

Building and codifying a scale of the level of tactical performance of advanced volleyball players

¹Dr.Khaleel Sattar Mohammed, ²Dr.Mohammed Salih Flayyih, ³ Dr. Ammar Fleah Rumeeh

Abstract

The research objectives, to build a measure of the level of tactical performance of volleyball players applying for the Iraqi Premier League for the 2018-2019 season. The nature of the research problem, then the researchers determined the research sample in the deliberate manner of the players of the Iraqi clubs for the Premier League (B, A). The researchers adopted the entire community as a sample for the research, and the number (156) players distributed over (13) clubs and divided the sample into (12)players an exploratory experiment player representing (the police club) and (100) player representing the construction sample and after a maximum period of two months has passed since applying the scale to the construction sample the researchers applied it to the rationing sample as it consisted of (144) players which is the same as the construction sample plus the rest of it The remaining number, which is (44) players, the researchers extracted the grades and the standard levels. The researchers reached several conclusions, the most important of which was: Building a measure of the level of linear performance by (36) items. The scale was also legalized in the final form, and the standard grades and levels were extracted for it. The researchers recommended using the current scale of volleyball coaches to identify the level of the sample in order to develop their own plans to improve or improve the level of planning performance. Building a measure of the level of the plan's performance level of volleyball players for other samples and from different age groups.

Keyword: Codifying, tactical performance and volleyball.

Introduction

The player is the focus of the training process and the changes taking place in it at the skill, motor, physical and planning levels do not take place through the use of efficient, approved and objective methods and methods based on solid scientific foundations and the building and refining of standards is only one of them, which gives an objective judgment on the player and shows us his progress and disclosure as well For strengths and find ways to address weaknesses.

The volleyball game is distinguished like the rest of the games by the diversity of skills that the player acquires to be the tool he uses to succeed in the planning performance as well as choosing the proper timing for these skills in different play situations as well as the team working to develop them in order to reduce the impact of the competing team and this is what we are actually seeing in The volleyball match, as it is distinguished by the fact that there is a team (transmitter) and a team (future), so each team has its preparatory plans that it uses to limit the attacks of the other team if it is (transmitter)

¹ University of Baghdad/ College of Physical Education and Sports Science/Iraq. Khaleel.Mohammed@cope.uobghdad.edu.iq

²University of Baghdad/ College of Physical Education and Sports Science/Iraq. Mohammed.Faleeh@cope.uobaghdad.edu.iq

³ Ministry of Education/ General Directorate of Education, Baghdad Governorate, Al-Karkh / second. aaabest78@gmail.com

and penetration of its defenses if it is (future), in addition to that the level of tactical performance is one of the most important success factors Team because it depends duck Nature of the case on an individual and teamwork between team members and this in turn puts the player on many of the duties of physical and psychological skills so he must enjoy it to be helpful to the success of the performance of the tactical. ¹Hence the researchers' idea to build and codify the measure of the level of tactical performance of advanced volleyball players. The researchers noted that they are former players of the national teams and Iraqi clubs, as well as their interest in the field of training that the coaches, especially in recent times, have paid attention to the level of the player's tactical performance after developments in the game and their use of analytical programs that will reveal the planning side of the teams in the championship in general and the team in the game In particular, in addition to the randomness that the team may be distinguished from in its plans moves, which results in the team's failure to achieve the goal of the match.²

Through the personal interviews conducted by the researchers with several coaches from the Iraqi League to identify the reasons for winning and defeating the teams, most of them confirmed that the level of planning performance is one of the main reasons as well as their use of many plans after the failure of their application by the players, and the researchers believe that the best way to search for the plan is to search for The reasons that led to its failure, hence the importance of research in building and codifying the measure of the level of tactical performance of volleyball players applying in the Iraqi league, believing by researchers to extract results that would provide coaches and those in charge of the game the most important reasons that lead to failure to The players are obligated to carry out the planning tasks assigned to them during the matches, which contributes to achieving the best results in the matches. The aim of the research is to:³ Build a measure of the level of tactical performance of volleyball players applying for the Iraqi Premier League for the 2018-2019 season, in addition to codifying it and extracting grades and standard levels. As for the most important previous studies that dealt with the level of planning performance, and among these studies, which dealt with the reasons for the low level of tactical performance in the basketball championship for the university team players in 2009 and find out the most important reasons that improve the performance of plans in basketball. The results came as the most important reasons that contributed to the decline The level of tactical performance is to entrust players with tasks that exceed their capabilities.⁴

Method and tools

The researchers used a descriptive approach with a survey method and correlations to fit the nature of the research problem.

The research community consisted of (6) clubs in the Iraqi Premier League, with (72) players for the Northern Group (Qaraqosh, Ararat, Police, Peshmerga, Erbil, Habbaniyah) and (7) clubs with (84) players for the Southern Group (Gas). The South, the Air Force, Industry, Revolution, Al Qasim, Maysan Oil, Al-Gharaf), as the total number of society reached (13) clubs by (156) players. The police) and (100) players represent the construction sample, and after a maximum period of three months has passed since applying the scale to the construction sample, The researchers applied to the sample as rationing consisted of 144 players, the same construction plus sample number with the rest of the remaining (44) players, the researchers extracted grades and levels of standard sample rationing.

Define the search variable

After the researchers became aware of the problem, the researchers conducted a set of personal interviews (1) with some specialists in the field of testing, measurement and volleyball. The procedures were as follows: The researchers built a measure of the level of the level of the level of plans for volleyball players applying to the Iraqi Premier League for volleyball season 2018- 2019, and construction procedures included some steps that must be followed for the purpose of arriving at a scale that meets the scientific requirements.

The identification of the idea is through giving a procedural definition that the researchers adopt in building the scale, as identifying the idea or phenomenon helps in identifying the main ideas that it adopts in building the scale (Ahmed, 2006, page 114), by informing the researchers of previous studies and research and interviews The personality that the researchers conducted reached the idea of the scale and then the purpose of the scale was determined as it is the main pillar and the first step that must be taken when building the measures, as the researchers reached the purpose of building a measure of the level of the linear performance of advanced volleyball players.⁵

The researchers identified the proposed fields and gave a theoretical definition for each field and interested in giving the fields meaning to the phenomenon or concept that is intended to be measured through a questionnaire .Especially for the purpose of identifying the most important fields or axes and the extent of their suitability and was presented to a number of experts and specialists in the field of volleyball And the (Chi square)test and measurement, whose number is (13) experts.

Table 1: Shows the agreement of experts and specialists on the fields of the level of the planned performance level after using (Chi square)

S	Candidate domains	Agree	Disagree	Chi square value	Significant value	Type of indication
1	The physical field	11	2	6.231	0.013	Sig.
2	The training field	12	1	9.308	0.002	Sig.
3	Field of the match	13	0	13	0.000	Sig.
4	Skill field	13	0	13	0.000	Sig.
5	Mental and psychological field	11	2	6.231	0.013	Sig.

The researchers prepared a questionnaire containing the paragraphs for the chosen fields, provided that the paragraphs are distributed within the axes of the measurement and each paragraph expresses the field in which it was placed on the basis of the theoretical definition of that field with the identification of alternatives to the proposed answer, which reached the number of paragraphs in the primary formula (47) paragraphs with a multiple choice method They were divided into (5) areas, and the researchers used the method of choosing three alternatives (Likert) (agree, somewhat agree, do not agree).⁶

After that, the researchers determined the validity of the paragraphs for the scale after presenting it in a preliminary form to a group of (13) experts and specialists in the field of tests and measurement and volleyball. Based on their opinions, the researchers used (Chi square) test to maintain each paragraph and accept it or delete it to repeat it in the sense And merging and modifying some of them for their similarity and for the paragraphs to become more appropriate, as shown in table (2).

Table 2: Shows the remaining paragraphs and the deleted paragraphs according to the opinions of experts and specialists to measure the level of the planned performance after using (Chi square)

S	Fields	Paragraph numbers	Number of paragraphs	Agree	Disagree	Chi square value*	Significant value	Type of indication
1	The physical field	9,7,6,5,4,3,2,1	10	12	1	9.308	0.002	Sig.
	The training field	10						
2	Field of the match	16,15,13,12,11,17	6	13	0	13	0.000	Sig.
	Skill field	18,14						
3	Mental and psychological field	24,23,22,21,19,28,27,26,25,29	10	13	0	13	0.000	Sig.
	The physical field	20						
4	The training field	34,33,32,31,30,35	6	13	0	13	0.000	Sig.
	Field of the match	-----						
5	Skill field	40,39,38,37,36,44,43,42,41	9	12	1	9.308	0.002	Sig.

*The value of the significance is significant if it is <0.05

In order for researchers to make sure of the clarity of the paragraphs, their understanding and ease when answering them, and the clarity of the instructions related to the measure of the level of planning performance, and it is a training for the

auxiliary work team as in Appendix (4), as well for the purpose of identifying the time taken to answer the scale and stop the obstacles that researchers may encounter when applying The principal of the scale, and the researchers followed the scientific method of the procedures in that the researchers conducted the exploratory experiment of the scale on Thursday corresponding to (22/10/2018) in the police hall on a part of the research sample, which is (12) players, and it was found that the sample accepted the scale through clarity Instructions The ease of understanding the paragraphs and their clarity, and the researchers and the assistant team did not face any obstacles or negatives, knowing that the time taken to answer the scale ranged between (7-10) minutes.⁷

After arriving at the initial version of the scale of the level of planning performance, the researchers, with the assistance of the auxiliary team, applied the scale to the construction sample, whose number is (100) Iraqi Premier League players, volleyball for the 2018-2019 season for the period from Saturday (1 November 2018) until Sunday Corresponding to 12/12/2018, and after completing the implementation of the main experiment, the researchers arranged the scale forms, corrected them, and recorded the results in preparation for statistical analysis. The descriptive characteristics of the sample response degrees, numbering (100) players, were found through which the individuals of the sample are distributed naturally in the scale and table (3) Shows For you, after completing the construction of the scale and extracting it in the final image, the researchers, with the assistance of the auxiliary team, applied the scale to the (144) members of the rationing sample in the Iraqi volleyball league for the 2018-2019 season for the period from Sunday 2/1/2019 until one day Monday, 20/1/2019, and after completing the implementation of the main experiment for codification, the researchers arranged the scale questionnaires, corrected them, and recorded the results in preparation for statistical analysis.⁸ The descriptive characteristics of the sample response levels of (144) players were found through which it was found that the individuals of the sample were distributed naturally in the scale table (8) shows that as the researcher used the statistical (SPSS).

Table 3: Shows descriptive characteristics of players for the construction sample

Properties	Performance level tactical
Mean	92.7200
SD	5.32780
Skewness	-1.048

The scientific foundations of the scale

The researchers analyzed the results of the construction sample to measure the level of the planned performance of the building sample. This step is considered one of the most important steps and procedures for building and adjusting the measures. Therefore, the researchers carried out the following procedures:

Extraction of the discriminatory capacity is also called by the peripheral comparison or the two groups at the total degree, which gives an important indication for building standards or tests, which is evidence of discrimination (Hani, Amer Saeed and Ayman, 2016, page 103), as well as the extraction of the internal consistency of more than one type using the coefficient of consistency The procedure for determining the extent of homogeneity of the vertebrae in its measurement of the phenomenon or behavioral dimension and the ability to highlight the correlation between the vertebrae paragraphs (Hani, Amer Saeed and Ayman, 2016, page 108) Q Also, the stability of the scale was extracted by the method of mid-section and Vakronbach as well as the objectivity achieved through the answers of the sample and the Tables (4-7) show that.

Table 4: Shows the discriminatory ability of each of the Paragraphs of the Plans Performance Level

Paragraph number	Lower group		Upper group		Calculated value (t)	Significant value	Type of indication
	Mean	SD	Mean	SD			
1	1.9259	0.26688	2.6667	0.48038	7.004	0.000	Sig.
2	1.0000	0.00000	1.4815	0.57981	4.315	0.000	Sig.
3	1.0000	0.00000	1.4815	0.70002	3.574	0.001	Sig.
4	1.0000	0.00000	1.4815	0.64273	3.893	0.000	Sig.
5	1.0000	0.00000	1.5926	0.88835	3.466	0.001	Sig.
6	2.0741	0.38490	2.9630	0.19245	10.733	0.000	Sig.
7	2.0370	0.33758	2.8519	0.36201	8.554	0.000	Sig.
9	2.0000	0.00000	2.6667	0.48038	7.211	0.000	Sig.

10	1.9630	0.19245	2.6667	0.48038	7.066	0.000	Sig.
11	1.8889	0.32026	3.0000	0.00000	18.028	0.000	Sig.
12	1.9259	0.26688	3.0000	0.00000	20.912	0.000	Sig.
13	1.8519	0.36201	3.0000	0.00000	16.480	0.000	Sig.
15	1.8889	0.32026	3.0000	0.00000	18.028	0.000	Sig.
16	1.8889	0.32026	3.0000	0.00000	18.028	0.000	Sig.
17	1.9259	0.26688	3.0000	0.00000	20.912	0.000	Sig.
19	1.8519	0.36201	3.0000	0.00000	16.480	0.000	Sig.
21	1.8889	0.32026	3.0000	0.00000	-18.028	0.000	Sig.
22	1.9630	0.19245	3.0000	0.00000	-28	0.000	Sig.
23	1.9630	0.19245	3.0000	0.00000	-28	0.000	Sig.
24	1.9630	0.19245	3.0000	0.00000	-28	0.000	Sig.
25	1.8889	0.32026	3.0000	0.00000	-18.028	0.000	Sig.
26	1.9259	0.26688	3.0000	0.00000	-20.912	0.000	Sig.
27	1.9259	0.26688	3.0000	0.00000	-20.912	0.000	Sig.
28	1.9630	0.19245	3.0000	0.00000	-28	0.000	Sig.
29	1.8889	0.32026	3.0000	0.00000	-18.028	0.000	Sig.
30	1.9630	0.19245	3.0000	0.00000	28	0.000	Sig.
31	1.9630	0.19245	3.0000	0.00000	28	0.000	Sig.
32	1.9630	0.19245	3.0000	0.00000	28	0.000	Sig.
33	1.9630	0.19245	3.0000	0.00000	28	0.000	Sig.
34	1.9630	0.19245	3.0000	0.00000	28	0.000	Sig.
35	1.9259	0.26688	3.0000	0.00000	20.912	0.000	Sig.
36	1.9259	0.26688	3.0000	0.00000	20.912	0.000	Sig.
37	1.9259	0.26688	3.0000	0.00000	20.912	0.000	Sig.
38	1.8889	0.32026	3.0000	0.00000	18.028	0.000	Sig.
39	1.9630	0.19245	3.0000	0.00000	28	0.000	Sig.
40	1.9630	0.19245	3.0000	0.00000	28	0.000	Sig.
41	1.9630	0.19245	3.0000	0.00000	28	0.000	Sig.
42	1.9259	0.26688	3.0000	0.00000	20.912	0.000	Sig.
43	1.9630	.19245	3.0000	0.00000	28	0.000	Sig.
44	1.9630	0.19245	3.0000	0.00000	28	0.000	Sig.

Table 5: Shows the correlation coefficient between the degree of paragraph total score to measure the level of performance tactical

Paragraph number	Simple correlation coefficient	Significant value	Type of indication	Paragraph number	Simple correlation coefficient	Significant value	Type of indication
1	0.117	.245	Non sig.	25	0.393**	0.000	Sig.
2	0.336**	0.004	Sig.	26	0.424**	0.000	Sig.
3	0.294*	0.012	Sig.	27	0.240*	0.016	Sig.
4	0.368**	0.001	Sig.	28	0.346**	0.000	Sig.
5	0.375**	0.001	Sig.	29	0.322**	0.001	Sig.
6	0.408**	0.000	Sig.	30	0.312**	0.002	Sig.
7	0.434**	0.000	Sig.	31	0.270**	0.007	Sig.
9	0.360**	0.002	Sig.	32	0.443**	0.000	Sig.
10	0.440**	0.000	Sig.	33	0.138	0.170	Non sig.
11	0.562**	0.000	Sig.	34	0.425**	0.000	Sig.
12	0.461**	0.000	Sig.	35	.396**0	0.000	Sig.

13	0.414**	0.000	Sig.	36	.215*0	0.031	Sig.
15	0.315**	0.000	Sig.	37	0.375**	0.000	Sig.
16	0.548**	0.000	Sig.	38	.439**0	0.000	Sig.
17	0.370**	0.000	Sig.	39	0.588**	0.000	Sig.
19	0.470**	.0000	Sig.	40	.567**0	0.000	Sig.
21	0.166	0.098	Non sig.	41	.456**0	0.000	Sig.
22	0.364**	.0000	Sig.	42	0.420**	0.000	Sig.
23	0.353**	0.000	Sig.	43	.224*0	0.025	Sig.
24	0.384**	0.000	Sig.	44	0.470**	0.000	Sig.

It was found that all paragraphs of the level performance plan for the plan are statistically significant except for paragraphs (1, 21, 33), as they are not significant at the level of significance (0.05), therefore, they were rejected, so that the number of remaining paragraphs of the scale is (37) paragraphs, and given the diversity of the fields of the level of performance level scale The Plans. The researchers extracted the correlation between the vertebra score and the total score for each of the five fields of scale through Pearson Law and Table (6) shows that.

Table 6: Shows the correlation coefficient between the vertebral score and the overall field score

Field	Paragraph number	Simple correlation coefficient	Significant value	Type of indication	Field	Paragraph number	Simple correlation coefficient	Significant value	Type of indication
The physical field	2	0.815**	0.000	Sig.	Skill field	26	0.355**	0.000	Sig.
	3	0.728**	0.000	Sig.		27	0.506**	0.000	Sig.
	4	0.814**	0.000	Sig.		28	0.478**	0.000	Sig.
	5	0.791**	0.000	Sig.		29	0.242*	0.015	Sig.
	6	0.674	0.000	Sig.		30	0.571**	0.000	Sig.
	7	0.154	0.126	Non sig.		31	0.609**	0.000	Sig.
	9	0.204*	0.042	Sig.		32	0.456**	0.000	Sig.
	10	0.310**	0.002	Sig.		34	0.382**	0.000	Sig.
The training field	11	0.573**	0.000	Sig.	Mental and psychological field	35	0.436**	0.000	Sig.
	12	0.465**	0.000	Sig.		36	0.364**	0.000	Sig.
	13	0.518**	0.000	Sig.		37	0.496**	0.000	Sig.
	15	0.411**	0.000	Sig.		38	0.580**	0.000	Sig.
	16	0.588**	0.000	Sig.		39	0.379**	0.000	Sig.
17	0.233*	0.019	Sig.	40		0.564**	0.000	Sig.	
Field of the match	19	0.296**	0.003	Sig.		41	0.420**	0.000	Sig.
	22	0.428**	0.000	Sig.		42	0.283**	0.000	Sig.
	23	0.383**	0.000	Sig.		43	0.380**	0.000	Sig.
	24	0.361**	0.000	Sig.		44	0.361**	0.000	Sig.
	25	0.356**	0.000	Sig.					

It was found that all paragraphs of the plan's level performance scale are statistically significant except for paragraph (7), as they are not significant at the level of significance (0.05), therefore it was rejected, so that the number of remaining paragraphs of the scale is (36) paragraphs.

In order to verify the stability of the level performance plan, the researchers used the following methods:⁹

- **Halftone division method:** The researchers divided the scale paragraphs into two halves in the first half and a half second, and the correlation coefficient was extracted between the sum of the halves of the two halves according to the Pearson method. Brown to correct stability to be total stability (0.553).
- **Alpha Kronbach method:** Is an internal homogeneity of the scale and is one of the most common stabilization coefficients.

Table 7: Shows the coefficient of stability through the Halftone division and Alpha Kronbach

S	Scale	Halftone division		Alpha Kronbach
		Half-scale stability	Total stability	
1	Performance tactical	0.453	0.553	0.575

The final image of the level planner performance scale represents the measure of the level of linear performance of volleyball players applying in five fields, (training, match, skill, mental or psychological). The scale includes the final image of (36) paragraphs. The scale paragraphs were divided into four areas: the physical and its paragraphs (2,3,4,5,6,9,10) training and its paragraphs (11,12,13,15,16,17,), the match and its paragraphs (19,22,23,24,25,26,27,28, 29) skills and his paragraphs (30,31,32,34,35) mental and psychological and his paragraphs (36,37,38,39,40,41,42,43,44).

Table 8: Shows descriptive characteristics of players for the rationing sample

Properties	Performance level tactical
Mean	90.4375
SD	3.25323
Skewness	-0.022
Standard error	0.202
The lowest degree	1
The highest degree	3

Grading standard gauge performance level tactical

The criteria are a set of scores derived by certain statistical methods from the raw scores and used to compare the level of performance of a particular individual with the level of performance of the group to which he belongs and as shown in table (9).

Table 9: Standard scores (Z and t) for a measure of the level of planned performance

Raw grade	Z	t	Raw grade	Z	t
83	-2.29	27.14	91	0.17	51.73
84	-1.98	30.21	92	0.48	54.8
85	-1.67	33.29	93	0.79	57.88
86	-1.36	36.36	94	1.1	60.95
87	-1.06	39.43	95	1.4	64.02
88	-0.75	42.51	96	1.71	67.1
89	-0.44	45.58	97	2.02	70.17
90	-0.13	48.66	98	2.32	73.25

Presentation and determination of the standard levels of a measure of the level of the planned performance of the rationing sample, analyzed and discussed

After it was recognized that the sample is distributed naturally through the coefficient of torsion, in addition to obtaining the standard grades for it, the researchers used the curve of Cous, which is one of the objective methods in estimating grades and it is one of the most common distributions in physical education because many of the characteristics that are measured in this The field is distributed naturally.¹⁰

The researchers chose (6) levels for the scale, and when distributing the standard scores to the approved levels, the standard levels appeared to us, as shown in Table (10).

Table 10: Show the levels and percentage set for it in the normal distribution, the raw and standard scores (Z and t), the number of practices and the percentage of the measure of the level of planned performance

The prescribed percentage in the normal distribution	Raw grade	Z degree limits	t degree limits	Sample number	Percentage
2.14% very good	97.00 and above	2.02 and above	70.17 and above	4	2.77
13.59% Good	96.00 -94.00	1.71 -1.10	67.10 - 60.95	23	15.97
34.13% average	93.00 - 91.00	0.79 - 0.17	57.88 - 51.73	49	34.02

34.13% acceptable	90.00 - 88.00	-0.13 - 0.75	48.66 - 42.51	38	26.38
13.59% weak	87.00 - 84.00	1.06 -1.98	39.43 - 30.21	29	20.13
2.14% is very weak	83.00 - or less	-2.29- or less	27.14- or less	1	0.69

Discussions

The level of the sample as well as the training age for which the study was conducted from advanced volleyball players who are distinguished by high and distinct levels came commensurate with the levels extracted from the application of the scale on them as the results were centered between a level (very good and weak) indicating that the sample is not possessed to a very weak level and this is a sign of submission the sample is based on organized training and good supervision by those in charge of the players, as well as the sample's involvement in an effective and continuous league despite the presence of variation in these levels and this is due to the principle of individual differences and thus the achievement of the sample higher levels in the level (very good) is due to several reasons Including:¹⁰ With regard to the physical side, the players are assigned physical duties commensurate with what they possess, and this is what has made him misleading about the players 'movements and their speed during the game, As for the training aspect.¹¹

The researchers attribute this to the preparation period and the involvement of all players in the planning formations, as well as the time sufficient for the planned numbers within the curriculum Training and conducting experimental matches to evaluate this performance, which led to the repair of mistakes that would weaken the level of tactical performance.¹² As for the match, the researchers attribute the level to which the sample reached due to the fact that the players are committed to the guidance of the coach as well as the leadership It's for the match in a way that is consistent with what it gives of plans commensurate with the level of the players as well as the coaches during the match and the appropriate timing and avoiding the many substitutions that confuse the team's formative formations. As for the skill side,¹³ the researchers attribute that the sample was good at performing the skill under the pressure of the competitor and during the implementation of the planning duty As for the mental and psychological side, the researchers see that the summary of everything mentioned affects this aspect through the spirit of cooperation and the high morale of the team, a sense of belonging to the team, its strength, motivation, lack of fear of the competitor, and a desire to implement the planned duty in training and match.¹⁴

Conclusions

1. A measure of the level performance plan for the volleyball players advanced in the Iraqi league 2018-2019.
2. The level performance plan for the volleyball players was codified, and through it criteria and levels were derived for the scale. The researchers chose the natural distribution method by determining these levels. The natural curve was divided into six levels, which were limited to (3) standard deviations to the right of the arithmetic mean and (3) deviations. Standard to the left of the arithmetic mean.
3. The sample showed good levels in the level of tactical performance of advanced volleyball players.

References

1. García-de-Alcaraz A, Ortega E, Palao JM. Effect of age group on technical–tactical performance profile of the serve in men’s volleyball. *Perceptual and motor skills*. 2016 Oct;123(2):508-25.
2. González-Villora S, Serra-Olivares J, Pastor-Vicedo JC, Da Costa IT. Review of the tactical evaluation tools for youth players, assessing the tactics in team sports: football. *SpringerPlus*. 2015 Dec;4(1):663.
3. Werner P, Thorpe R, Bunker D. Teaching games for understanding: Evolution of a model. *Journal of Physical Education, Recreation & Dance*. 1996 Jan 1;67(1):28-33.
4. McPherson SL. Tactical differences in problem representations and solutions in collegiate varsity and beginner female tennis players. *Research Quarterly for Exercise and Sport*. 1999 Dec 1;70(4):369-84.
5. McPherson SL, Kernodle M. Mapping two new points on the tennis expertise continuum: Tactical skills of adult advanced beginners and entry-level professionals during competition. *Journal of Sports Sciences*. 2007 Jun 1;25(8):945-59.
6. Alsayigh HA, Athab NA, Firas M. The Study of Electrical Activity of the Triceps Brachia Muscle according to the Chemical Changes of Water Loss during Spike in Volleyball. *Journal of Global Pharma Technology*. 2017:57-62.

7. Athab NA, Hussein WR, Ali AA. A Comparative Study for Movement of Sword Fencing Stabbed According to the Technical Programming in the Game of Fencing Wheelchairs Class B. *Indian Journal of Public Health Research & Development*. 2019;10(5):1344-7.
8. Athab NA. An Analytical Study of Cervical Spine Pain According to the Mechanical Indicators of the Administrative Work Staff. *Indian Journal of Public Health Research & Development*. 2019;10(5):1348-54.
9. Al-Hadeethi RF, Almshaakhi NA, Cecilia G. EFFECT DRILLS ON ACCORDING TO THE LAW OF INERTIA IN IMPROVING SOME VARIABLES KINEMATICS AND THE ELECTRICAL ACTIVITY OF MUSCLES OF THE LEGS IN THE EFFECTIVENESS OF THE LONG JUMP. *Ovidius University Annals, Series Physical Education & Sport/Science, Movement & Health*. 2013 Jul 2;13.
10. Abdulaziz AY, Alshawi HN, Mohammed AH. The Effect of the Micro-Teaching Method on the Physiological Level of Testosterone and Learning the Most Important Basic Skills in Fencing. *Journal of Global Pharma Technology*. 2017 Oct 10;9(9):192-5.
11. Alshawi HN, Abdulsada ZA. The relationship of mental fatigue (FLIM) with the level of hormone cortisone and the performance of running (100) meters for young players. *Journal of Global Pharma Technology*. 2017 Oct 10;9(9):196-200.
12. Alshawi HN, Saeed SH. The Relationship of Emotional Arousal with the Level of Acetyl Cholinesterase and Lactic Acid in Young Basketball Players.
13. Marques MC, Van Den Tillaar R, Vescovi JD, González-Badillo JJ. Changes in strength and power performance in elite senior female professional volleyball players during the in-season: a case study. *The Journal of Strength & Conditioning Research*. 2008 Jul 1;22(4):1147-55.
14. Pagnano-Richardson K, Henninger ML. A model for developing and assessing tactical decision-making competency in game play. *Journal of Physical Education, Recreation & Dance*. 2008 Mar 1;79(3):24-9.
15. Flayyih, H. H., Salih, J. I., Rahma, N. G. A., & Mohammed, Y. N. (2020). Earnings Management between the fact of manipulation and credibility of management procedures: a literature review. *Social Science and Humanities Journal*, 1898-1908.
16. khdir Abass, Z., Flayyih, H. H., Salih, J. I., & Rahman, N. G. A. Conceptual Issues in Private information on Lean Accounting: Subject Review.