

# The Impact of the Proposed Training Curriculum of the Cognitive Training to Develop some Offensive Skills for Basketball Players

# Article Info

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#### **ABSTRACT**

Identify the impact of the cognitive training curriculum to develop some offensive skill of basketball the researcher proposes that the proposed training curriculum of the cognitive training has positive impact to develop some offensive skills for basketball in research variables. The researcher uses the experimental methods for a sample by designing of the individual group and chooses the research sample intentionally. The sample of research includes (15 players) of Dajla Club for young under 17-19 years in Maysan. He uses the pre-tests and post-tests by using the cognitive training curriculum. Besides he uses the exploratory experiment he uses the appropriate statistical methods to treat the data for the requirement of the study.

**Keywords**: Cognitive training, offensive skills, basketball, training curriculum.

#### 1. Introduction

The scientific development in the athletic field is not by chance but it comes for serious, continues and scientific search. The development makes the sport walks the progress in all life fields and achieves the wanted aims by the sharing work for the coaches in the athletic clubs (Al-Nimiah, 2004). The basketball has obvious wonderful development around the world to be the mass game. It has hurry harmony and continuous movements between defense and offense, for it has great mix of article performance and mental process which are having the important role in the skillful performance in all athletic activities .The cognitive training is one of the important processes which are success the application of different skills and to put the solution to the individual and compound skills.

The passing, receiving, dribbling and scoring are basic skills requite the development through the mental processes. The observance of the competitor movements during the match requires the ability of the cognitive training which leads to increase the predication. The research importance is putting the exercises of the cognitive training to develop some basic skills of basketball to increase the correct article performance. Cognitive training is considered one of the ancient ideas which are appeared at the lasts of the 19th C. and one of the modern subjects nowadays. It is entered to be twin with the athletic training to describe the psychological methods which are aim at the change and control in the individual behavior either cognitive or physical. Cognitive training represents the basic part of the preparation the player to enter to the athletic competition.

It includes the movement conception and the sequences of situations, skills, aims, and dimensions of competition which are followed by coaches(Muhmmed AlArabi Shimon &Abdul NabiAl Jama, 1996). Cognitive training in mentioned under different definitions, Al-Azawi (2002) according to (Schmidt, 2000) mentioned that the cognitive training refers to the mental resumption by the performer by movements and without. In addition, Shimon and Al-jamal (Ibid) according to (Beckm and Fuhrer, 1992) mentioned that the cognitive training deals with the learning, improving, developing the movement and affirming it by concentrated process without the real performance of it. However, cognitive training is defined by (Shimon 2007) as the repletion of the dynamic skill conception is learnt before for raising the skill. (Mahjob, 2000) states that the cognitive training is conception of the performance without appearing action which is produces the great positive action for real learning of skill.

The researcher notices that the cognitive training id the programmed processes depend on the mental processes greatly with the economy in physical effort to get the high level of skillful performance. Skill (kinetic performance art) in any game it refers to the person ability to perform the special movement which include in the game successfully and precisely (Alawi & Radwian, 1999). Also it means the ability to perform the movement speedily and accuracy (Hussian, 1999). So others have mentioned that the player should perform these movements in all situations which are required in the game to get the best results with the economy in effort (Hassinean & Abdul Mineam, 1988). Passing is one of the offensive kinetic skill to transfer the ball to the different directions in the field (yosif & Najim, 1988).

The mentioned skill has the important role in the training of players in all levels. It is performed either relying on or in air. The first situation of passing the movement is performed from the stability and taking step. While the second situation the passing is performed by jumping from jogging. The team has the good movements of passing is the winner and has the chance to win. Moreover, dribbling in basketball, the attacking player can use dribbling to transfer to different directions in field with having the ball by caroming the ball between the hand and the earth (Ibid), dribbling helps the attacking player to protect himself from walking foul and the rule of eight minutes foul.

Shooting is also one of the basic and important principle skills, where the result of basketball match is identify by the successful shootings which are marked in the basket of competitor team (AlAtar, 2004). Therefore the player should master all basic skills to mark shooting (Abdul Allah,1986:9). The coaches should pay attention to this skill for all ages for its positive impact on the mach result. The main purpose of shooting is to mark goals more than the opposite team (Samakah, 1999). Al–Ani (2002) mentioned that according to Jagger (1977), Cousi (1970) and Cooper (1975), the shooting is performed from near, middle and of distances of backset. The aim of present study is to identify the scope of the impact of the educational physical cognitive aids in learning some basic skills of football to know the best times for using these aides to limit the most affected aid in leaning.

# 2. Methodology

The researcher uses the experimental method of the individual group to solve the research problem.

# 2.1 Subject:

The sample of research is chosen intentionally; the sample is players of Dajla club for young of basketball and consists of 15 players.

# 2.2 The Scientific basis for Person Test:

To find the relationship between two exploratory Experiments ( $1^{st}$  and  $2^{nd}$ ) the  $1^{st}$  experiment is done in 2013-7-1 and the  $2^{nd}$  experiment is done 2013-7-8, this refers to stability of test.

# **2.2.1** *Stability*:

The researcher finds the coefficient of stability to the exploratory experiment group of sample which is consists of (10) players by using Coefficient of relation rule.

#### **2.2.2** *Validity*:

The researcher used two kinds of validity to for focusing on the test validity, there are:

- 1. Content validity by using the questionnaire forms which are distributed on the specialists to choose the appropriate tests.
- 2. Objective validity by the test stability.

# 2.2.3 Objective:

McGhee mentioned according to (Kreabit, 1989) that objective means the degree which is getting for results collection by the same test for the same group.

(Table 1) Shows the coefficient of stability, validity and objective of the basic chosen skills

N	The chosen basic skills	Stability	Validity	Objective
1	Thoracic passing	84.0%	96.0%	82.0%
2	Rebound passing	82.0%	91.0%	86.0%
3	High Dribbling	86.0%	94.0%	88.0%
4	Low Dribbling	81.0%	94.0%	85.0%
5	Shooting of free line	74.0%	87.0%	96.0%
6	Peaceful shooting	75.0%	87.0%	94.0%

#### 2.3 Measurements:

# 2.3.1 The thoracic passing test

- The purpose of test: Measuring the player ability to perform the passing receive it and check the correct performance for the special technique (Al-Mindaalawi *et al.*, 1989).
- The essential devices: Smooth earth, flat wall, legal basketball and camera of video.

# - The performance description:

- 1-the player stops behind drawing line on earth which is distance (5 feet) and catches the ball in his hand.
- 2- The player has right to performed just one thoracic passing of training before starting.
- 3-when the player hears the sign of starting, he/she passes the ball of the wall by his hands and receives it(direct thoracic passing)
- 4- the player performs (5)attempts (direct thoracic passing)
- 5- the photographer takes the photos for the player performance.
- **Scoring:** The specialist assesses the player performance of five attempts and accounts the best player performance according to the prepared form to assess the performance, the degree of (1-10).

# **2.3.2** The rebound passing test (Hassan, 2004).

- **-The purpose of test:** Measuring the player ability to perform the passing and receive it and measuring the correct performance of skill.
- **-The essential devices**: flat earth, legal basketball, video camera and colleague (student)

# -The performance description

- 1-the player stops in front his colleague and catches the ball.
- 2- the player has right to perform only one attempt of training before starting.
- 3-when the player hears the sign of starting, the player passes the ball (rebound passing)to his/her colleague then the player receives the ball from the colleague and the passing is rebound too. The player continues to perform the passing for 5 attempts.
- 5- the photographer takes the photos for the player performance for 5 attempts.
- -Scoring: the specialist assesses the player performance for five attempts (passing and receiving) ,accounts to the player the best attempt and according to the prepared form for assessing the player performance the degree of (1-10).

## 2.3.3 The high dribbling test

- **-The purpose of test**: Measuring the student ability to perform the high dribbling skill and checking the special techniques of the mentioned skill (Yosif, 2000).
- **-The essential devices**: Field basketball ,legal basketball measuring tape, chalks ,siren and video camera.
- **-Procurers:** Drawing the parallel lines, the distance between them is (10 M) presenting the starting point (A) and ending point (B).

## -The performance description

- 1-the player stops and catches the ball by his hand behind the A point which is distance from B (10 M).
- 2- The player has just one attempt of training before starting.
- 3-When the player hears the sign of starting he runs quickly with high dribbling of ball by his arm control to arrive at (B) point.
- 4- the player has just one attempt.
- 5- The photographer takes photos for player performance from the start to the end.
- **-Scoring:** the specialist assesses the player performance according to the prepared form of assessment the degree is give (1-10).

# 2.3.4 The low dribbling test

- -The purpose of test: Measuring the player ability to perform the low dribbling skill and checking the special technique for the mentioned skill (Hassin, 2004).
- -The essential devices: Basketball field, legal basketball, siren and video camera.

#### -The performance description:

- 1- The player catches the ball by two hands and takes the correct position of the skill performance.
- 2- When the player hears the sign of starting, he starts the ball dribbling at the position and controls by his arm.
- 3- The photographer takes the photos for player per.

**-Scoring:** The specialist counts the degree by watching player performance and according to the prepared form to assess the performance, the degree is given of (1-10).

# 2.3.5 The peaceful shooting test

- **-The purpose of the Test**: Measuring the player ability of the right performance for the peaceful shoot (Hmoodat & Jasim, 1987).
- -The essential devices: legal basketball field, legal basketball and video camera.

# -The performance description:

- 1- The player stops and catches the ball by his hand at the middle position of the field.
- 2- When the player hears the sign starting, he performs the ball dribbling toward the goal to perform the peaceful passing skill.
- 3- Each player has right to perform just one attempt to training before starting
- 4- The photographer takes the photos for player performance.
- **-Scoring:** The specialist checks the player performance to three attempts of peaceful shooting. The degree is given for the best attempt of player performance and it is accounted by the prepared form to assess the performance. The degree is accounted from the starting of first step to the end. The degree is given of (1-10).

#### 2.3.6 The Foul Shoot Test

- **-The purpose of the Test**: measuring the skill of Foul shoot by line of foul shoot (Majeed, 1989).
- -The essential devices: basketball and backset goal.
- **--The performance description**: the shoots are done behind the line of foul shoot, the player has 20 attempts. The player uses the group way to performing 4 shoots .The shoots should be as a group each group has 5 shoots. Each player has right to perform 20 shoots , these shoots should be behind line of foul shooting.

**Assessment:** one degree is marked for each successful shoot(inter the ball into basket(the high limit of the degree is 20 Degrees.

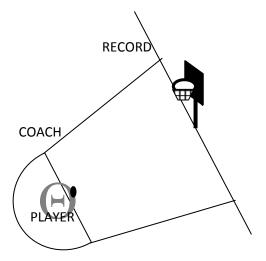


Figure 1. Shows foul shoot

# 2.4 Exploratory Experiment:

- **2.4.1** The first Exploratory Experiment: It was conducted in 18.6.2013 on a group of players, From Maysan arts club. Totaling (6) players. There has been applying the exercise of explosive power, distinctive speed and offensive and defensive continuity. The purpose is:
- 1- Finding the scientific basis for the test.
- 2- Asserting the suitability of tools used in the test.
- 3-The efficiently of the assistant staff.
- 4- To consider on the obstacles facing the conduct the basic experience.
- **2.4.2** The second Exploratory Experiment: It was conducted in 25-6-2013 on the same group of Maysan sport club after even days of the first Exploratory, at the hall of Martyr Sa'ad Khalaf swaif.
- **2.5** The conditions of test have been fixed like place, time and assistant team so as to achieve conditions that lead to accurate results. When conducting posterior tests.
- **2.5.1** *Training curriculum proposed for Mental Training*: The curriculum was applied and accompanied with skill training for the research sample. It consisted of 12 training units, distributed to 4 weeks, 3 training units per a week. They take sequential days in the week. Time unit was 50 Minutes. The curriculum has started in 2.7.2013 and ended in 29-7-2013. The training curriculum focused on the following themes:
- **1- Breath control drills**. The audio recording used, so that the players can focus on regular deep breath . from the bottom of diaphragm to reach the muscle mental relaxation.
- **2- Drills of self-relaxation**. It helps to get rid of cramps and thus reflected on the speed of the restoration of healing after muscular exertion. It is performed by using some exercises include catching small neurological muscular group and keeps, this process for several seconds, then relax, then transfer to another group. The process repeats itself to scan most of the groups. It helps the player in configuration the exercises of mental visualization and focus on performance.
- **3- The mental visualization drills**. It helps to increase the players' awareness and works on improving the skill performance to repeat the skill mentally more than once. With the involvement of senses used in skill performance and thus increased the learning process to increase the impact of learning through repetition. It reflects positively on the players' performance in competition, and this is confirmed by the theory of Thorndike –Transmission of learning impact can occur. From a previous position to a new position on the basis of existence of identical elements in both situations. Also say the transmission can happen when the similarly between the previous position and the new position becomes greater.

- **4- The fourth**: special cases Drills: the video recording used so that the player can identify the strength and weakness in skills' performance. For special cases as well as the most important features of the accurate performance of the skill and the factors affecting them. The directives, discussions of past mistakes and how to process them, have a role in improving the performance accuracy of the research sample (Kyoon,2000).
- **2.6** *Post-test*: The research has conducted the post test on the sample in 30.7.2013. The conditions were similar to pretest conditions in term of time, place and other specifications which help to affect new results.
- **2.7** *Statistical analysis*: The software system (spss.v19) has been used to process the data of the study.

#### 3. Results and Discussion

A table showing the calculation circles and arithmetic means of the differences between the two tests and standard deviations and deviations of differences between pre and post tests and the value of (V) calculated and statistical significance of the results.

(Table 2) Shows a significant difference between pretest and post-test for all research viable

Variables	Pre –Test		Post-test		V	T value		Referential
	M	SD	M	SD		Measured	Schedule	Level
The	4.637	0.360	6.180	0.424	1.543	13.296	1.77	Abstract
thoracic								
Passing								
The	5.589	0.356	6.670	0.542	1.081	5.903	1.77	Abstract
rebound								
Passing								
The high	5.120	0.449	5.489	0.963	0.369	3.094	1.77	Abstract
dribbling								
The low	5.795	1.660	6.404	1.030	0.609	2.416	1.77	Abstract
dribbling								
The	6.375	0.923	7.008	1.411	0.733	4.463	1.77	Abstract
peaceful								
shooting								
Foul	15.66	0.583	16.482	1.062	0.822	3.357	1.77	Abstract
shooting								

The arithmetic means appeared in chest delivering in pretest (4.637) and standard deviation (0.360). While the arithmetic mean in the post-test appeared (6.180) and standard deviation (0.424). The arithmetic means of the difference between the two tests (1.543) The delivering of rebound passing, the arithmetic mean in pretest appeared (5.589) and standard deviation (0.356).

The deviation mean in post-test (6.670), the standard deviation (0.542), the arithmetic mean of the difference between two was (1.081). The arithmetic mean in high dribbling in pre-test (5.120), the standard deviation (0.963), and arithmetic means of the difference between the two tests was (3.094). The low dribbling, the arithmetic means appeared deviation (1.660), the arithmetic means in post-test (6.404), the standard deviation (1.030). The arithmetic means of the difference between the two tests was (0.609). The second scoring, the arithmetic mean appeared in pre-test (6.275), the deviation standard was (0.923). The arithmetic mean in post-test is (7.008) the standard deviation is (1.411), the arithmetic mean in difference between the two tests is (0.733). The scoring behind of foul pass line appeared, the arithmetic mean in post-test (15.66), the standard deviation is (0.583). The arithmetic in post-test is (16-48).

The standard deviation is (1.062). The arithmetic mean in difference between the two tests is (0.822). In processing the results statically through the test (V), all results appeared significant differences in favor of post-test. The values of calculated (V) is greatest than the tabulated (V), equals (1.77). The free degree 13, level (0.05). This shows that the differences are significant and for the favor of post-test. The results ensured that the mental training curriculum has a clear impact, through choosing variant exercises for each player and using mental training and skill exercises in training units; especially chest delivery landing corner attack through the mental perception of the players, which leads to strengthen the nervous system path.

The last will lead to the right concentration and mental perception, through mental framing exercises away from negative effects of emotion and lack of concentration in the moment of execution of thoracic handling and counter attack. This was leaded to the evaluation of performance of players sample through developing their mental capability, which is consistent with what Ibrahim confirmed (2009), there is evaluation in player sample in high and low dribbling. The researcher attributed that evaluation to the mental training which helped him to perform the skill in a perfect way without neurons excitability. Due to that, there has been a sound impact on highlow dribbling in the sample, hence, the mental training is the best types of exercises. The researcher believes that the mental training associated with skill training help in developing movement and its time, where in extrusive correlation between the mental level in basketball players and evolution occurring in the level of performance and the extent of high-low in the implementing of various games, and this referred to by Al Arabi (Ibid, 2009)".

The importance of the mental training lies increasing the predictability and the opportunity to perform future events, not only perception, but can expect any future occasion. The table shows that there is evaluation I peaceful scoring and scoring and scoring behind the foul shooting line. The researcher attributes that evolution to the mental curriculum when helps the players to understand, recognize and master the skill, through the players' awareness that the final outcome of the entering that ball in the opponent basket and achieve winning.

The mental training helped in developing the skillful and physical sides. Khyoun (ibid, 2002) has referred that, the mental training cannot be separated from skill and physical training. The researcher believes that the mental training is not substitute than skill training within the training process, but complementary it because the backset player needs to evaluate the mental perception by mental training exercises, especially peaceful scoring and scoring behind the foul shoot line, by looking into the specific point in basketball loop to help him to focus his attention on the right scoring, and by rescoring kinetic skill mentally and this is consistent with what Al-Arabi mentions that "in fact we rode every movement in skill and make a symbolic signed by performing a lot of mental movement, we seek the movement to be mechanic and easily retrieval (ibid, 2001).

#### 4. Conclusion

In the light of the results of the research/ The researcher came out to the following conclusions: The cognitive curriculum used by the researcher in training the research sample, contributed in the results level of post-tests that pretest in basic skills represented by thoracic handling and counter handling high dribbling, law dribbling and right scoring. In addition, the multiplicity of cognitive training (VCR, Voice recording, TV) has helped in improving the kinetic perception of performance, which helped in achieving better skill level in players sample. Moreover, the cognitive training contributed in relaxation and developing the mental perception through understanding the best mental training exercises.

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# Appendix (1) Shows training unit for cognitive training accompanied to the skillful performance

<b>N</b> T	performance							
N	Educational aim	Time	Exercises	Notes				
1	The physical part	10M.						
2	The general physical heat	5M.	Trotting for heating all parts of body					
3	The private physical heat	5M.	The general exercises which are served the					
			applied side of the skill					
4	Educational Part	10 M.	Explain and identify the skill of cognitive					
			training in the training process and its role					
			to develop the player's skillful performance					
			in different offensive basic skills especially					
			the peaceful shooting and shooting behind					
			line of foul shoot by the conception process					
			and care to affirm the kinetic skills for the					
			player of basketball					
5	Applied Side	25M	-Demanding from players to auto neural					
			andmuscular relaxation					
			-Trying to imagine the player performance					
			of thoracic passing.					
			-Trying to imagine the shooting hand of					
			foul shoot (left and right), and repeating it					
			with breathing.					
			-Trying to imagine the rebound passing					
			performance of player and linking it with					
			the film video of basketball match and					
			repeating it with breathing.					
			-Trying to imagine the correct kinetic from					
			relaxation situation of peaceful shooting					
			from all sides of basketball goal and					
			repeating it with breathing.					
			-emphasizing to use the basic skills of					
			basketball such as the high and low					
			dribbling for achieving the goals and					
			changing the match results and quotation					
			with some examples to arrive the player to					
			the faith with the role of the cognitive					
			training by focusing and economy in effort.					
			-recovering the correct and important points					
			in the execution process by player, and					
			emphasizing on enough time for ending the					
			tension and for completed emphasis.					
6	The ending part	5M.	Small game where the players are					
			distributed one opposite one, the first					
			player tries to touch the left colleague's feet					
			by his left feet the second player tries to					
			escape from his colleague and keeping on					
			his preparedness position.					