target.
- The pass must be on the correct sign.

Recording method:

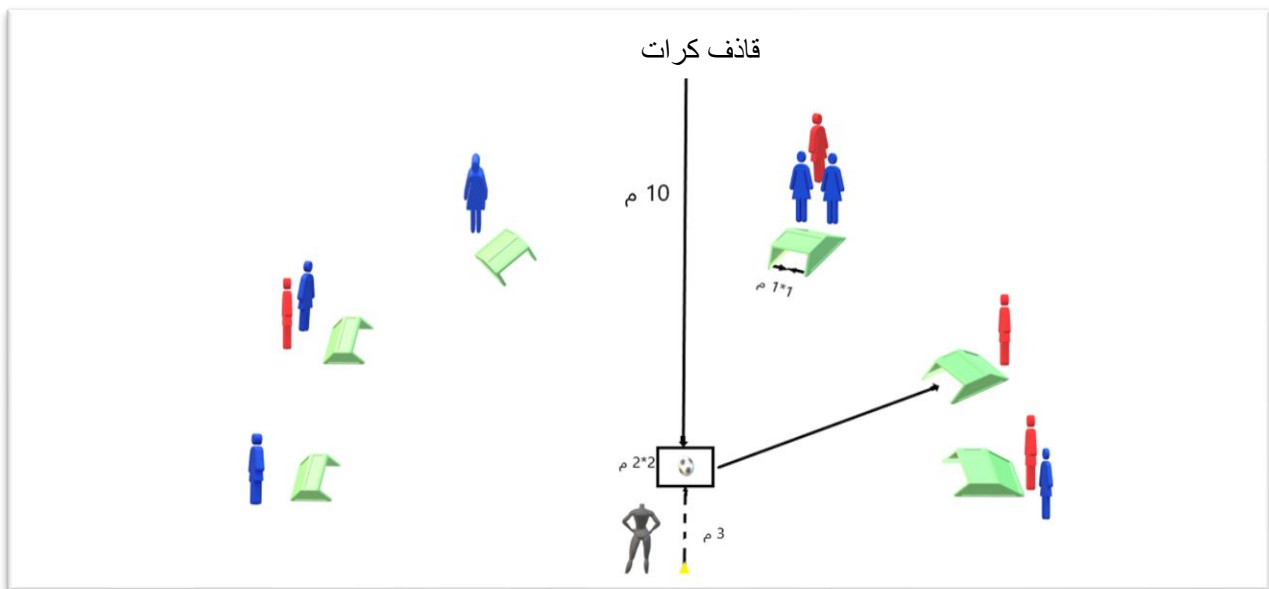
- The tester is given three balls.
- The tester is awarded (3) points if he plays the ball inside the small goal in front of the marker that was given the signal.
- The tester is awarded (2) points if he plays the ball inside the small goal after it touches one of the posts or the crossbar.
- The tester is awarded (1) points if he plays the ball outside the small goal after it touches one of the posts or the crossbar.
- The tester is awarded (zero) points if the pass is played outside the small goal.
- The tester is awarded (zero) points when performing the pass skill on the wrong

marker target.

-Points are not awarded when the ball is extinguished outside the designated extinguishing square.

Total score: 9 points.

Figure (1) shows test no. (1)



Test no. (2) :

Test name: One-touch handling with visual scanning.

Test purpose: Measuring the accuracy of direct handling with visual scanning.

Tools used: Soccer ball, (3) human-shaped markers, (10) one-meter-long light strips, (4) fixed on the back of the human marker, a small target with dimensions of (1*1 m).

Performance description: The tester stands in the designated ball-direction area (2*2) m, which is 10 m away from the ball thrower, and (10) markers are placed (10-15 m) away from the designated handling area to the right, left and in front of the tester, and between one marker and another 10 m. When the coach handles the ball, the light signals placed on the back of the human markers, (4) illuminated markers, are turned on. When the ball reaches the area designated for the player, the light signals are turned off and a forward handling is performed on the small target, which is the best option for passing.

Performance conditions:

- The ball must not be stopped in the designated area.
- The examiner must know the most appropriate character for the pass.
- The pass must be performed with one touch towards the small goal.

Scoring method:

- The examiner is given 3 attempts.

(3) -points are awarded to the examiner if he plays the ball inside the small goal.

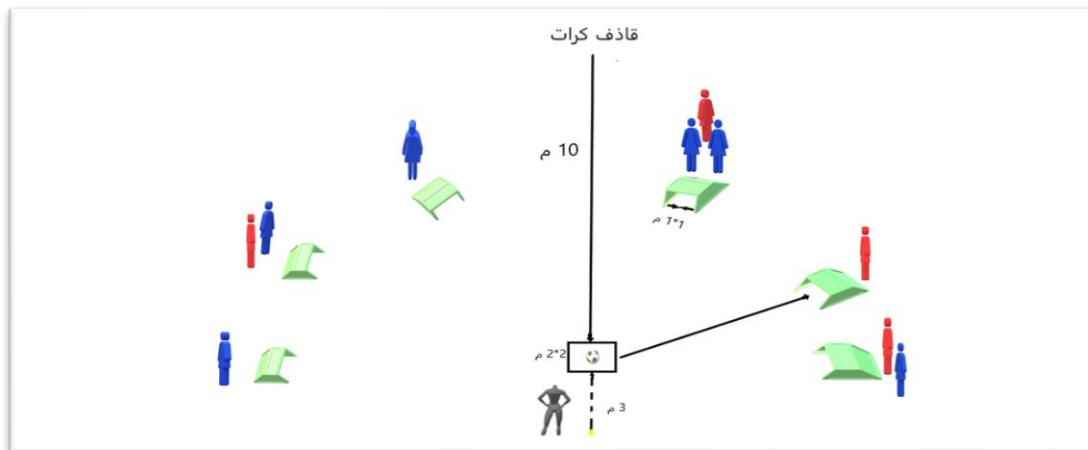
(2) -points are awarded to the examiner if he plays the ball inside the small goal after touching one of the posts or the crossbar.

(1) -points are awarded to the examiner if he plays the ball outside the small goal after touching one of the posts or the crossbar.

-(Zero) points are awarded to the examiner if the pass is played outside the small goal or towards the wrong goal

Total score: (9) points.

Figure (2) test no (2)



Scientific transactions for tests:

Test validity:

In order to extract the validity of the candidate tests under study, the researcher extracted the validity of the content.

-Content validity:

The questionnaire form for the tests under study was distributed to experts and specialists (*) in the field of football, testing and measurement, to survey their opinions on the ability of the tests to measure what they were designed for, as the test becomes valid if the experts or specialists in the field of the test agree that it measures what it was designed for.

As all experts and specialists in the field of testing, measurement and football agreed that it is valid with some modifications, the researcher took into consideration these modifications, believing in their soundness and scientific value that improves the test, in addition to that (one of the most important quality standards in testing and measurement, as it refers to the truth or accuracy with which the test measures the thing or phenomenon for which it was designed.).(1)

Table(2) The percentage of experts' agreement (content validity) for the research tests and the value of (Chi2).

N	TEST	Agree	Un ce	chi- are test	statistically ificant
1	Put down and short pass visual scanning	13	0	13	Significance
2	Pass in one touch with al scanning	13	0	13	Significance

1- Mahjoub Ibrahim Yassin Al-Mashhadani; Tests and Measurements in the Field of Physical Education and Sports Education Sciences, 1st ed., (Baghdad, Al-Mutanabbi Street, 2015). p. 69.

Reliability:

Reliability, as is known, is obtaining the same test result if it is repeated once or several times.(1)

To ensure the stability of the results extracted from the test, the researcher extracted the reliability by testing and repeating it, as the tests were applied to a sample of (30) players representing the teams (Al-Zawraa and Al-Karkh) on (25-26/1/2023) and the researcher obtained the first measurement and the tests were repeated after (7) days under the same conditions and on the same sample, to extract the reliability coefficient using the correlation coefficient (Pearson), as the results showed high reliability coefficients by observing the significance values, which are less than the significance level (0.05), which indicates the significance of the correlation, as shown in Table (3).

Table (3) shows the stability coefficient for the skill tests according to the visual scanning

Skill for the research sample and the significance values under study

	test	unit	Reliability	statistically significant
1	Put down and short pass with visual scanning	degree	0.946	0.000
2	Pass in one touch with visual scanning	degree	0.951	0.036

It means "the lack of difference between the evaluators in judging something or a specific subject" (2), In addition, it was calculated by (the correlation between the scores of two judges), who assign scores to one group of individuals at the same time. 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, as shown in Table (4).

1- Louay Ghanem Al-Sumaidaie and others; Statistics and Testing in the Sports Field, 1st ed., (Erbil, Directorate of Dar Al-Kutub, 2010), p. 120.

2 - Mustafa Hussein Bahi; Scientific Transactions and Application (Validity - Consistency - Objectivity - Standards), 1st ed.: (Cairo, Book Center for Publishing, 1999), p. 50.

Table(4)

Objectivity coefficient for skill tests and significance values under study

n	test	unit	Objectivity	statistically significant
1	Put down and short pass with visual scanning	degree	0.953	0.000
2	Pass in one touch with visual scanning	degree	0.684	0.014

Main experiment:

The researcher applied the football skill tests nominated for application on the construction sample consisting of (60) players from the Iraqi Elite Football League clubs, and for each club separately.

Verifying the validity of the tests under study:

Level of ease and difficulty:

The researcher presented the statistical description of the nominated tests under study, as the arithmetic mean, standard deviation and skewness coefficient were extracted for the nominated tests, as it was shown through Table (5) that the values of the skewness coefficient are all less than (+3), which indicates that the tests used are distributed moderately and it was shown that the tests are at one level of difficulty, "as the test is considered appropriate if its distribution is normal, provided that the tests do not form severe skewness (1).

Table(5) Values of arithmetic means, standard deviations and skewness coefficient for the nominated tests

n	test	unit	mean	Standard ation	skewness
1	1	degree	5	2.12	0.01
2	2	degree	3.45	2.15	0.66

¹ -Salah El-Din Mohamed Allam; Analysis of Psychological, Educational and Social Research Data (Cairo, Dar Al-Fikr Al-Arabi, 2000), p. 78.

Discriminatory ability (power):

After collecting and transcribing the data for the tests under study, the researcher arranged the raw scores for each test in ascending order from “the lowest score to the highest score, from which (27%) of the highest scores and the same number of the lowest scores were selected in order to identify the ability of the tests to distinguish between the high-level group and the low-level group” (1).

Table(6)

Discriminatory power of the skill tests under study

n	test	unit	High level		Low level		T-test	
			Std. or Mean	±	Std. or Mean	ع ±	T	statistic significant
1	A1	deg	8.87	0.3	2.56	0.5	41.0	0,000
2	B2	درج	7.25	0.4	0.75	0.4	41.1	0,000

Statistical methods:

- Arithmetic mean.
- Standard deviation.
- T-test for equal, non-symmetrical samples.
- Skewness coefficient.
- Simple correlation coefficient (Pearson).
- Chi-square test
- Standard scores (Z and T)

¹ - Wahib Al-Kubaisi; Applied Statistics in Social Sciences, 1st ed., (United International, Beirut, Lebanon, 2010), p. 276.

4 -Chapter Four - Presentation, Analysis and Discussion of Results:

4-1 Standardization of Skill Tests

4-1-1 Application of Skill Tests to the Standardization Sample:

Table (7) Values of means, standard deviations, and skewness coefficient and the highest and lowest values for the skill tests of the standardization sample.

n	test	unit	mea	standar viation	skewness	Highest ree	Lowes degree
1	1	degree	4.94	2.16	0.17	9	0
2	2	degree	3.09	2.14	0.82	9	0

The researcher extracted the standard scores for the skill tests by converting the raw scores to standard scores (Z, adjusted T) as shown in Tables (8). The researcher extracted the Z score from the law used (raw score - arithmetic mean / standard deviation) in the event that the test was by score and then entered it in extracting the T score (adjusted).

Table (8) shows the standard Z and T scores for the skill test of suppression and handling according to the visual scanning.

raw score	z	t
0	-2.28	27.12
1	-1.82	31.75
2	-1.36	36.38
3	-.89	41.01
4	-0.43	45.64
5	0.02	50.27
6	0.49	54.9

7	0.95	59.53
8	1.41	64.16
9	1.87	68.79

Table (9) shows the standard Z and T scores for the one-touch handling skill test according to the visual scanning.

raw e	z	t
0	-1.44	35.56
1	-0.96	40.32
2	-0.50	44.90
3	-0.04	49.57
4	0.42	54.25
5	0.89	58.92
6	1.35	63.59
7	1.82	68.27
8	2.29	72.94
9	2.76	77.61

4-1-2 Presentation, identification, analysis and discussion of the standard levels of skill tests for the standardization sample:

After identifying that the sample is distributed normally through the skewness coefficient, in addition to obtaining its standard scores, the researcher used the Gauss curve, which is considered one of the objective methods for estimating scores and is one of the

most common distributions in physical education because many of the characteristics measured in this field are distributed normally.(1)

The researcher chose (5) levels to measure his tests, and when distributing the standard scores to the approved levels, the standard levels appeared to us, as shown in the tables

Standard levels and ratios used in the research

Standard levels	Very good	good	average	accepta	weak
Standard ratios	%2,14	%13,59	%68,27	%13,59	%2,14

Table(10) Levels and their specific percentage in the normal distribution, raw and standard scores (z and t), number of practices and percentage for the extinguishment and handling test according to the visual scanning

The proportion determined in the normal distribution	Raw score	Z Limits	T Limits	Sample number	Percentage
Very good	(9)-	(1.87)-(1.41)	64.16 -68.79	17	%12.1
good	- (6)	0.49))-(0.95(	54.9 -59.53	50	%35.7
average	(5) -	-0.43)) -(0.02(	45.64-50.27	21	%15
acceptable	(3) -	-1.36))-(-.89(	36.38-41.01	46	%32.8
weak	(1) -	-2.28))-(-1.82(	27.12-31.75	6	%4.2

The portion determined the normal distribution	Raw score	Z Limits	T Limits	Sample number	Percent
Very good	(9)-(8)	2.29)-(2.76(	72.94-77.61	5	%3.5
good	- (6)	1.35))-(1.82(	63.59-68.27	19	%13.5
average	4)(-	0.42))-(0.89(	54.25-58.92	19	%13.5
acceptable	2)(-	-0.50))-(-	44.90-49.57	66	%47.1
weak	0)(-	-1.44))-((-	35.56-40.32	31	%22.1

(11)Table Levels and their specific percentage in the normal distribution, raw and standard scores (Z and T), number of practices and percentage of the one-touch handling test according to the visual scanning

Tables (10-11) show that the percentages of the standard levels shown by the sample in the tests under study, in comparison to these levels on the normal curve, are as follows:

•The first test:

In the first test, the sample showed different percentages in comparison to the percentages determined in the first standard level (very good). The sample achieved a percentage of (12.1), which is a higher percentage than that determined for it in the normal distribution. In the second standard level (good), the sample achieved a percentage of (35.7), which is a higher percentage than that determined for it in the normal distribution. In the third standard level (average), (Salman et al., 2022) the sample achieved a percentage of (15), which is a lower percentage than that determined for it in the normal distribution. In the fourth standard level (acceptable), the sample achieved a percentage of (32.8), which is a higher percentage than that determined for it in the normal distribution. In the fifth standard level (weak), the sample achieved a percentage of (4.2), which is a higher percentage than that determined for it in the normal distribution. We note from the above that the results of



the first test, extinguishing and handling, according to the visual survey of the sample, were limited to the levels (good, average, and acceptable) and (B. R. Jawad et al., 2024), which indicates The sample level was average in the test.

The second test: In the second test, the sample showed different percentages compared to the percentages determined in the first standard level (very good). The sample achieved a percentage of (3.5), which is a percentage higher than the percentage determined for it in the normal distribution. In the second standard level (good), the sample achieved a percentage of (13.5), which is equal to the percentage determined for it in the normal distribution. In the third standard level (average), (Abdulhussein et al., 2024) and (A. F. Jawad et al., 2024) the sample achieved a percentage of (13.5), which is less than the percentage determined for it in the normal distribution. In the fourth standard level (acceptable), the sample achieved a percentage of (47.1) and (Yousif et al., 2023), which is a higher percentage than the percentage determined for it in the normal distribution. In the fifth standard level (weak), the sample achieved a percentage of (22.1) and (Mandoob Makki Ati et al., 2024), which is a higher percentage than the percentage determined for it in the normal distribution. We note from the above that the results of the second test of the sample were limited between the levels (average, acceptable, and weak), which indicates that the sample level was acceptable in the test.

The researcher explains the results as follows: The level of the sample as well as the training age on which the study was conducted from the players of the Iraqi Professional League who are characterized by high and distinguished levels came in proportion to the levels extracted from conducting tests on them (Wesam Najeeb Asleawa, Najji Kadhim Ali, 2020), as the results were centered between the level (good, average and acceptable). This is evidence of the sample being subject to organized training and good supervision by those in charge of the players, (Kadhim, 2023) as well as the sample's involvement in an effective and continuous league despite the existence of a difference in these levels. This is due to the principle of individual differences. (Kadhim, 2024) Therefore, the sample's achievement of different levels is due to the players' diligence in performing skills according to the visual survey, (Kazim et al., 2019) due to the lack of training on visual survey and seeing the field during the performance of the skill in order to be a criterion for the player in achieving good results while performing the skills in matches, and because most of the players' training is based on developing the skill aspect

, this in turn helped to develop many aspects, including awareness and revealing the field to the player because repeated practice of the skill leads to reaching the correct performance of the skill with consistency, harmony and control and without rigidity or



tension. “Repetition and training give the skill more mastery, competition and more precise motor brilliance”.(1)

Conclusions:

- When applying the tests to the standardization sample, the tests were found to be easy, uncomplicated, and can be used by researchers and trainers.
- Skill tests according to visual scanning are an objective criterion because they are more realistic in the process of evaluating skill performance during football matches.
- The results of the current study contribute to raising the levels of visual scanning and correct field vision associated with the performance of football skills.

Recommendations:

- Building and standardizing skill tests according to visual scanning on age groups other than the current research sample related to the Iraqi environment, in addition to skills that were not researched.
- Paying attention to training skills with the peripheral vision of the field that the study addressed, and with comprehensive scientific curricula for both motor and skill aspects.

1 - Wajih Mahjoub; Scientific Research and its Methods: (Baghdad, Ministry of Higher Education and Scientific Research, 2000), p. 175.

Appendix(1)

Expert Opinion Survey on Nominating the Tests Under Study

n	Expert name and academic title	Specialization	Workplace
1	Prof. Thaer Dawood man	Tests and measurements	University of Baghdad / College Medicine
2	Prof. Fares Sami	Tests and measurements / Football	University of Baghdad / College Education
3	Prof. Mohammed Khalil Hussein	Motor training / Football	Physical and Sports Sciences
4	Prof. Saleh Radhi Shihab	Tests and measurements / Football	University of Babylon / College Education
5	Prof. Abbas Ali Adhab	Tests and measurements	Physical and Sports Sciences
6	Prof. Fares Sami Al-Josef	Tests and measurements / Basketball	University of Baghdad / College Education
7	Prof. Riyadh Khalil Al-Muhammas	Tests and measurements / Volleyball	Physical and Sports Sciences
8	Prof. Zahra Shihab	Tests and measurements	University of Baghdad / College Education
9	Asst. prof. Khalil Sattar Al-Muhammed	Tests and measurements / Volleyball	Physical and Sports Sciences
10	Asst. prof Ali Saad	Sports training / Football	University of Baghdad / College Education



11	Asst. prof Asmaa mat	Tests and asurements / eyball	Physical and Sports Sciences
12	Asst. prof Ahmed Dhari	Tests and asurements / tball	University of Baghdad / College ducation
13	Lecturer Safwan Abdul ni	Sports ning / Player and ch	Alturath university Physical and rts Sciences

References

- Abdulhasan, G. A., Fenjan, F. H., & Abood, H. J. (2022). The Effect of Special Abilities Exercises on Growth Hormone and Achievement for Advanced Weightlifters, Baghdad Clubs. *Revista iberoamericana de psicología del ejercicio y el deporte*, 17(3), 130-132.
- Abdulhussein, A. A., Dheyab, A. S., Abdulkareem, O. W., mutar Albadri, E. H., Hammood, A. H., Musa, M. F. A. H., Kadhim, M. J., & AbdulMaged, T. S. (2024). AN ELECTRONIC SYSTEM ACCORDING TO THE COOPERATIVE METHOD AND ITS IMPACT ON DEFENSIVE MOVEMENTS IN YOUTH BASKETBALL. *International Development Planning Review*, 23(1), 1253–1266.
- Amira Hanna Marqos; Building and standardizing the burnout scale among handball players, (PhD thesis, College of Physical Education and Sports Sciences, University of Baghdad, 2001).
- Faleh Hashim Finjan, F., (2016). A comparative study between the electrical muscle contraction (EMS) in the electrical activity of the muscles working in the clean and jerk lift for young lifters. *Scientific Journal of Physical Education and Sports Sciences*. Helwan University, 90 (September Part 1), 599-608.
- Gear Jordet and others : Scanning contextual, and Association with performance in English premier league footballers: An investigation across a season , movement science and sport psychology ,2020.
- Hussein, A. M. A., & Nasser, K. J. (2023). The effect of using exercises accompanied by loud music in carrying out the written and skill duties of the advanced boxers. *journal mustansiriyah of sports science*, 5..(2)
- Ismaeel, S. A., & Fenjan, F. H. (2020). Biomechanical analysis of some variables and EMG of the muscles during the performance of the snatch lift in weightlifting. *International Journal of Psychosocial Rehabilitation*, 24.(05)
- Jawad, A. F., Youssef, T. A., & SubhanSakhi, H. (2024). EVALUATING THE TYPES OF SMASH HITS AND THEIR RELATIONSHIP TO THE RESULTS OF THE IRAQI PREMIER LEAGUE VOLLEYBALL MATCHES. *International Development Planning Review*, 23(1), 933–950.
- Jawad, B. R., Ali, S. H., & Akbar, R. A. (2024). The effect of using strength exercises to prevent some shoulder joint injuries for national rugby team players. *Journal Mustansiriyah of Sports Science*, 6(2).
- Kadhim, M. J. (2023). Examining The Relationship Between Social Classes And The Culture Of Poverty: A Case Study. *International Journal of Social Trends*, 1(1), 23–27.
- Kadhim, M. J. (2024). Digital Literacy and Its Importance in the Modern Workforce. *International Journal of Social Trends*, 2(2), 44–50.
- Kazim, M. J., Zughair, A. L. A. A., & Shihab, G. M. (2019). The effect of zinc intake on the accumulation of lactic acid after cooper testing among football Premier league referees. *Sciences Journal Of Physical Education*, 12(5).
- Luay Ghanem Al-Sumaidaie and others; Statistics and testing in the sports field, 1st ed., (Erbil, Directorate of Dar Al-Kutub, 2010).
- Mahjoub Ibrahim Yassin Al-Mashhadani; Tests and Measurements in the Field of



- Physical Education and Sports Education Sciences, 1st ed., (Baghdad, Al-Mutanabbi Street, 2015).
- Mandoob Makki Ati, Teba Saleem Abd Almajed, Qatada Hisham Abdulghafoor, Halah Sinan Atiyah, Sabah Qassem, Mohamed Hassan, Ahmed Quinn Dawood, Mohamed Abdel Hussein, Thamer Hamed, Ahmed Farhan, Hussein Khamis, Mohamed Qusay, Ahmed Thamer, Abbas Fadhil, Salah Mahdi, Mubasher Harith, Ghassan Adeeb, Muwafaq Obayes, Saad Abbas, ... Ali Sadiq. (2024). The effect of suggested exercises on improving the kinesthetic response of soccer goalkeepers. *TechHub Journal*, 7(1 SE-Articles), 28–41.
- Mustafa Hussein Bahi; Scientific Transactions and Application (Validity - Reliability - Objectivity - Criteria), 1st ed.: (Cairo, Book Center for Publishing, 1999).
- Saeed, T. A., Yasser, O. K., & Fenjan, F. H. (2020). The effect of various aerobic exercises on the endurance and some physiological variables among fitness training practitioners of at (30-35) years old. *International Journal Of Psychosocial Rehabilitation*, 24(03), 6083-6086.
- Salah Al-Din Muhammad Allam; Analysis of data of psychological, educational and social research, (Cairo, Dar Al-Fikr Al-Arabi, 2000).
- Salman, S. M., Kadhim, M. J., & Shihab, G. M. (2022). The effect of special exercises in the rehabilitation of the shoulder muscle for the youth wrestling category. *INTERNATIONAL JOURNAL OF EARLY CHILDHOOD SPECIAL EDUCATION*, 14(5), 4606–4609. <https://doi.org/10.9756/INTJECSE/V14I5.555>
- Wahib Al-Kubaisi; Applied Statistics in Social Sciences, 1st ed., (United World, Beirut, Lebanon, 2010).
- Wajih Mahjoub; Scientific Research and its Methods: (Baghdad, Ministry of Higher Education and Scientific Research, 2000).
- Wesam Najeeb Asleawa, Naji Kadhim Ali, F. S. Y. (2020). The effect of physical training on the general endurance and fitness of “Beladi” club for advanced football players,. *International Journal of Psychosocial Rehabilitation*, 24(5), 1475–7192. <https://doi.org/10.37200/IJPR/V24I1/PR202281>
- Yousif, T. A., Almogami, A. H. B., & Khadim, W. I. (2023). analysis-of-the-effectiveness-of-offensive-skill-performance-according-to-a-computer-based-analytical-program-for-profes.pdf. *Revista Iberoamericana de Psicologia Del Ejercicio y El Deporte*, 18(2), 185–189.