

Some Manifestations of Attention According to the HRP System and its Relationship to the Accuracy of the Shooting Performance from the Free Throw in Basketball for Junior Players

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Abstract

The purpose of this paper is to identifying the degree of some aspects of attention (attention volume, attention focus, attention distribution) according to the HRP system and its relationship to the accuracy of performance from the free throw in basketball for junior players. The researchers used the descriptive approach due to its suitability to the nature of the problem, the objectives and the overall study as the research sample consisted of 12 players from the Adhamiya Sports Club, the Cubs category, for ages under (14) years for the year 2022/2023, where they were chosen in a deliberate way from the community of origin represented by the Baghdad clubs who have cubs players participating in the Iraqi Basketball Association tournaments .The researchers used the attention battery test on the HRP system, which includes attention volume, attention focus, and attention distribution. As well as the shooting test from the free throw in basketball. The results of the study showed that there was a positive correlation between the degree of attention concentration and the volume of attention with the skill of shooting from the free throw in basketball, and an inverse correlation between the distribution of attention and shooting from the free throw in basketball for junior players.

Keywords: manifestations of attention, HRP system, shooting from the free throw in basketball.

Introduction:

Mental skills are very important in the sports field, especially in games that directly affect the performance of the skill in the outcome of the match. Focusing on performance or distracting him, or whether the player has external problems that affect the level of the player on the field, these are all psychological factors that cause confusion to the player in performance during competitions, and the coach must be aware of them and keep them away from the player

In order to complete the training process, mental processes must be developed and completed, especially those that have an important role in achievement and performance. (Aziz and Wanas, 2021). In addition, that one of the important mental skills is attention in all its aspects, he defined attention as "the state of mind and feeling focusing on some parts in the kinetic field." (Saleh, 1972) . Also knows attention (Adaptation - mental movement together for a thing, it is a movement adaptation because attention is accompanied by reactions to stop all movements that are appropriate to the situation, and it is a mental adaptation in which there is a choice and a stop at the

same time.(Metwally, and Ibrahim). And that one of the most important aspects of attention is the focus of attention, the volume of attention and the distribution of attention, where the focus of attention is one of the very important things in sports skills and technical performance, as it directly affects the performance of the players and the extent of their ability to manage matches well and maintain their ability to score as well as their physical capabilities through the distribution Physical and skillful effort at the time of the matches, as well as with regard to the volume of attention, as the volume of attention is important during the matches, as the player can pay attention to the ball, the stadium, the coach, fellow players, as well as the competing players, and many other things, where the focus of attention is defined as the amount of material or elements that can be perceived at one time with one degree of resolution (Hammad, and Abbas Ali. 2012) .

The more the individual is able to perceive the largest possible amount of materials or their elements, the greater the attention lexicon, and the less his awareness of the quantity of the elements, the smaller the attention volume (Lewis, 1981), as for the

distribution of attention, it is a hindrance and leads to the player's distance from performance, and the training staff must make these things few and far between for the players during the matches, as the distribution of attention is considered an obstacle for the players, and among the basic factors for the distribution of attention are physical factors such as fatigue and physical stress, as well as psychological factors such as thinking in a specific problem outside the game and social and material factors and others. "Basketball is one of the team games that requires high physical, skill and mental effort as a result of the fast offensive and defensive play of the game, which requires accuracy in implementing skills, including the skill of shooting, in which players seek to achieve the highest number of points during the match." (Abdullah and Saeed, 2021), "The movements and skills of basketball include many situations that require the player to be physically, mentally and skillfully efficient to fully implement the movements in accordance with the mechanical conditions." (Shteeb and Juma, 2020, page 114) Here, the importance of research in studying and knowing the extent of the relationship between each aspect of attention with shooting from the free throw in basketball and benefiting from these aspects for players and coaches to come out with the highest points in matches.

Some previous studies have dealt with this field, such as the study (Jassem. 2016) where the study aimed to identify the correlation between manifestations of attention and the accuracy of the performance of offensive skills in football. The study was conducted on the College of Physical Education football team, Al-Qadisiyah University in 2016-2017 on the stadiums of the College of Physical Education, University of Al-Qadisiyah. The researcher found a positive correlation between attention focus and handling. Football and an inverse relationship between the focus of attention and dribbling. As well as a study (Rashid, and Adnan Hadi. 2009), the study aimed to identify the manifestations of attention and the accuracy of penalty kick performance in football. The researchers used the descriptive approach in the survey method. The research sample consisted of Qaraqosh Sports Club players for the 2007/2008 season, numbering 18 players. The most prominent findings of the study is the existence of a strong correlation between attention intensity and stability. Attention with the penalty kick test. There is also an inverse correlation between attention focus and attention distribution and the penalty kick test. There is no significant relationship between the attention

transfer test and the penalty kick test. As well as a study (Abass, & Mehves, 2022) the aim of the research is to design a measuring device to test the attention volume, to prepare skill exercises, and to identify the effect of the skill exercises designed in developing the attention volume of the young boxers. Conclusions were reached, the most important of which is the contribution of the tests to achieving the purpose of measuring the attention size of the young boxers, and the skill exercises of boxing contributed to the development of the attention size of the young boxers.

As well as a study (Mohamed. 2016). The study aimed to identify the relationship between the size, focus and field of attention with the accuracy of aiming at the air rifle for the young female class and concluded that the concentration of attention has a direct relationship with the accuracy of aiming, and vice versa with regard to the size and field of attention, the relationship is inverse between it and the accuracy of aiming with the air rifle.

Research problem:

Research problem lies in the fact that some players have high skills during training and matches but it is low to score points in the competitions, where the researchers studied whether the manifestations of attention are the main reason for the difficulty of performing the shooting from the free throw and shooting points or not?

Research objective:

- identifying the degree of some aspects of attention (attention volume, attention focus, attention distribution) according to the HRP system and its relationship to the accuracy of performance from the free throw in basketball for junior players

Research methodology and field procedures:

Research Methodology:

The problem is the basis by which the method chosen by the researchers is determined to reach the results, "and because the phenomena can be studied through a scientific method that is appropriate with the nature of the problem to be researched." (Al-Kazemi. 2012). Therefore, the researchers used the descriptive approach due to its suitability to the nature of the problem

Community and sample research:

The research sample was chosen deliberately, which represents the Cubs basketball players of the Adhamiya Sports Club, who numbered (12) players, as the sample represents 20% of the original

community represented by the Baghdad clubs that have cub players, the number is (5) clubs, each club has (12) players.

Table (1) shows the percentage of the research sample

Research community	Research sample	Sample type	Number	Percentage
60	12	Exploratory	5	%8.34
		Main	12	%20

The researchers chose the research variables for their importance and direct impact on the results of the matches by following up the technical performance of the junior players in the tournaments and through the experience of the researchers being in the specialty of training in basketball in some sports clubs and specialized schools, and the researchers used the HRP cognitive system to perform the attention test battery and the shooting test of free throw (Allawi, and Radwan. 1987)

Researchers used the appropriate tools to conduct the study:

- HRP cognitive system.
- A Lenovo personal computer.
- Legal basketball court.
- Basketballs number (2).
- Colored signs.
- Adhesive tape in different colors.
- Metric tape measure.
- Whistle.
- Electronic stopwatch.
- Registration form.

Tests used:

1- Testing the HRP system to measure the attention battery: (Abdulghani, 2023)

The purpose of the test: to measure the attention manifestations of the players

Test conditions:

- The laboratory should be in a quiet room away from noise in order to give accurate results
- The laboratory should not be tired, stressed, under stress, or suffer from physical pain
- The test must be carried out without anyone's intervention or assistance
- The tester should be willing to perform the test seriously

Test details:

The first task is to determine the direction by the appearance of the word (Direction), where the tester depends on the direction of the arrow, if it is to the right or to the left, and it changes constantly and quickly, so the tester must focus on it.

The second task is to determine the location of the arrow using the word (Location), as the laboratory must ignore the direction of the arrow and focus on the location of the arrow, whether it is to the right or the left.

When performing the test, the tester must focus on the task that appears at the top of the screen, and on the left, focus on the directions, whether it is the location of the arrow or the direction of the arrow, as shown in Figure (1).



Figure (1) shows the focus of attention test according to the HRP system

2- Shooting test behind the free throw line 10 throws

- The purpose of the test: to measure the shooting accuracy of the free throw.
- The necessary equipment: 2 basketballs, a legal basketball court.
- Performance description: The player stands in his position behind the free throw line and shoots in the form of two groups, each group of 5 throws, as shown in Figure (2).

- Score Calculation: Scores are calculated as follows:
 - One point is calculated and recorded for the player for each successful free throw (in which the ball is included).
 - No score is awarded to the player when the ball does not enter the basket (a failed throw).
 - The player's score equals the total points he gets in the throws 10.

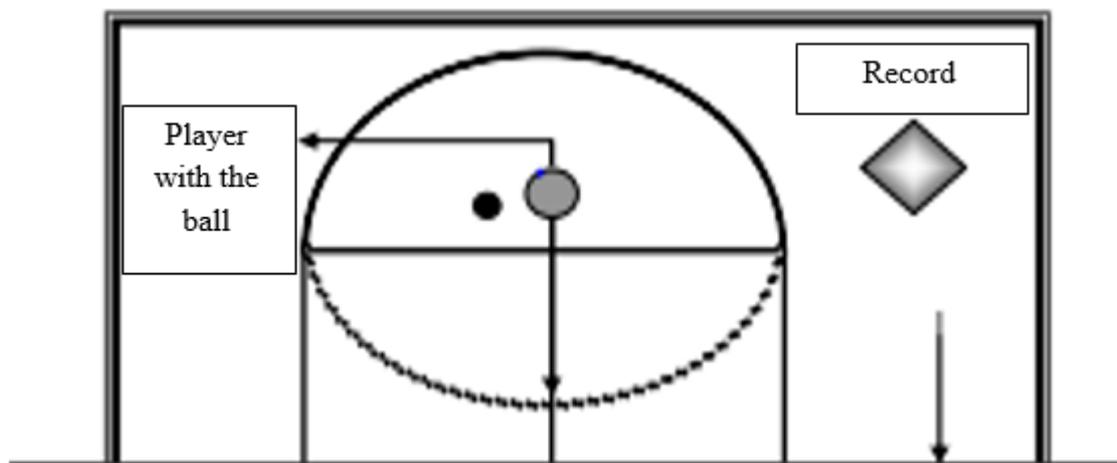


Figure 2: Free throw shooting accuracy test

The two researchers conducted the exploratory experiment on the cubs of the specialized school with basketball, and it consisted of (5) players, as it is necessary for scientific research to know the validity of the devices and tools used, the auxiliary work team, the appropriate time for conducting tests, and the appropriateness of the tests for the sample, as the exploratory experience is known "It is a mini-experiment of the main experiment, the purpose of which is either to reveal scientific facts or test work to

reveal the obstacles and negatives that face the application of the main experiment, or for the purpose of training some of the cadres who help to work." (Kazem. 2015) . He also defined it (Al-Kadhimi, 2012). It is an exploration of the circumstances surrounding the phenomenon that the researcher wishes to study. As for the main experiment, the two researchers conducted tests on the sample, which was represented by the cubs of Al-Adhamiya Club, on Friday corresponding to (03-02-2023). On the hall of

the Adhamiya Sports Club, as the researchers conducted tests on the HRP system to measure the manifestations of attention among the players, which numbered (12) players, after which the skill test was conducted for shooting from the free throw in basketball.

Statistical methods: The search data was processed through the Statistical Package for the Social Sciences (SPSS) (Hashem. 2009) (Kareem, A., & Abdulhadi, S. 2021) , (Mahmoud, M., & Hadi, A. 2020).

Results and discussion:

1- The relationship between the amount of attention and the accuracy of shooting from the free throw:

Table (2) shows the arithmetic mean, standard deviation, simple Pearson correlation coefficient, and the value of the significance level between the variable of attention volume and the shooting skill of the free throw

Variables	Sample number	Arithmetic mean	Standard deviation	Simple Pearson correlation coefficient	Level sig	Type sig
Attention volume	12	45.35	10.49	0.687	0.014	sig
Shooting skill Free throw		5.08	1.78			

It appears in Table (2) the value of the arithmetic mean for the attention volume and its value is (45.35) and its standard deviation is (10.49) and the arithmetic mean value for the variable of shooting accuracy from the free throw is (5.08) with a standard deviation of (1.78) and the Pearson simple correlation rate between

attention volume and the throw test The free throw is (0.687) and the level of error is (0.014), which indicates that the correlation is highly significant between the volume of attention and the accuracy of the free throw.

2- The relationship between the concentration of attention and the accuracy of shooting from the free throw:

Table (3) shows the arithmetic mean, standard deviation, simple Pearson correlation coefficient, and the level of significance between the attention focus variable and the shooting accuracy of the free throw

Variables	Sample number	Arithmetic mean	Standard deviation	Simple Pearson correlation coefficient	Level sig	Type sig
Attention volume	12	42.45	8.04	0.640	0.025	sig
Shooting skill Free throw		5.08	1.78			

Table (3) shows the value of the arithmetic mean for attention focus and its value is (42.45) and its standard deviation is (8.04) and the arithmetic mean value for the variable of shooting accuracy from the free throw is (5.08) with a standard deviation of (1.78) and the Pearson simple correlation rate between attention focus and the throw test The free throw is (0.640) and

the level of error is (0.025), which indicates that there is a significant correlation between the concentration of attention and the accuracy of the free throw.

3- The relationship between the distribution of attention and the accuracy of shooting from the free throw:

Table (4) shows the arithmetic mean, standard deviation, simple Pearson correlation coefficient, and the level of significance between the attention distribution variable and the shooting accuracy of the free throw

Variables	Sample number	Arithmetic mean	Standard deviation	Simple Pearson correlation coefficient	Level sig	Type sig
Attention volume	12	18.13	5.66	0.456	0.136	Non sig
Shooting skill Free throw		5.08	1.78			

It appears in Table (4) the value of the arithmetic mean for attention distribution and its value is (18.13) and its standard deviation is (5.66) and the arithmetic mean value for the variable of shooting accuracy from the free throw is (5.08) with a standard deviation of (1.78) and the Pearson simple correlation rate between attention distribution and the throw test The free throw is (0.456) and the level of error is (0.136), which indicates that the correlation is not significant between the distribution of attention and the accuracy of the free throw.

Discuss the results:

It is clear from the tables above that there is a strong significant correlation between each of the volume of attention and concentration of attention with the shooting skill of the free throw and vice versa with regard to the distribution of attention with the shooting skill of the free throw, where the results showed an inverse correlation between the two variables, and the researcher attributes that the reason for the significant correlation with the attention volume And the skill of shooting from the free throw because the player must be aware and attentive to many things during the performance of the throw in terms of placing the foot behind the line and the position of the body when performing and holding the ball and bending the joints participating in the performance of the throw as well as the traveler of the throw and the height of the basket are all important matters that the player must be performing The free throw is aware of it and pays attention to all these matters. Therefore, the amount of attention is one of the important things for the players when performing the free throw how much did he mention (Odeh, 2007). The amount of attention is one of the important aspects of the players, as it is the basis for the success of applying technical and tactical skills and the size of attention it is in the sense of selective

attention that reflects the ability of the athlete to focus on the thing he is performing, and that the athlete who loses focus, even if by a small percentage, this negatively affects and prevents the achievement of the maximum possible performance (Al-Damad. 2000). And that the amount of attention plays a key role in the shooting process for the player, as it enhances the player's self-confidence when performing the free throw, and this positively affects the outcome of the match by shooting the largest number of points through the performance of the free throw. "Because during the performance, many and changing things happen that require the player to continuously observe and be vigilant in order to be able to overcome these situations." (Hara, 1990).

The correlation coefficient of Pearson correlation between concentration of attention and the skill of peaceful shooting in basketball for the junior players of the Adhamiya Sports Club is a significant relationship, and the researchers attribute this correlation to the fact that the concentration of attention is a very important factor in shooting performance and that without focusing attention the player cannot score any point during the matches through Peaceful shooting, and this is confirmed (Dweiger. 2007) "Focusing attention is one of the important psychological skills for players, as it is the basis for the success of any learning, training or competition process in its various forms, and the distribution of attention or lack of focus negatively affects performance and the result." Likewise, it is clear from the above tables that the relationship of attention focus and shooting from the free throw is a direct relationship (Salary, 1997) to "The athlete who has a high concentration of attention is the one who can match his physical and mental attitudes well." As the basketball player needs to control the tension

inside the court for the purpose of increasing concentration when performing peaceful and other skills.

The researchers believe that the loss of focus of attention is one of the main factors in poor performance, which directly affects the failure to achieve victory and approaching defeat, and that the implementation and mastery of kinetic skills as well as the high physical level is not only completed by training on them, but also linked to the individual's ability to focus attention and the ability to control his kinetic skills. (Mahmoud .2005) indicates that a loss of focus can distort and spoil performance as a whole, and affect results. Thus, focus is a decisive factor, especially in cases of noise and ideas that are not related to the performance situation. Focusing attention has a major role in the player's performance and movements inside the field with or without a ball, because of his sense of his position inside the field and the focus on the game plan that the coach gives to the players. If the player loses focus on the course of the match, he will be distracted and unable to complete the game plan for the team he points out (Mahjoob . 2001). Focusing attention is a higher mental process that includes several processes and depends on attention and focus to enhance the interpretation of information and clarify it to choose the appropriate kinetic program. The above tables also show that the relationship is inverse, and there is no significant correlation between the distribution of attention and the targeting of the free throw. The researcher attributes the reason for this to the fact that the free throw is accurate and has no room for error due to the small diameter of the throat, as well as the distance of the throw in relation to the throat, as it needs high concentration and no room for distribution and dimensions. The player's attention towards other matters such as the audience, the referee, the coach, and others must be highly focused on shooting only. The reason for distributing attention is sometimes due to anxiety and fear of missing the free throw, especially in decisive matches, as well as some physical matters such as muscle fatigue, physical exhaustion, difficulty breathing, etc. and other things. Distribute the attention of the players when performing the free throw as mentioned (Suleiman, 1988) quoting (Mateev) However, attention decreases with increasing fatigue. Also, players should be taught to focus and not distribute when performing any skill "The players deal with the continuous changes in the external and internal environments, and this requires them to pay attention and control in more than one direction, in addition to teaching them when to shift

their attention from one stimulus to another." (Mohamed and Zwaen, , 2021).

Conclusions and Recommendations:

Conclusions:

- There is a high significant correlation between the amount of attention and the skill of shooting from the free throw for the Cubs basketball players.
- There is a significant correlation between attention focus and shooting skill from the free throw for the Cubs basketball players.
- There is no correlation between the distribution of attention and the shooting skill of the free throw for the junior basketball players.

Recommendations:

- Paying attention to the exercises related to the manifestations of attention, as they lead to an increase in the level of attention, which helps to increase the level of skillful performance.
- Paying attention to psychological tests when selecting cubs, especially manifestations of attention, and giving them the same importance as physical and skill tests.
- Carrying out similar studies on other skills in basketball and other aspects of attention.
- Carrying out similar studies on other games that need attention directly and affect the performance and results of matches.

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