

The effect of competitive exercises training on the development of physical abilities and offensive skills in basketball young players

Researchers:

Dr. Shukri Shaker Faleh

Dr. Thamer Kazem Arheem

Prof. Dr. Haider Abdul Razzaq Kazem

University of Basra / College of Physical Education and Sports Sciences / Republic of Iraq

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Abstract: The research purpose is clarifying what is the role of speed and the right training method, to serve the proper skills. The paper underlines the scientific research in the selection of the method of successful training, and this may contribute to the upgrading of the game of basketball for young basketball players.

Through the experience of the humble researchers as former players, coaches and unions, we have noticed that the lack of progress of our teams in most local and international forums is their lack of planning. this is because the players insufficient speed or weakness in the physical condition and all factors do not help in obtaining good performances.

The research objectives were:

- 1 - Putting the exercises and applied in the manner of training the game (competitions) to develop some of the physical abilities and offensive skills in the basketball youth.
- 2 - to identify the impact of the method of training the game (competitions) in the development of some of the physical abilities and skill offensive basketball youth.

The following was concluded:

- 1 - The method of training the game (competitions) had an impact on the development of physical abilities and skill offensive basketball young players in the study sample-
- 2 - training for physical qualities in teams gives good results for the development of each individual attribute and better than individual training.

1.1 Introduction and Importance of Research:

The world witnessed a great renaissance of the sports aspect, which is of great importance in the progress of their society in health, economically and politically, and therefore they are interested in building sports cities, not just stadiums, selecting advanced sports equipment and building the basic base to promote any individual or multi-player game in terms of education, training and follow-up of their players. And their needs to continue to progress and achieve the desired results.

Because basketball one of games that have its audience and practitioners and the games that bring pleasure because competition is not easy, the developed world also provide the requirements of this game to progress

towards the best in terms of training and the development of sports means and methods appropriate, and started from different ages (young, youth and older people) because each age group has its own specificity in training and its physical, skill and planning needs.

The stage of youth, the second phase of sports training, is necessary for players to obtain speed and accuracy in skill performance, in addition to sufficient flexibility to perform and increase the other physical abilities. These factors help the success of the tactical side in the final stage - the age-old - The players have a strong physical and professional side and only a schematic side in performance.

Hence the importance of research in clarifying what is the role of speed and the right training method to serve the skilled side. Here comes the science and scientific research in choosing the method of successful training in it and thus we may contribute to the development of basketball game for young people when trying this training

1-2 Research problem:

The game of basketball in which the factor of speed and competition is an imperative for success in performance, especially the performance of skill, and in the case that the players do not have or lack of this attribute we note the slow performance of skill or weakness in physical abilities.

Through the experience of the humble researchers as former players, coaches and unions, we have noticed that the lack of progress of our teams in most local and international forums is their lack of planning, which is came because the players did not have sufficient speed in the performance skill or weakness in the physical side and all factors do not help in the success of the performance of the plan . Therefore, we decided to lay the foundation stone in addressing this weakness during the youth stage, they must implement the required planning side. This is done by using appropriate training for this important function.

1-3 Research Objectives:

1 - Putting exercises and applied in the manner of training the game (competitions) to develop some of the physical abilities, and the offensive skill basketball youth.

2- recognize the effect of the game training method (competitions) in the development of some physical abilities, and the offensive skill basketball youth.

3 - Identification of the results of the differences between the tests before and after the two groups (control and experimental) in some of the physical abilities and skill offensive basketball youth.

4 - Identification of the results of differences after tests between the control groups and experimental in some of the physical abilities and skill offensive basketball youth.

Information is repeating below

2. Research methodology and field procedures:

2.1 Research methodology: the experimental approach was used with the design of an appropriate control and experimental groups in solving the research problem and achieving its objectives.

2. Research community and sample: The research community was deviated from the players of Al-Minaa Sports Club for the youth basketball, which is (12) players a basic group of the team and against them were divided into two samples (control and experimental) the number of each group (6) players. Each group is equal to 50% of the original population. The sample is homogenized within the two groups, and the groups are equal in the research variables as shown in Table (1).

Table (1)

The homogeneity of the two samples (control and experimental) and their equivalence in the search variables

| Search variables | Control group | | | The experimental group | | | Calculated value (t) | Level of significance |
|------------------------------------|---------------|------|--------------------------|------------------------|------|--------------------------|----------------------|-----------------------|
| | M- | +_S | Coefficient of variation | M- | +_S | Coefficient of variation | | |
| age | 16.2 | 0.32 | 1.975 | 16.3 | 0.31 | 1.901 | 502% | Not significant |
| Training age (Year) | 5.3 | 0.2 | 3.77 | 5.2 | 0.3 | 5.76 | 0.62 | Not significant |
| Weight (kg) | 68.5 | 1.2 | 1.75 | 68.4 | 1.3 | 1.9 | 0.12 | Not significant |
| Length (cm) | 173.3 | 2.3 | 1.32 | 173.4 | 2.4 | 1.38 | 0.06 | Not significant |
| Pulse Rest Time (p/ m) | 65.3 | 1.3 | 1.9 | 65.4 | 1.4 | 2.14 | 0.11 | Not significant |
| Kinetic velocity of arms (number) | 30.2 | 2.4 | 7.94 | 30.5 | 2.2 | 7.21 | 0.2 | Not significant |
| Motor velocity of two men (number) | 25.3 | 2.2 | 8.69 | 25.4 | 2.4 | 9.44 | 0.06 | Not significant |
| Response speed of arms (cm) | 127.3 | 1.1 | 0.86 | 127.2 | 2.3 | 1.8 | 0.08 | Not significant |
| Strength of speed of arms (number) | 16.4 | 0.3 | 1.82 | 16.3 | 0.2 | 1.22 | 0.62 | Not significant |
| Peaceful scoring (sec.) | 6.3 | 0.2 | 3.17 | 6.2 | 0.3 | 4.83 | 0.62 | Not significant |
| Swipe (sec.) | 14.2 | 0.4 | 2.81 | 14.3 | 0.2 | 1.39 | 0.5 | Not significant |
| The Beatles (sec.) | 9.3 | 0.1 | 1.07 | 9.2 | 0.3 | 3.26 | 0.71 | Not significant |

Tabular value (T) at the degree of freedom level (10) and under the probability of error 0.05 = 2.228

2.2 Means of gathering information:

2.2.1 Means of data collection:

- Sources and references
- Tests used:
- Scientific observation

2.2.2 Research equipment and tools:

- Legal basketball court.

- Balls basket (6).
- 2 terraces
- Measure bar (3 meters).
- Electronic stopwatch (3).
- a watch for heart rate measurement (3).
- Cones (Tarbush) (5).

2.3 Field research procedures:

2.3.1 Determining the Search Variables:

The research variables were determined according to the opinion of the researchers, sources and scientific references, which they consider to be important for the specificity of the basketball game and the youth research sample, as well as an indication of the success of the training used.

2.3.2 Tests used:

2.3.2.1 Physical tests:

2.3.2.1.1 Speed of arms movement test: speed of arm movement in horizontal direction (30 seconds) (3:50)

Purpose of the test: Measure the speed of the individual in the near and far arm at the horizontal level.

Tools used: 1- stopwatch 2- A device consisting of two circles of wood lined with leather and placed horizontally to be (24) inches, the device is placed on a table with a suitable height 3-chair.

Test: The player sits in front of the device at a distance of 8 inches. When he hears the signal, he touches the right flap with his fingertips and then touches the left flap with the same hand, repeating the action as many times as possible in 30 seconds.

Scoring: The number of rounds played by the player is calculated at 30 seconds.

3-2-1-2 Testing The legs speed: The leg speed in horizontal direction during (20 seconds) (3: 51).

Purpose of the test: Measure the speed of the individual in the near and far leg at the horizontal level.

Tools used: 1- stopwatch; 2 - a device consisting of a panel mounted on the middle of the display (18) inch to be placed vertically on the plate; 3-chair without back.

Test: The player sits in front of the device so that the foot on the right side of the device at the hearing of the start signal, the player move his foot to the left side of the device from above the bar and then back to the right side and has after completed a full cycle repeats work as many times as possible during (20) seconds.

Scoring: Calculate the number of courses he performed during (20) seconds.

2.3.2.2.3 Test the response speed of the hand (3: 52).

Purpose of the test: Measuring the speed of the response time of the hand

Devices and tools: Ruler to draw a line in black between 120 cm, 130 cm, table with a suitable height and chair.

Performance Specifications: The player sits on the chair, placing his arm, which will be tested in a comfortable position on the table, pointing the thumb and forefinger, and the hand is prominent on the table by (3-4) inches. The referee holds the top of the ruler and sets it vertically on the table between the thumb and the index finger. Note that the lower edge of the ruler is facing the thumb and index finger of the player. The player should focus on looking at the black mark and do not have to look at the referee. The referee leaves the ruler falling vertically, and the player tries to hold the ruler by the thumb and forefinger at the blacked-out point whenever possible.

Scoring

A. If the player succeeds in holding the ruler by the thumb and index finger at the fully colored point, it will be a positive response.

- B. If the player holds the ruler before the black-colored area, the response shall be faster than the correct rate. The distance between the black zone and the place where the player holds the ruler is an expressive response to how quickly the individual responds to the normal limit.
- C. If the player holding the ruler after the black-painted area is a slow response to the correct rate, the amount of slow response is at the desired level.

2.3.2.1.4 Force characteristic of arm speed (5: 286): Bend and extend arms from tilted forward position in (10) seconds.

2.3.2.2. Technical tests (9: 270-271)

2.3.2.2.1 Peaceful scoring test:

The aim of the test is to measure the skill of the potter and the peaceful scoring

Devices and tools used: 3 poles, a basketball and a stopwatch. The distance between the starting line which is 19.5 meters away from the point of the center of the loop and the first pole is 6 meters and the distance between the poles is 4.5 meters.

Test Performance Conditions:

The player stands at the starting line and when he hears the starting signal, the player begins to pat the ball between the poles starting with the right hand side of the first pole (for the player using his right arm) and when he reaches a suitable distance to the goal he makes the right and quickly returns the ball if the scoring succeeds. If the player does not score, then try again from under the loop, until he succeeds, then quickly return and calculate the time, which is a test guide.

2.3.2.2.2 Speed Pass Test

The objective of this test is to measure the player's ability to pass and receive the ball.

Devices and tools used: Stopwatch, basketball, flat ground, smooth wall.

Test Performance Method: The player stands behind a drawn line on the ground at a distance of 9 feet, (2,70 m) from the wall. When the signal is heard the player passes the ball to the wall in the way he chooses. The scrolling is at the head level of the player as fast as possible and then receives the ball after it is rebounded from the wall to repeat the work until 10 correct passes are made.

Test Conditions:

-Allows the ball to reach the wall at any height.

-It is not allowed to hit the ball when it is rebounding from the wall, it must first be received and then passed back.

-All passes must be performed behind the line drawn on the ground.

-If the ball falls to the ground during the performance, the player must re-catch the ball and continue to perform behind the line. Only the right passes that are traced from the player to the wall, and then to the player directly without touching the ball to the ground.

-The player is allowed only two attempts and his best bet.

Scoring: Time is calculated in this test when the ball is touched to the wall in the first successful pass and continues until the ball touches the wall in the tenth successful pass.

The time is calculated in seconds and ten seconds, and the two allowed attempts are recorded.

In this case, the player must be counted for the attempt in which he scored less time than the two attempts. Time is calculated to perform ten successful passes.

2.3.2.2.3 Dribble: Dodgy test (Dribble)

Objective of the test: The objective of this test is to test the speed of the dribbles between a set of poles.

Devices and tools used:

6 columns, stopwatch, basketball, the columns are arranged as shown in Figure (11), noting the drawing line for the beginning and another one for the end. The starting line is about (5 feet, 1.5 m) away from the first column, while the distance between the other columns is (8 feet, 2.40 m).

Test Performance Conditions:

At the beginning, the player stands with the ball behind the starting line and when he hears the start signal, he runs the zigzag between the columns with the continuous plump ball. The player must do this work back to the finish line and go until he crosses the starting line. In this case, the timer calculates the time that this attempt took from the distance (start- end- start).

Test Conditions:

- Allows the player to train before the test begins.
- The player must perform the dribbles properly.
- The player has the right to perform the dribble with any hand (right or left).
- The player is allowed only two attempts, scoring the best attempt.

Scoring: The time in which the player performs the required test is calculated from the start of the test until the player passes the starting line with the ball.

Time is recorded for both attempts.

The best time for one adapter is supported.

2.3.3 Exploration Experiment:

On 8/1/2019, the researchers conducted an exploration experiment on the main experimental research sample by applying some of the exercises used to organize the training load and to know the load components (intensity, size and comfort) suitable for the training used.

2.4 Field experience:

2.4.1 **Previous Tests:** Tests were conducted on 15/1/2019

2.4.2 **Training used:** Exercises The method of playing (competitions) imposed on us to select the exercises set according to the conditions of previous exercises. We have to control the volume by increasing the frequency and setting the time in the speed training and the skills that lead to the required speed, which was given at the beginning of the main section.

Therefore, one of the conditions of using the intensity of training in accordance with the privacy of this method in the game of basketball is considered the main attribute of the success of performance in the game. In light of this, the intensity ranged from 80-95% and the method of high-intensity infant training was adopted.

As for resting, the pulse was used as an indicator of comfort, which was between the frequencies (120-130 Z / d) and the totals (110-120 Z / d).

The training lasted for two months (8) weeks and each week (3) training modules, and the number of units reached (24) units.

In each unit, 2 exercises were developed for flexibility and (3) exercises for speed with and without ball. The main section of the training unit was used for the trainer and for the pilot group only, and the rest of the training for all players under the coach's work. The researchers were only supervised by the application of the exercises established and according to the training used for those exercises and by the trainer. Therefore, training was applied for the period from 16/1/2019 until 13/3/2019.

2.4.3 **Post-tests:** Post-tests were conducted on 14/3/2019

2.5 **Statistical methods:** The use of bag (spss) SPSS statistical soft.

3. Review, analysis and discussion of the results:

3.1 review, analysis and discussion of the results of physical tests.

Table (2)

Shows the results of the tests before and after for the two groups control and experimental physical

| Physical Search Variables | Control group | | | | The experimental group | | | |
|--------------------------------------|---------------|--------------|------------------|------------------------|------------------------|--------------|------------------|------------------------|
| | (M)before | (M)after | A standard error | The value (t) recorded | (M)before | (M)after | A standard error | The value (t) recorded |
| Kinetic velocity of arms (number) | 30.2 | 32.1 | 0.2 | 9.5 | 30.5 | 34.5 | 0.5 | 8 |
| Kinetic velocity of legs (number) | 25.3 | 27.3 | 0.3 | 6.6 | 25.4 | 30.2 | 0.7 | 6.8 |
| Response speed of arms (cm) | 127.3 | 126.1 | 0.3 | 4 | 127.2 | 124.1 | 0.4 | 7.75 |
| Distinctive power for speed (number) | 16.4 | 18.6 | 0.3 | 7.3 | 16.3 | 20.2 | 0.7 | 5.57 |

Tabular value (T) at the degree of freedom (5) and under the probability of error 0.05 = 2.571

Table (3)

The table shows the results of the post-test between the two groups (control and experimental) physical.

| Physical Search Variables | Control group | | experimental group | | The value (t) recorded | Level of significance |
|--------------------------------------|---------------|-----|--------------------|-----|------------------------|-----------------------|
| | M after | +_S | M after | +_S | | |
| Kinetic velocity of arms (number) | 32.1 | 0.3 | 34.5 | 0.4 | 10.9 | moral |
| Kinetic velocity of legs (number) | 27.3 | 1.1 | 30.2 | 1.3 | 3.8 | moral |
| Response speed of arms (cm) | 126.1 | 1.2 | 124.1 | 1.3 | 2.53 | moral |
| Distinctive power for speed (number) | 18.6 | 0.4 | 20.2 | 0.3 | 7.27 | moral |

The tabular value (T) at the degree of freedom (10) and under the probability of error 0.05 = 2.228
 By observing tables (2) and (3), there was an evolution in the physical side of the control and experimental groups in the physical research variables, but the preference was for the experimental group and the researchers attributed the development of the control group to its commitment in daily training and applied exercises used by them regularly. This is evidence that sports training helps to develop. This is confirmed by Mohamed Hassan Allawi (1986) (6:17) and Nadir Abdulsalam Al Awamari (1983) (10: 301) (that sports training works to improve both physical qualities and skill level).

The experimental group has evolved into the training used, which proved to be successful on the physical side. The use of speed training in the way of repetition has had an impact on the repetition of physical performance and according to what it needs by speed, kinetic speed, speed of response and distinctive power for speed.

The two used training helped to correlate measured physical characteristics and gave good results for each attribute. This is confirmed by Risan Khreibt and others. (1989) (4:72). "The contemporary coach must look at each physical attribute in the light of its interdependence and interdependence with other qualities, not in any way isolated."

3-2 Showing the results of skill tests, analyzed and discussed them.

Table (4)
The results of the tests before and after the two sets of control and experimental skills

| The variables of Skill search | Control group | | | | The experimental group | | | |
|-------------------------------|---------------|-------------|------------------|------------------------|------------------------|-------------|------------------|------------------------|
| | M before | M after | A standard error | The value (t) recorded | M before | M after | A standard error | The value (t) recorded |
| The correct scoring (second) | 6.3 | 5.9 | 0.1 | 4 | 6.2 | 5.2 | 0.3 | 3.33 |
| Fast Pass (Second) | 14.2 | 13.8 | 0.1 | 4 | 14.3 | 13.1 | 0.4 | 3 |
| Dribble (second) | 9.3 | 8.9 | 0.14 | 2.85 | 9.2 | 8.6 | 0.22 | 2.72 |

Tabular value (T) at the degree of freedom (5) and under the probability of error 0.05 = 2.571

Table (5)
Shows the results of the post-tests between the two groups (control and experimental) of the skill.

| The variables of Skill search | Control group | | experimental group | | The value (t) recorded | Level of significance |
|-------------------------------|---------------|------|--------------------|------|------------------------|-----------------------|
| | M after | +_S | M after | +_S | | |
| The correct scoring (second) | 5.9 | 0.2 | 5.2 | 0.3 | 4.37 | moral |
| Fast Pass (Second) | 13.8 | 0.4 | 13.1 | 0.2 | 3.5 | moral |
| Dribble (second) | 8.9 | 0.11 | 8.6 | 0.21 | 2.83 | moral |

Tabular value (T) at the degree of freedom (10) and under the probability of error 0.05 = 2.228

After this presentation of the skill side in Tables (4) and (5), it was also revealed that there is a development of the control and experimental groups in the performance of the offensive skill and the experimental group was better in the post tests.

As mentioned above in the physical side, the evolution of the control group came from the use of appropriate and effective exercises. Bastouisi Ahmed and Abbas al-Samarrai (1984) (2 235) stated that "Exercise is a systematic and targeted movements through which you develop the qualities of movement and skill in the field of life and sport."

The experimental group has evolved from the training used and their role in achieving success and physical development, which was reflected in the development of the skill, in other words, in the absence of physical qualities necessary for performance will not be able to improve the accuracy and speed of the performance of skills on the playground

Therefore, the researchers used two influential methods in training for reasons, first the development of the physical side and the second the development of the skill side related to the physical side. This is confirmed by Amrallah Ahmed Al-Bassati (1998) (1: 9) "that athletes in various sporting events cannot master the basic skills that characterize each effectiveness in the absence of the necessary physical qualities and sporting activity, so the close link between the skill level and physical requirements In every activity." As Singer (1990) pointed out, "skill is achieved only in the presence of special physical abilities" (13:22).

In addition, precise physical exercises were used to raise the skill level and increase the efficiency of rapid performance. (Richard A 2005) "Speed and strength play a key role in enhancing performance efficiency" (12: 217). This is confirmed by Wajih Mahjoub (2000) (11: 175) "repetition and training give the skill more mastery, competition and more accurate brilliance of movement. The practice of repetition is therefore one of the most successful methods of advancing a basketball game.

4. Conclusions:

1- The method of training the games (competitions) had an impact on the development of abilities (physical and skill attack) of the youth basketball under study.

2 - Training for physical qualities combined in competing exercises gives good results for the development of each character and better than individual training.

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A form of training modules

Week: First

Module: 1

Unit Objective: Speed Development – Flexibility

Intensity: 80%

Total time: 53-55 minutes

| Dpt. | Time | Exercises | Volume | Rest | |
|------|---------|--|--------------|---|---|
| | | | | Repetitions | Groups |
| main | 45 sec. | - stand on the platform and try pressing with bending downwards for 5 seconds, then rotation of the trunk with movement for 10 seconds. | 15×3sec. | Back pulse 120 -130 p / min Time ranges from 2-2.5 minutes | Back pulse 110-120 p / min Time ranged from 2.5-3 minutes |
| | 60 sec | - Hold a stick by hand and put it behind the neck and make a rotation of the trunk for (10) times, and then stop and press forward and down with the inclusion of legs | 20×3 sec | | |
| | 180sec | - Making sprints along the pitch diagonally for 15 seconds. | ×34 times | | |

| | | | | | |
|--|--------|---|-----------|--|--|
| | 300sec | <ul style="list-style-type: none"> - Starting from the end of the stadium to the middle, there are balls taking the ball and return with dribble ball, and do a correct score, then start again for the second ball and so during (20 seconds) | 5×3 times | | |
| | 180sec | <ul style="list-style-type: none"> - The handling of the colleague (who stands at the end of the midline line) once and then start patted the ball to the end of the court and scoring, and follow the ball and return to the colleague again to perform the handling and so repeat the exercise in (15 seconds) | 4×3times | | |