



The percentage of contribution of the training process scale for coaches to the explosive power of the high smash skill for advanced volleyball players

Teeba Basim Abd¹, Khalil Sattar Mohammed ²

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

DOI:

[https://doi.org/10.37359/JOPE.V38\(SpecialIssue\)2026.2289](https://doi.org/10.37359/JOPE.V38(SpecialIssue)2026.2289)

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

Article history: Received 28/April/2025; Accepted 15/May/2025; Available online 28/ October /2026

Abstract

The purpose of this study was to explain the contribution of the training process level scale to the explosive power of the high spike skill in volleyball and to enhance and standardize a training process scale for volleyball coaches from the perspective of their players. The researcher used the illustrative survey method and correlational analysis as these were suitable for the research problem. The research population was described as the players of the Iraqi Elite Volleyball League in the 2024-2025 season, totaling (13) clubs (Peshmerga, Police, South Gas, Industry, Habbaniyah, Hit, Erbil, Nu'maniyah, Northern Refineries, Dagharah, Muqdadiyah, Nineveh, and Haditha), with a total of (158) players. The researcher picked the sample from the whole population, resulting in a total sample size of (145), representing (91.77%) of the original population. Thirteen players could not be reached or were therefore excluded. The sample was divided into (8) players for a pilot study, illustrating (Industry Club). (50) players were selected to develop and determine the scientific basis for a training process level scale. Subsequently, (62) players were chosen for the standardization sample, and (25) players were selected for the main experimental sample. The findings of the relationship and contribution percentage between the training process level scale and explosive skill power were presented and discussed. The researcher attained many conclusions: the scale demonstrates the level of the coach's training process and to develop performance accurate assessment of the training process demands continuous knowledge of the components of the training situation, identifying training needs, designing the training program, implementing the training and finally evaluating the training program. Explosive power plays a important role in the success of the volleyball spike skill.

Keywords: Percentage Contribution, Training Process Scale, Explosive Power, Volleyball

¹ University of Baghdad, College of Physical Education and Sports Sciences
Tiba.Abd2204m@cope.uobaghdad.edu.iq

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



Introduction

The training process is one of the major elements for the success of the team and its achievement of accomplishments at the local and international levels. Since the coach is its cornerstone he must have the successful features so that he can lead the team to attain its various skill-related, physical, tactical and psychological goals in addition to employing his abilities to reach certain developments that he sees the player needs in order to evaluate his performance. The training process needs many elements comprising material and moral ones. “The success of training relies on the availability of its basic pillars which are (the coach, the athlete and the training process). The leader of the training process is the coach who is responsible for planning and implementation and he must possess the qualifications that help him succeed in preparing the athlete in a comprehensive manner” (Al-Mayahi, 2022, p. 23).

The training process support from many aspects and perhaps the most important of these aspects are the achievements. However many aspects precede this to identify the level of the training process, which is the extent of progress in the functional and physiological aspects of the player and the development of his physical, technical and planning aspects. This relies on the extent of the advantages that the coach possesses in terms of years of experience, information and various training courses that involve all the training aspects mentioned above, in addition to his previous practice of the game or activity the extent of his progression in training and the extent of his implementation of modern methods and tools that would cause to his success at the training level and so on, from the advantages that should be available to the coach. As you know, they are numerous and varied. Moreover, the level of the training process is the main determinant of achieving athletic development, which reaches physical, motor, or technical development. Perhaps the most important characteristic of volleyball training is that there are several variables related to skills that depend on achieving a good skill level. Therefore, from this perspective, the researcher decided to show the level of training from axes that she believes affect the training process and the contribution of these elements to the explosive power of the spiking skill. Explosive power is a important physical capacity for volleyball players. Possessing this ability allows a player to jump, hit the ball, and execute skills effectively. However, a lack of explosive power (or weakness in this ability) will obstruct a player from mastering the spiking technique. Alawi (1994, p. 91) demonstrates that explosive power is one of the most important physical abilities, positively correlated with skill performance. It is the essential factor in developing performance. Hassan (1983, p. 280) defines it as the use of force in the shortest possible time to produce movement.

Material and Tools

The researcher used the descriptive approach with a examine method and correlational analysis as these were suitable for the research problem. The research population was defined as the players of the Iraqi Elite Volleyball League for the 2024-2025 season, totaling (13) clubs (Peshmerga, Police, South Gas, Industry, Habbaniyah, Hit, Erbil, Nu'maniyah, Northern Refineries, Daghara, Muqdadiyah, Nineveh, Haditha), with a total of (158) players. The researcher identified the sample from all members of the population, resulting in a total sample

size of (145), representing (91.77%) of the original population. (13) players could not be reached or were therefore excluded. The sample was divided into (8) players for the pilot study, representing (Industry Club). Subsequently (50) players were sampled to establish and extract the scientific basis for measuring the level of the training process. After that, (62) players were selected for the standardization sample, and (25) were selected for the final sample. A player for the main experimental sample.

Table1. *It shows the details of the community and the sample distribution*

NO	Club name	Count	Sample	Pilot study sample	Construction sample	Sample of Technicians	Main study sample	Excluded players
1	South Gas	12	10	-	3	5	2	2
2	AI-Shorta	12	12	-	1	1	10	-
3	AI-Muqdadiya	12	12	-	6	6	-	-
4	Peshmerga	12	11	-	5	6	-	1
5	North Refineries	12	11	-	1		10	1
6	AI-Habbaniya	12	9	-	5	4	-	3
7	AI-sinaa	12	8	8			-	4
8	Hit	13	11	-	6	5	-	2
9	Erbil	13	13	-	6	7	-	-
10	AI-Daghara	12	12	-	4	8	-	-
11	Haditha	12	12	-	5	4	3	-
12	Nineveh	12	12	-	3	9	-	-
13	AI-Numaniya	12	12	-	5	7	-	-
Total		158	145	8	50	62	25	13
Percentage		%100	%91.77	%5.06	%31.64	%39.24	%15.82	%8.22

Field Research Procedures

Identifying the Areas of the Scale (Level of the Training Process for Coaches):
The researcher suggested and defined (6) areas and gave a theoretical definition for each area. The researcher was keen to guarantee that the areas gave meaning to the phenomenon studied or the construct that is to be measured from the questionnaire Appendix (1). It was presented to a number of experts and specialists in the field of training science, tests, measurement and volleyball numbering (13) experts as they were asked to give their opinions on the validity of the areas and their definitions and the possibility of adding or integrating any area that they see as appropriate and deleting or adjusting the areas that are not suitable. The researcher adopted the chi-square in identifying the research areas under a significance level of (0.05) as shown in Table (2) for the scale of the level of the training process.

Table2. *It shows the agreement of experts and specialists on the domains of the Training Process Level Scale for coaches*

No	Proposed Domains	Agreed	Disagreed	K2 values	Significance Value	Significance
1	Sport Culture	13	0	13	0.000	Significant
2	Knowledge of the Psychological Aspect	13	0	13	0.000	Significant
3	Knowledge of Sport Training	13	0	13	0.000	Significant
4	Knowledge of Sport Teaching and Learning	11	2	6.231	0.013	Significant
5	Knowledge of Sport Analysis and Statistics	13	0	13	0.000	Significant
6	Knowledge of Sports Laws and Regulations	13	0	13	0.000	Significant

Preparing the Items for the (Training Process Level for Coaches) Scale

After defining the domains of the volleyball coach training process level scale the researcher formulated a questionnaire containing selected items for each domain. These items were allocated across the axes (domains), with each item representing the domain in which it was placed. The questionnaire was founded on the theoretical definition of the domain along with the identification of proposed answer alternatives. The scale which consisted of (61) items, is a fundamental step in scale design. The first domain is sports culture (11 items) the second is knowledge of the psychological aspect (10 items) the third is knowledge of sports training (11 items), the fourth is knowledge of sports teaching and learning (10 items), the fifth is knowledge of sports analysis and statistics (9 items), and the sixth is knowledge of sports laws and regulations (10 items). The researcher used a five-point multiple-choice (Likert) scale, utilizing a five-point scale (always, often, etc.). Sometimes, rarely, never) and arranged the scoring scale starting from (5) always, (4) often, (3) sometimes, (2) rarely, (1) never. Accordingly, the researcher regarded as the following aspects when formulating the scale:

Each domain should have its own particular items •

The items in each domain should precisely reflect the theoretical definition of that • domain

.Each item should have only one explicit meaning •

The items should be obvious and easily understood •

Ambiguous or vague phrases should be avoided •

Afterward, the scale's domains were defined and suitable definition was established for each.

The item questionnaire (Appendix 1) was then presented to experts to identify the validity and suitability of the researcher's statements for the research topics and their applicability to the research subject matter.

Pilot Tests

The First Pilot Test of the Coaches' Training Process Level Scale

The transparency of instructions the respondents' understanding of phrases and vocabulary and their knowledge of how to answer the questionnaire are all achieved through scientific steps, one of the most important of which is the pilot test. The researcher administered her first pilot

test of the scale on a sample of (8) players from Al-Sina'a Club outside the primary research sample on (December 12, 2024). The researcher conducted this first pilot test to determine the following:

- Identifying the challenges the researcher faced when utilizing the scale to the sample and constructing it.
- Establishing the extent to which the players could understand the scale as well as the accuracy of its language and wording

Second Exploratory Experiment

The researcher administered her second exploratory experiment on the training process level scale and the skills tests under investigation using the same sample of players from the first exploratory experiment at Al-Sina'a Club on December 16, 2024. The researcher conducted this second exploratory experiment to ascertain the following: -

- The difficulties the researcher encountered when administering the skills tests.
- The appropriate time for conducting the tests.

The Main Experiment in Developing a Training Process Level Scale for Coaches

After completing all the initial steps in improving the training process level scale for coaches based on sound scientific principles the scale comprised (46) items, ready for application to the development sample. On Wednesday, December 18, 2024, a group of (50) volleyball players were administered. After verification and examination all forms were found to be valid. Therefore, the researcher compiled the results in formulation for statistical examination

Psychometric features of the training process level scale for trainers

The test was valid

Validity is one of the important scientific cornerstone in testing and measurement. It refers to "the validity or correctness of the test, i.e., whether it actually measures the purpose it is designed for without measuring another function alongside it" (Mustafa et al., 2006, p. 111).

First: Face validity

This type of validity aim to determine the extent to which the scale depicts the aspects to be measured. This type of validity was attained when the scale items were presented to experts and specialists in the field of training science, testing, measurement and volleyball to demonstrate their validity. In addition the researcher found the discriminatory capacity and internal consistency of the scale under study.

Second: Discriminatory Power

After compiling and processing the scale data the researcher organized the raw scores in ascending order from the lowest score to the highest score selecting (35%) of the highest scores and the same percentage of the lowest scores to id the capacity of the two scales to differentiate between the high-level and low-level groups (Al-Kubaisi, 2010, p. 276). Accordingly, the (T)

statistical test for unpaired equal samples was used. After statistically processing the data it was found that the scale has (power) of discrimination between the high and low groups as the significance values are less than the significance level of (0.05) at a degree of freedom $n_1 + n_2 - 2$. (34) =

Third: Internal consistency of the training process level scale for trainers

The researcher extracted the internal consistency of the two scales using two methods.

- It seems that most of the items on the scale are significant except for items (18, 27, 29, 34, 38), which are not significant under the significance level of (0.05)
- It appears that most of the items in the scale are significant, except for item (15), which is not significant under the significance level of (0.05)

The relationship between a domain score and the total scale score: This includes finding a correlation between the score of each domain and the total scale score for all members of the sample. The aim of this procedure is to identify if a given domain represents the characteristic or phenomenon that the scale measures. Therefore the researcher also used Pearson's correlation coefficient between the total domain score and the total scale score to assess the scale's reliability.

Scale stability

The researcher used the split-half method as “the reliability of the test can be estimated if we know the reliability of its two halves” (Abdul Majeed, 1999, p. 99), and the Spearman-Brown coefficient because the number of items on the scale is even. The researcher also extracted Cronbach's alpha coefficient for the scale, as shown in Table (3). The researcher classified the items on the scale into two halves a first half and a second half and extracted the correlation coefficient between the sum of the scores of the two halves based on Pearson's method.

Table3. *It shows the reliability coefficients of the Training Process Scale for coaches*

Cronbachs Alpha	Split-half method		Scale	No.
	Reliability	Split – half reliability		
0.862	0.746	0.595	Training process level scale for trainees	1

Tests Used in the Research: The Spike Jump from Positions (2, 4) (Shaher, 2023, pp. 48-50)

Main Standardization Experiment

The researcher administered the scale to a standardization sample of (62) players from Sunday, January 12, 2025, to Thursday, January 16, 2025, concerning the level of the training process for coaches. The statements were then arranged non-sequentially to prevent limiting the respondent's focus to one area over another. The questionnaires were collected after a

specified period and then systematically rearranged based on each area in preparation for statistical analysis

Main Experiment

The researcher administered the Explosive Power Scale and Test to the main experimental sample of (25) players from Tuesday, January 28, 2025, to Saturday, February 1, 2025. The questionnaires and test scores were systematically collected in design for statistical analysis.

Standard Scores for the Training Process Level Scale for the Standardization Sample:

Standards are a set of scores derived using particular statistical methods from raw scores. They are used to compare the performance level of an individual with that of the group to which they belong. This is achieved by measuring the deviation of any score from the arithmetic mean of that group. An individual's score on a test (raw score) is meaningless in itself and cannot be contrasted with their score on other tests or scales or with another person's score on the same test or other tests, unless it is transformed into standardized scores. Standards are therefore important because they represent how others performed on the test thus providing a basis for comparison (Hasted & C, 1998; p. 73).

The researcher extracted the standardized scores for the scale by transforming the raw scores to standardized scores (Z-scores and modified T-scores), as shown in Table.(4)

Table 4. It shows the standardized scores (z-scores and t-scores) of the Training Process Level Scale

T-Score	Z- Score	Raw Score	T-Score	Z- Score	Raw Score
51.98	0.198	135	29.66	-2.03448	107
52.78	0.27773	136	31.25	-1.87502	109
53.57	0.35746	137	35.24	-1.47636	114
54.37	0.43719	138	36.03	-1.39663	115
55.17	0.51692	139	37.63	-1.23716	117
55.97	0.59666	140	38.43	-1.15743	118
56.76	0.67639	141	41.61	-0.83851	122
58.36	0.83585	143	42.41	-0.75878	123
59.95	0.99531	145	43.21	-0.67905	124
60.75	1.07504	146	44.01	-0.59931	125
62.35	1.23451	148	44.8	-0.51958	126
64.74	1.4737	151	46.4	-0.36012	128
67.93	1.79263	155	47.2	-0.28039	129
69.52	1.95209	157	47.99	-0.20066	130
70.32	2.03182	158	48.79	-0.12093	131
73.51	2.35075	162	49.59	-0.04119	132
			50.39	0.03854	133

Presentation and Discussion of the Standard Levels for the Training Process Level :Scale for the Standardization Sample

After identifying that the sample is normally distributed using the skewness coefficient and after obtaining its standard scores the researcher used the Gaussian curve. This is an objective method for estimating scores and is one of the predominant distributions in physical education because many of the qualities measured in this field are normally distributed (Marqas, 2001, p. 94). The Gaussian curve consists of (6) standard levels because the standard scores expand to (6) deviations: three to the right of the arithmetic mean and three to the left of the arithmetic mean. This corresponds to six standard scores each associated to one standard level. The standard levels are determined using the normal distribution curve through the following steps:

- ✓Finding the arithmetic mean and standard deviation of the raw scores.
 - ✓We plot the mean of the raw scores against the mean of the standardized g-score (0) or the adjusted t-score.(50)
 - ✓We insert the mean of the raw scores to their standard deviation and to three deviations to the right of the curve.
 - ✓We deduct the standard deviation from the mean of the raw scores and to three deviations to the left of the curve.
 - ✓This gives us (7) standard levels, as shown in Table.(5)
- Alternatively there can be (5) levels by integrating the two levels at the midpoint of the curve. This midpoint would then represent (68.27%) of the standard percentages under the .(5) curve, as shown in Table

Table 5. It shows the standard levels and percentages used in the study

Standard levels	Very good	Good	Average	Acceptable	Weak	Very weak
Standard percentage	%2,14	%13,59	%34,13	%34,13	%13,59	%2,14

Therefore, the researcher selected six levels. When the standardized scores were distributed across the adopted levels, the standard levels were obtained, as shown in Table (6).

Table 6. It shows the levels and their assigned percentages in the normal distribution, as well as raw scores, standardized scores (z-scores and t-scores), number of cases, and percentages for the Training Process Level Scale

Proportional percentage in the normal distribution	Raw score	Standard score limits	Standard score limits	Sample size	Percentage
very %2,14 good	and -158 above	-2.03	-70.32	2	%3.22

good %13,59	146 -157	1.07 -1.95	60.7 -69.52	6	%9.67
Average %34,13	133 -145	0.03 -0.99	50.39 -59.95	20	%32.25
%34,13 Acceptable	120 -132	0.99-- 0.041	40.0 -49.59	23	%37.09
weak %13,59	108 -119	1.87--1.15	31.25 -38.43	10	%16.12
very weak2.14	107	And below-2.03	And below 29.66-	1	%1.61

Table (6) shows that the percentages of standard levels demonstrated by the sample on the research scale when measured on the normal distribution curve were higher than the percentages specified in the normal distribution for some levels extracted by the researcher, and lower than their consistency percentages in the normal distribution.

The researcher detected that the sample results were confined to the following levels: (Very Good, Good, Average, Acceptable, Weak and Very Weak), as follows:

✓Very Good Level: The percentage of players was higher than their consistency percentages in the normal distribution.

Good Level: The percentage of players was lower than their conformity percentages in ✓
.the normal distribution of the research scale

Average Level: The percentage of players was lower than their corresponding percentages ✓
.in the normal distribution of the research scale

Acceptable Level: The percentage of players was higher than their corresponding ✓
.percentages in the normal distribution of the research scale

Weak Level: The percentage of players was lower than their corresponding percentages in ✓
.the normal distribution of the research scale

✓The level is very weak: The percentage of players was lower than the percentage anticipated in the normal distribution in the research scal

Discussion of the results of the standard levels of the training process level scale

The coaches' level was considered appropriate based on the sample's responses to the training process level scale. The researcher characteristics this to the fact that the training process level requires experience, continuous work, study and knowledge throughout the sports season. To guarantee an accurate assessment of the training process's effectiveness and to help players reach their highest levels of achievement, coaches must always possess in-depth theoretical knowledge of all the game's requirements. This aligns with what Mansour and Hashem (2007, p. 76) indicated: that raising the level of achievement and ensuring an accurate assessment of the training process's effectiveness requires continuous knowledge of the elements of the players' physical, technical, tactical, psychological and intellectual training state as well as their responsiveness and fulfillment of the basic duties of the preparation phases which aim to bring the individual to the highest levels of achievement in their specialized activity.

Presenting and discussing the relationship and contribution percentage between the training process level scale and explosive skill power.

To achieve the third aim of the study the researcher presented Pearson's simple correlation coefficient between (training process level and explosive skill power) to explain the relationship between the scale and explosive skill power. Furthermore the researcher used linear regression using the Enter method to measure the contribution percentage of each of these variables to the training process level.

Presenting and discussing the relationship and contribution percentage between the training process level and the spike jump test from positions.(4 ,2)

Table7. Shows the Partial Correlation Coefficient and the Contribution Ratio of the Training Process Level to the Running Spike Jump Test from Positions (2-4)

Variabl es	Mean	Standar d deviatio n	Correlati on coefficient	Contributi on ration	Adjusted contribution on ration	Calculate d F value	Valu e T	Significan ce value
Scale	139.160 0	8.12240	.5330	0.284	2.53	9.121	1.47 7	0.006
Spike jump test	7.8625	1.6559 6					3.02 0	

less than the significance level of (0.05). This verifies the existence of the relationship between them with a contribution percentage of (0.284). The researcher attributes this to the fact that the coach controls most of the variables influencing the training process by following the correct methods and techniques that influence the player's physical and motor abilities as well as technical skills including the smash. Like other skills the smash needed continuous attention and training based on prior data and information about the player, as well as the opponent, identifying the players' strengths and weaknesses, and working to improve the strengths and address the weaknesses. The training that players undergo, especially recently relies on the development of the game in terms of offensive skills. The coach always works to create new exercises depending on what he attends in courses and using software that delivers him with everything new. Physical exercises also play a role. Influence on the intelligence and cognitive achievement of coaches (Phillip & Jack, 2008, p. 111, p. 131) indicates that physical exercises have an effect on the intelligence and cognitive achievement of players and coaches, as physical exercises facilitate the necessary steps for selection, maintain and orientation towards the goal. Performing the smashing skill requires a high use of explosive power of the arms and legs to push off the ground and jump upwards, allowing the player to hit the ball. This is what Susan Jadou' confirmed: "The importance of the explosive power of the arms for the smashing skill comes from the fact that the technique of

the skill requires, directly the explosive power of the arm muscles to perform a strong and effective hit” (Jadou’, 2001, p. 105).

Conclusions

✓A scale was improved to reveal the level of the coach's training process.

✓The level of the training process requires experience, continuous work and knowledge throughout the sports season.

✓To increase the level of achievement and accurately assess the training process, continuous knowledge of the components of the training situation is required.

✓The coach controls most of the variables that impact the training process by following the correct methods and techniques that influence the player in one way or another in terms of physical, technical, and motor skills as well as technical skills including the spiking skill.

✓Explosive power plays important role in the success of the spiking skill in volleyball.

(1) Appendix

The scale in its final form.

Sport culture :The first domain

No.	Items	always	often	sometimes	rarely	never
1	The coach contributes to the development of the player's cultural level.					
2	The coach encourages respect for the opponent, regardless of victory or defeat.					
3	The coach always urges continuous training and hard work instead of anger and fanaticism.					
4	The coach always fosters positive and interconnected relationships among the players					
5	He promotes himself through media outlets.					
6	I feel that the coach's confidence in the substitute player increases his determination.					
7	My coach has the ability to bear all the reasons for failure and defeat.					
8	My coach has the ability to manage the players' emotions, which has a positive impact.					

9	. My coach has interests in other areas that affect his coaching performance.					
---	---	--	--	--	--	--

The Second Domain: Knowledge of the Psychological Aspect

No	Items	always	often	sometimes	rarely	never
10	He possesses the ability to unlock the player's potential during the match.					
11	He has the ability to use strategies that help players overcome psychological pressure during training and matches.					
12	He possesses sufficient knowledge of sports psychology.					
13	He is able to provide continuous psychological support to players by offering feedback and constructive criticism.					
14	He uses various techniques and methods that contribute to strengthening the relationship between players, thus ensuring effective performance on the field.					
15	He has the ability to teach players how to recover from defeats, quickly overcome mistakes, and positively utilize past experiences.					
16	He possesses expertise in identifying players' psychological problems that affect performance and providing them with appropriate support					

The Third Domain: Knowledge of Sports Training

No	Items	always	often	sometimes	rarely	never
17	He uses a variety of compound exercises to improve his players' performance.					
18	He ensures a gradual progression in exercises, from easy to difficult and from simple to complex.					
19	He considers the individual differences between players during training and works to minimize these differences.					
20	He utilizes modern scientific techniques in the training process.					
21	He has the ability to develop playing strategies that suit his team and opponents.					
22	He is able to guide players on how to act appropriately in different situations.					
23	He monitors players' nutrition and ensures they get adequate rest to maintain a healthy lifestyle.					

24	He has the ability to prepare players physically before competitions.					
25	. He designs training programs aimed at improving performance efficiency in all its aspects.					

The Fourth Domain: Knowledge of Sports Teaching and Learning

No	Items	always	often	sometimes	rarely	never
26	He works on strategic planning and adds expertise and knowledge in sports information as a method for generating knowledge.					
27	He has the ability to search for up-to-date information from sources and the internet.					
28	He works to benefit from the experiences and expertise of those working in sports institutions and organizations.					
29	Reading and scientific discussions provide him with cognitive skills.					
30	He has the ability to acquire modern and advanced knowledge to update the training process.					
31	Periodic tests enable him to assess his knowledge in comparison with others.					

The Fifth Domain: Knowledge of Sports Analysis and Statistics

No	Items	always	often	sometimes	rarely	never
32	He works on collecting and analyzing data related to team and player performance to identify strengths and weaknesses.					
33	After each match he analyzes the team's data and performance to improve the team's level and reduce errors.					
34	He is able to analyze the tactical performance of his own team and the opposing team during the match.					
35	He uses past data and statistics to predict the team's future performance and results.					
36	He analyzes the players' performance levels periodically to adjust training programs.					

37	He performs sports analysis and statistical analysis of individual players' performance to provide accurate feedback that allows them to better understand their performance.					
38	Gathers data on competing teams and analyzes their performance for comparison and to develop tactical plans to exploit the weaknesses of the competition.					

The Sixth Domain: Knowledge of Sports Laws and Regulations

No	Items	always	often	sometimes	rarely	never
39	He is familiar with all the official rules of the game.					
40	He knows the rules and regulations concerning the use of equipment such as the ball, net, court dimensions, etc.					
41	He stays up-to-date with the latest updates to the rules of the game issued by the International Federation and local federations.					
42	He is familiar with the regulations concerning doping and ensures that team players adhere to testing procedures and avoid prohibited substances.					
43	He is knowledgeable about the procedures and conditions related to player contracts and transfers, and how to manage relationships with the club and team					
44	He is familiar with the disciplinary regulations governing player conduct during matches and training, and the penalties imposed on violators. 45. He is knowledgeable about the rights of players and his/her duties and responsibilities.					
45	. He is knowledgeable about the rights of players and his/her duties and responsibilities.					



Journal of Physical Education

Volume 38 –Special Issue– 2026 Open Access

P-ISSN: 2073-6452 , E-ISSN: 2707-5729

<https://jcope.uobaghdad.edu.iq>



46	. He/She continuously educates players and assistants about new rules, regulations, and updates, and ensures compliance.					
----	--	--	--	--	--	--



References

- Abdul Majid, M. (1999). Testing, measurement, and evaluation in physical education (1st ed.). Amman, Jordan: Dar Al-Fikr for Printing, Publishing and Distribution.
- Al-Kubaisi, W. (2010). Applied statistics in the social sciences (1st ed.). Beirut, Lebanon: United International Publishing.
- Allawi, M. H. (1994). The science of sports training (3rd ed.). Cairo, Egypt: Dar Al-Maaref.
- Al-Miyahi, F. D. M. (2022). Concepts and applications: Training methods and styles, and organization of training loads (1st ed.). Al-Kut, Iraq: Center for Research, Studies and Publishing, Al-Kut University College.
- Fadil, Asmaa Hikmet, and Khalil Setar Mohammed. "Constructing and Rationing A Test for the Skill of Receiving the Serve From Above in Volleyball for Third-Year Students in the Faculty of Physical Education and Sports Sciences." *Revista iberoamericana de psicología del ejercicio y el deporte* 17.3 (2022): 140-142.
- Hassan, S. A. (1983). Introduction to sports training. Mosul, Iraq: University of Mosul Press.
- Jadou, S. (2001). Contribution of some physical fitness components and anthropometric measurements to the accuracy of the volleyball spike skill (Doctoral dissertation, College of Physical Education and Sport Sciences, University of Baghdad, Iraq).
- Jasem Z K, Mohammed K S, Dawood M S, Liayth Abd Alkreem K. The Psychological Well-being and Its Relationship with the Functional Creativity of Female Gymnastics' Trainers. *Ann Appl Sport Sci* 2024; 12 (2)URL: <http://aassjournal.com/article-1-1369-en.html>
- Mahmood Abdullah S, Mohamed Abdul_Razzaq L, Hisham Ahmed A, Setar Mohammed K, Salman Dawood M. Designing and Standardizing a Test to Measure Motor Creativity Abilities of the Arm and Leg with the Assistance of Artificial Intelligence for Specialized School Male Athletes. *Ann Appl Sport Sci* 2025; 13 (1)URL: <http://aassjournal.com/article-1-1446-en.html>
- Mansour, Z. A. H. (2007). Football toward achievement. Amman, Jordan: Dar Al-Fikr.
- Morqus, A. H. (2001). Construction and standardization of a psychological burnout scale for handball players (Doctoral dissertation, College of Physical Education and Sport Sciences, University of Baghdad, Iraq).
- Mustafa, S., et al. (2006). Measurement and diagnosis in education. Amman, Jordan: Dar Yafa for Publishing and Distribution.
- Phillip, Tomporowski., Catherine, Davis., Patricia, Miller & Jack, Naglieri. (2008). Exercise and Children's Intelligence, Cognition, and Academic Achievement, *Educational Psychology Review*, 20 (2).
- Setar Mohammed , K., Aed Shamkhi, D., & Jabar Mohammed, M. (2023). Determining the grades and standard levels of some mental skills as an indicator for the selection of young volleyball players. *SPORT TK-EuroAmerican Journal of Sport Sciences*, 12, 28. <https://doi.org/10.6018/spork.581681>