

A STUDY OF SOME ASPECTS OF ATTENTION AND THEIR RELATIONSHIP WITH THE SPIKING FOR JUNIOR PLAYERS OF KURDISTAN REGION IN VOLLEYBALL

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Abstract

The volleyball game is a games that needs a lot of time and perseverance to be learned, therefore preparing volleyball player requires more effort to get him to the advanced levels.

The research aims to:

1. getting to know some aspects of attention (intensity, concentration and diversion of attention) of Juniors Volleyball players in clubs of Kurdistan Region .
2. getting to know the skills of spiking in volley ball for Juniors Volleyball players in clubs of Kurdistan Region .
3. getting to know the relationship of some attention aspects (intensity, concentration and diversion of attention) with the skill of spiking in volleyball of Juniors Volleyball players in clubs of Kurdistan Region .

Through the presentation of the results, analyzing and discussion them the researcher has reached to the following:

1. There is a significant correlation relationship between attention intensity and the two tests of diagonal and linear spiking accuracy in volleyball .
2. There is a moral correlation relationship between attention concentration and the two tests of diagonal and linear spiking accuracy in volleyball.
3. There is significant correlation relationship between attention diversion and the two tests of diagonal and linear spiking accuracy in volleyball.

Keywords: Relationship. Spiking. Junior. Kurdistan. Volleyball

1. INTRODUCTION

The right preparation based on the scientific basis is the basic foundation which the modern countries depend on it in order to achieve Superiority in the field of sports through a remarkable achievements in various kind of sports, thanks to reliance on scientific methods and techniques in sport training such as regular and systematized training based on scientific principles which led to the improvement of physiological and physical variables that were the basis which enabled the athlete to reach the highest level in the sports leagues.

Choosing the right individual for any the type of sport activity is the first step to get to the level of the tournament, so it turned specialists in different kind of sports activities in to determine the necessary specifications for each activity separately which helps choosing the athlete according to a specific scientific foundations in order to reach high levels of sports.

The volleyball game is a games that needs a lot of time and perseverance to be learned, therefore preparing volleyball player requires more effort to get him to the advanced levels, it was necessary to use methods and tools that raise the motivation of the learner towards learning and innovation through some interesting and entertaining workouts and suitable for the nature of the game until the coach succeed in achieving his goals, the game experts believe that the reasons that prevent players from mastering the basic skills of volleyball is doing what is Inappropriate to their interests and preferences and their willingness, therefore training must be appropriate for their interest and urging them to master the game, so the player needs a continuous training and motivation and concentrate his attention during the training units, there are many requirements to accomplish sports achievement including, physical and skill specifications and psychological abilities, there are many manifestations of psychological abilities, one of them is the attention and one of the most important aspects of the attention is attention diversion and attention concentration which they have an active role in executing the spiking skill in volleyball.

The importance of the research is studying the attention concentration and attention diversion and their relationship with spiking in volleyball.

The volleyball game is one of the most popular games in the world, as it witnessed a great improvement in performance through the increased interest by trainers and researchers in the field of improving the comprehensive training programs, directing the individual to the type of physical activity which is suitable for his preparations and ability increases the possibility to reach the high levels of sport, and also contributes in the same direction the amount of accurate knowledge of the effectiveness of the training on the growth of these preparations through the psychological aspects of the player that is no less important than sports skills and physical abilities, it is important that coach should be interested in it too.

The researcher has noted that there is a clear lack of performance of spiking through follow-up matches, the performance is not in the required level as a result of weakness in some aspects of attention that require concentration and diversion in the attention on the body and the arm of the player who is doing the spiking in volleyball to determine the direction of the ball and minimize the opportunity of blocking it, so the researcher directed all of his interest in this problem through the psychological aspects that are not less importance than the other aspects, note that there are many researches dealt with the physical and functional aspects while the psychological aspect did not have the same interest in research, study and interpretation.

The research aims to:

1. getting to know some aspects of attention (intensity, concentration and diversion of attention) of Juniors Volleyball players in clubs of Kurdistan Region .
2. getting to know the skills of spiking in volley ball for Juniors Volleyball players in clubs of Kurdistan Region .
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research procedures:

research methodology:

Descriptive method has been used in a way of the matrix correlation for its suitability with the problem of the search.

research sample:

The research sample was chosen intentionally, which was 42 players of volleyball representing (4) Clubs in the Kurdistan Region in the sports season 2014-2015, while (6) players were chosen as a sample for the pilot study

Research devices and tools:

the researcher used (Arabic and foreign references, personal interviews, Referendum form for experts about the identifying the most important psychological indicators, data sheet to collect the tests results being used in the search, Internet, (4) volleyballs, light and audio diversion device and (4) stopwatches).

research procedures

Determine the most important attention aspects: -

In order to identify the most important aspects of attention it has been showed a questionnaire Form to a number of experts and specialists in Volleyball, psychology and tests and measurement, Then all the data were collected and took the aspects that have achieved ratio (7 5%) or above as you can see in table (1) so the aspects are (intensity, concentration and diversion of attention).

Table (1)Shows the most important aspects of the tests by experts and specialists

	aspects of attention	Percentages	Candidate aspects
1	Distribution of attention	60%	
2	attention concentration	80%	✓
3	The stability of attention	30%	
4	the intensity of attention	9 0%	✓
5	Picking of Attention	10%	
6	Attention diversion	90%	✓
7	Size of attention	20%	
8	Attention distraction	20%	

Borden- Onvemuv test to measure the attention(.Ahmed Mohammed Khater and Ali Fahmi elbieg: 1978. 492) :

It is a test for athletes used to measure five aspects of attention, which are, (intensity, concentration, distribution, diversion and stability) and is used to measure the level of attention of the players and when choosing a junior player at the training centers, the scale is a form contains (31) lines of arabic digits, each line contains (40) digits and thus the test has (1240) digits and the digits in each line are in groups placed in standardized way, each of which consists of (3-5) digits in a different arrangement to ensure that it would not be saved by the player

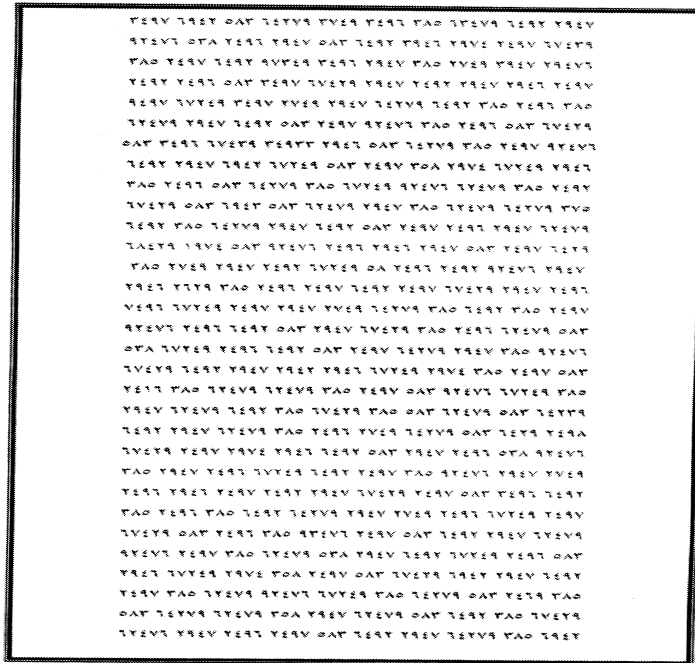


figure (1) Attention intensity test

Attention Intensity test:

- Purpose: to measure the attention intensity of junior player.
- Tools: scale form, stopwatch, and a pen.
- Procedure: When word (start) is being heard the player starts to take the test at the same time the stop watch starts ticking, the player searches and writes-off of number (97), line after line and from left to right.
- Conditions: test time is one minute, and when the word (stop) is being heard the player puts a mark next to the reached digits.
- Calculating the results: extracting the following :-

attention intensity: $A \times E$

A : Overall size of the seen part of test (the amount of digits that have been seen) from the beginning till the STOP word .

S : The number of digits that should be written off in the seen part.

B : The number of errors in general (the number of digits that did not write-off plus the number of digits that mistakenly written off).

E : Work equation

$$\frac{(S - B) \times 100}{S} = E$$

Attention concentration Test :

- Purpose: to measure the attention concentration of the junior player.

- Tools: light and audio distraction device, scale form of attention, stopwatch and a pen.
- Procedure: the same system that used in measuring the attention intensity, but when the start signal is given, the distraction device gives a flash of light each (5 seconds) and a sound each second (60 time per minute) , The device is placed one meter away from the player with his eyes level
- Conditions: When the word (stop)is being heard the player puts a mark at the end of written off digits and the distraction device turns off automatically.
- Calculating the results:
 - the results of measuring the attention intensity in quiet case = **U1**
 - the results of measuring the attention intensity in distraction case = **U2** - Concentration = the difference between the quiet case and the distraction case.

Attention concentration is $B = U1 - U2$

Attention diversion test:

- Purpose: To measure the attention diversion of junior player.
- Tools: form for measuring attention, stopwatch and a pen
- procedure: When the word (start)is being heard the player starts to search and write-off number (83).
- When the command (switch) is being said the player puts a vertical line and starts writing-off number (49) from where the player ended without stopping.
- When the command (switch) is being said the player puts a vertical line and starts writing-off number (83).
- When the command (switch) is being said the player puts a vertical line and starts writing-off number (49).
- When the command (stop) is being said player puts a vertical line.
- Conditions: the command (switch) is given every (30) seconds, the test time is two minutes.
- Calculating the results:
 - first intensity : the results in the first 30 seconds.
 - Second intensity: the results in second 30 seconds.
 - Third intensity: the results in the third 30 seconds.
 - Fourth intensity: the result in the fourth 30 seconds.
- Then extracting the following values:
 - N** : attention diversion
 - M** : The difference between the first and second results.
 - H** : The difference between the second and third results
 - C** : The difference between the third and fourth results.

$$M + H + C$$

$$\text{attention diversion} = N \frac{\quad}{3}$$

3

Spiking skills tests in Volleyball :

First / Diagonal spiking accuracy(Muhamad. Subhi Hassanein & Hamdi Abdel Moneim:1988:202)

The purpose of the test: Measuring the accuracy of the diagonal spiking.

Tools: Volleyball, Volleyball field, two mattresses; one of them placed inside corner of the volleyball field 5cm away from the side and the end lines.

Procedure: The player spikes the ball from the center 4, after the coach **Passes** the ball from the third center using the long diagonal pass The player does 10 attempts to hit the back mattress, and then another 10 attempts to hit the front mattress, only the correct attempts would be counted in all the 20 attempts according to the rules of registration.

scores:

- 4 points for each correct spike when the ball falls on the mattress.
- 3 points for each correct spike when the ball falls on the lined area.
- 2 points for each correct spike when the ball falls on area A or B.
- 1Point for each correct spike when the ball falls on area c.

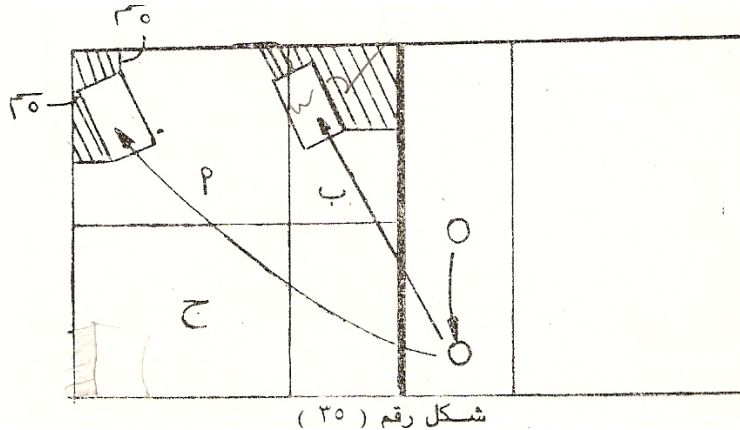


Figure (2) Diagonal spiking accuracy test

Second / Linear spiking accuracy(Mohamed Sobhi Hassanein Hamdi Abdel Moneim:1988:203)

The purpose of the test: Measuring the accuracy of spiking in straight directions.

Tools: Volleyball, Volleyball field , 2 mattresses one of them placed in back of the field 5 cm away the side and end lines.

Procedure:

The player does the spiking from center 4, after the coach passes the ball from the center 3, the player does 10 attempts to hit the back mattress and another 10 attempts to hit the front mattress.

scores :

- 4 points for each correct spike when the ball falls on the mattress.
- 3 points for each correct spike when the ball falls on the lined area.
- 2 points for each correct spike when the ball falls on area A or B.
- 1Point for each correct spike when the ball falls on area c

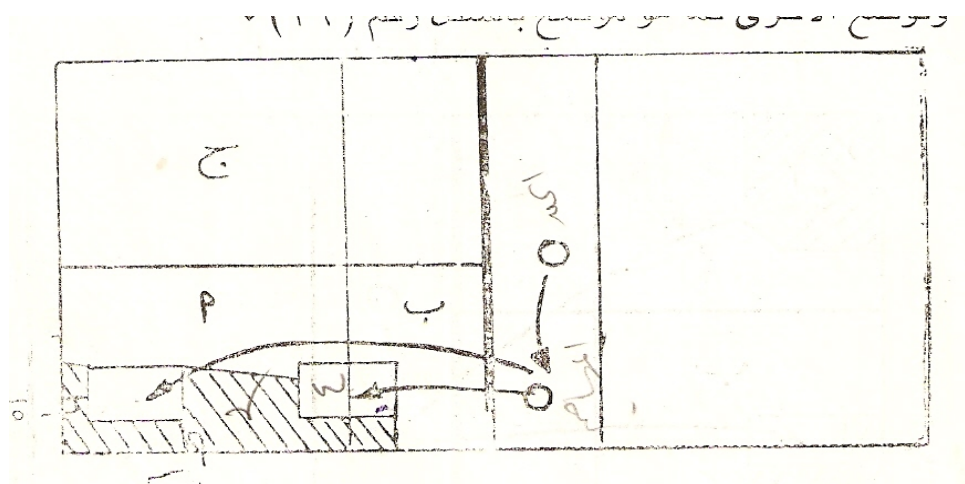


Figure (3) Linear spiking accuracy test

The scientific foundation of the psychological and skill indicators:

Test Validity :

The Researcher Calculated the index-validity of the test that is equal to the root of the reliability factor as can be seen in the table (2) the correlation coefficient of the test is between (0.949 To 0.959) Indicating that the test is valid in measuring the aspect

Test Reliability :

the Researcher used the method of testing and re-testing, the test was on a sample of (6) junior players of volleyball from outside the research sample then re-testing after 4 days and then calculating the correlation coefficient between the results of the two tests as shown in the table (2) correlation coefficient shows that the test has a high degree of reliability.

Table (2)Shows the validity and reliability of the skill and psychological indicators

	Variables	Stability	index-validity
1	Attention intensity	0.920	0.959
2	Attention Diversion	0.914	0.956
3	Attention concentration	0.912	0.954
4	Diagonal spiking accuracy Test	0.902	0.949
5	Linear spiking accuracy test	0.904	0.950

Test objectivity :

After the test has been shown to a group of experts and specialists in the field of sport psychology and volleyball, testing and measurement they confirmed that the test is easy to be understood by the research sample, the Borden - Onvemuv test for attention intensity and concentration, in addition to the two tests the diagonal and the linear spiking accuracy have good objectivity as indicated by (Ibrahim Ahmed 1980) " the test with a good objectivity is the test that keeps the doubts and the lack of approval away from the test takers when applied"(Ibrahim Ahmed Salama:1980:79)

The main Experiment:

After the completing the scientific basis for all the research variables, the main experiment was performed on the main sample which was (42) junior player of volleyball representing (4) Clubs in the Kurdistan Region in the sports season 2014-2015.

Statistical methods:

Statistical methods were treated by SPSS and the following has been extracted (means, standard deviation, percentage, simple correlation coefficient of Pearson).

2. RESULTS AND. DISCUSSION :

Presentation of the attention aspects and skill of spiking:

Table (3) Shows the means and standard deviations of the attention aspects and the skill of spiking in volleyball

	Aspects	Arithmetic mean	Median	Standard Deviation	skewness factor
1	Attention intensity	529.023	528.500	6.508	0.241
2	Attention diversion	115.666	115	3.653	0.570
3	Attention concentration	631.976	632	3.502	- 0.020
4	Diagonal spiking accuracy test	58.476	60	4.949	- 0.923
5	Linear spiking accuracy test	59.095	59	4.011	0.071

Through the table (3) ,the arithmetic mean and standard deviations for the aspects in this research, the arithmetic mean value of attention intensity is (529.023) with a standard deviation (6.508) as the arithmetic mean value of attention diversion (115.666) with standard deviation (3.653) and the arithmetic mean value of the attention concentration (631.976) with standard deviation (3.502) while the arithmetic mean value of the diagonal spiking accuracy test (58.476) with a standard deviation (4.949) and the arithmetic mean value of the linear spiking accuracy test is(59.095) with a standard deviation (4.011).

Correlation between the attention aspects and the skill of spiking in volleyball:

The Researcher Extracted the relationship between the aspects of attention (intensity, diversion and concentration of attention) with the tests of spiking skill in volleyball through the use of simple correlation coefficient of Pearson , the researcher has found that all aspects of attention have significant relationship with the spiking skill in volleyball represented by the two tests of linear spiking accuracy and diagonal spiking accuracy, because all calculated values of (R) were greater than the tabulated value of (R) which is (.304) at freedom degree (40) and the level of significance 0.05, as shown in table (4).

Table (4) shows The correlation coefficient between the aspects of attention and spiking skill in volleyball

Variables	Calculated Diagonal spiking accuracy(R)	Significance	Calculated linear spiking accuracy (R)	Significance
Attention intensity	0.832	Moral	0.840	Moral
Attention diversion	0.791	Moral	0.811	Moral
Attention concentration	0.827	Moral	0.825	Moral

3. DISCUSSING THE RESULTS:

From table (4) Its clear to us that the value of the correlation coefficient between the intensity of attention and diagonal spiking accuracy is (0.832) which it is greater than the tabular value of correlation coefficient which is (0.304) when the degree of freedom is (40) with significance level of 0.05, which indicates that there is a significant correlation relationship , while the value the correlation coefficient between the intensity of attention and the accuracy of linear spiking (0.840) which is greater than the tabular value of the correlation coefficient which is (0.304) when the degree of freedom is (40) and the significance level is 0.05, which indicates that there is significant correlation relationship too, this result that the researcher has reached that there is significance relationship between the intensity of attention and the two tests of diagonal spiking accuracy and the linear spiking accuracy in volleyball because performing any sport activities must be accompanied by the attention , but with varying degrees of attention sometimes the attention is very sharp and at other times the attention is very weak, this result compatibles with (Abdul Hamid Ahmad 1976) "during the activity, the player can direct the attention because of the activity of the nervous system, which leads to accuracy and when the player is not in his activity case the nervous system is inactive which leads to the lack of (Abdul Hamid Ahmed:1976:228) As it can be seen from the table also, The value of the correlation coefficient between the concentration of attention and diagonal spiking accuracy is (0.827) which is greater than the tabular value of the correlation coefficient which is (0.304) when the degree of freedom (40) and the significance level is 0.05, which indicates the presence of significant correlation , while the value of the correlation coefficient between the concentration of attention and linear spiking accuracy is (0.825), which it is greater than the tabular value of the correlation coefficient which is (0.304) at a degree of freedom (40) and the level of significance is 0.05, which indicates the presence of a significant correlation too.

The researcher believes that limiting the attention on a certain thing for certain period of time leads to discontinuity with what surrounding the player to do his move , the volleyball player focuses his attention on the direction of the ball that coming from the other player who prepares it to him and how he would respond with a diagonal spiking or linear spiking , toward the competitive team, and that would happen if he discontinues from what surrounding him, and this result agrees with what has mentioned by (Wajieh Mahjoub 1985), "Gathering all the ideas and the operations in one point to serve the skilled work to be achieved."(Wajih Mahjoub:1985:44) , and the result is agrees with what pointed out by (Abul Ela Ahmed and Ahmed Omar, 1986) that "concentrating the attention affects at the accuracy, clarity and mastering the technical aspects of the movement skill"(Abu Ela Ahmed Abdel-Fattah and Ahmed Omar Ruby:1986:74) ⁽³⁾ .

And also agrees with what has been reached by (Mohammad Hassan Allawi, 1979), "the attention concentration has important role in the field of

sports as it a significant factor in the level of performance skills"(Mohammad Hassan Allawi:1979:74) .

The result is also agrees with what has been referred by (Walid waedalla 1991), "The concentration of attention is a significant factor in the level of performance skills(Walid Ali waadalaah:1991:1959) .

As also shown in Table (4) the value of the correlation coefficient between attention diversion and diagonal spiking accuracy is (0.791) which is greater than the value of the tabular correlation coefficient which is (0.304) when the degree of freedom (40) and the level of significance is (0.05), which indicates the existence of the significant correlation relationship while the value of the correlation coefficient between attention diversion and of the linear spiking accuracy is (0.811) which is greater than the value of the tabular correlation coefficient which is (0.304) when the degree of freedom (40) and the level of significance is (0.05) which shows the existence of significant correlation relationship too, this is because the ability of the volleyball player to direct the attention quickly from one activity to another activity, the result that reached by the researcher agrees with what has been

confirmed by (Muhammad Lutfi Muhammed 1975) "that the player has the ability to direct the attention quickly from one activity to another activity with the same intensity and the ability of attention diversion is vary from player to another." (Muhammad Lutfi Muhammed:1975:29)·

and also agrees with what referred by (Mohamed Sobhi,and Hamdi Abdel Moneim 1988), "The attention is important variable and crucial in the match , so concentrating at suitable rates and diverting the attention quickly

to a different parts of the field and according to the requirements of the performance in the match considered as important indicators of the player who has the ambition to achieve the highest levels. "(Mohammed Subhi Hassanein & Hamdi Abdel Moneim1997:391).

4. CONCLUSION :

Through the presentation of the results, analyzing and discussion them the researcher has reached to the following:

1. There is a significant correlation relationship between attention intensity and the two tests of diagonal and linear spiking accuracy in volleyball .
2. There is a moral correlation relationship between attention concentration and the two tests of diagonal and linear spiking accuracy in volleyball.
3. There is significant correlation relationship between attention diversion and the two tests of diagonal and linear spiking accuracy in volleyball .

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