The Impact of Competition Exercises on the Fast Attack Skills and Some Physical Abilities of Basketball

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Abstract

The research importance lighted as it is a research from the researches that attempts to identify the stumbling situation that affects our teams and players when performing fast attack during the game and also an attempt by the researcher to develop appropriate solutions to overcome this situation through the development of some physical abilities for their importance in the success of this type of attack. The research objectives include the preparation of competition exercises using weightlifting for the members of the research sample and to identify the time, attack speed and some of the physical abilities of the individual sample, the researcher also hypothesized that competition exercises by using weightlift which effect on the time, speed attack and some physical abilities of research sample members. The research population consisted of 24 players representing the specialized center in basketball Diyala branch and the sample number of the research 12 players who are between (14-18) years and of 50% The researcher chose the specialized center in basketball Diyala branch deliberately. In conclusion, the researcher concluded that competition exercises using weightlift have a positive impact in the development of physical variables of the research sample members. In addition, weightlifting competition has a positive impact on developing the basic skills of the research sample members.

Keywords: Competition exercises, Weightlifting, Attack speed, Physical abilities, Basketball

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1. Introduction

The great scientific development which has occurred in the various fields of the world peoples is due to the adoption of modern and sophisticated scientific methods to reach the desired goals and objectives to this sports field which has a remarkable development through the advancement of sports levels which came as a result of right and programmed planning. The game of basketball is one of the sports that has witnessed a great development and has become a prominent place in most peoples because of the development of suspense and intrigue. Exercises has important for the basketball player to help him develop his physical ability to reach the highest possible level of performance in the sports field and professional in different fields of life and choose according to its own rules. As a result of the development of attack playthroug increasing the effectiveness of individual and collective performance, the attack has become the decisive effect in winning. Therefore, it became necessary for the coaches to follow multiple offensive methods adapted to the game circumstances and the capabilities of the opposing team on the one hand and the abilities of their players on the other. Therefore, it is important to rely on the rapid attack in the game of basketball because it is the key to winning in the case of mastery and can be note these global and local championships. The research importance is highlighted as it is a research that attempts to identify the stumbling situation that affects our teams and players when they perform a fast attack during the game. It is also an attempt by researchers to devise appropriate solutions to overcome this situation by developing some physical abilities for their importance in the success of this type of attack. Through the field follow-up and the use of game specialists, the researcher was able to indicate a weakness in the player’s performance of the specialization school, the weakness in their physical abilities and calibration related with exercises similar to the playing that they are subjected to which is not reflected positively in the development of their physical abilities and fast attack skills by reducing the attack time to get the best Results.
2. Research Methodology and Field Procedures

2.1 Research Methodology

The nature of the problem is determined the chosen approach by the researcher for the purpose of reaching many phenomena cannot be studied only through a method suits with the research problem, the experimental approach used to solve this problem and is converted to control all the main factors affecting the variable or dependent variables except for one controlled by the researcher changes it in a certain way to determine and measure its impact on dependent variables. (Alshok and Kubaisi; 2004: 59).

2.2 Population and Sample Research

The research community consisted of 24 players representing the specialized center in basketball, Diyala branch, the sample number of the research is 12 players who are (14-18) years and with 50% the researchers chose the specialized center in basketball Diyala branch with deliberately way.

3. Means, instruments and tools used in the Research

3.1 Means of Gathering information

Sources and References Arabic and Foreign, Physical Ability Tests Form, Physical Measurement Registration Form, Tests and Measurements

3.2 The Devices and the Used Tools


4. Used Tests in the Research

4.1 Physical Ability Tests

4.1.1 First: A Test from the standing position bend and extend the knees as many as possible until the exhaustion of strength (Abdul: 2013: 74)

- The purpose of the test to measure the bearing strength of the two legs.
- The used tools to help the colleague in calculating the number
- Conducting the test from the standing position bend and extend the knees fully and calculate the number after depletion the strength.
- Evaluation: the times number of bending and extending the knees until the exhaustion of strength indicate to withstand the strength.

4.1.2 Second: The Test of withstand the strength of the arms and the front standing until depletion the strength (Abdul: 2013: 71)

- The test purpose to measure the strength of the arms muscles.
- Performance Specifications: From the front position should be the hands next to the chest and fingers of the palm refers to the skill and legs are contiguous and the body is extended straight without curvature where the tested persons touches the ground with Chest pass and then return to the original position.
- The used tools by assistant colleague in calculating the number of the recording way to calculate the right repeated numbers of the tested person.

4.1.3 Third: The Test of pushing a medical ball 3 kg forward. (Abd: 2013: 47)

- The purpose of the test: to measure the explosive power of the arms.
- The used tools: measure tape and ball weighing 3 kg.
Performance description: The tested person standing against the throwing position and holding the ball with the hands together, then knees bend and swinging the hands with medical ball and throw forward to the farthest recording distance, the distance calculated to the nearest ten meters from the start line keeper.

4.1.4 Fourth: Standing Broad Jump Test (Jawad: 2004: 91)
- The purpose of the test: to measure the explosive strength of the legs standing.
- The Used tool in the appropriate place of weight in the width of one and half meter, a length of three and a half meters and attention to the distance to be the place equaled to the measure tape.
- Performance Description: The tested person stands behind the start line with a little spaced feet or a little equaled of the metatarsus to the starting line from the outside begins the tested persons swinging the arms stage to back with knees bending and leaning forward slightly, then throwing forward to the maximum possible distance through the lungs and push with the feet and swinging the arms forward, the recording shall be the measurement from the starting line until the last part of the body to the ground, the end of this line, the tested person’s grades calculates the best attempt.

4.1.5 Fifth: The Front Readiness Test for 10 seconds (Hassan and Ahmed: 1979: 71)
- The Test purpose: to measure the discriminate strength of the arms speed.
- The used tools: stopwatch, Whistle.
- Performance specifications from the position of the front teeth and bending and extending the arms as many as possible within 10 seconds, the test conditions is taking the body the right position of the front and paralleling the chest the ground during bending the arms.
- The recording way: the tested person calculated the number of praise and compliment within 10 seconds.

4.1.6 Sixth: Regression Running Test 9 m × 4 (Al Khashab: 2010: 188)
- The Test purpose: to measure the speed strength of the legs.
- The tools: court, stopwatch.
- Performance Description: The tested person stands in front of the running field which is 9 meters and when the signal starts to run 9 meters, returns to the starting line and touches it then returns to it twice, to be the distance running is 45 meters.
- The Recording: The time records of the player run to the nearest 10 seconds.
- Instructions: the tested person record one attempt.

5. The Skills Testing used in Research

5.1 First: The Picking up and high Purl and Peaceful Throwing Test: (Abd: 2013: 243)
- The purpose of the test: to measure the ability to pick up and opening high purl in peaceful throwing.
- The Tools used: basketball court, 4 barriers, one pole, number of eight balls, leather tape 40 meters, timed tape, electronic stopwatch, two chairs, whistle.
- Perform the test standing the player on the front first point on the ground, at the same time standing two members of the work team with the ball on the limited two points at the start signal, scoring the ball from the first chest with the hands from the right side of the tested player who pickup with direct high purl toward the basket and on the right of the located person well, the peaceful throwing for one attempt, the picking up from the right side, and then moving to the second side of side performance of another attempt toward the basket and on the left located person the picking and the floating point and then refer to the first front point to complete the six attempts with the same way and thus the player do ten attempts divided into five attempts from the first point and five attempts from the second point, with exchange of test conditions faster in performance and assist the tested player alert to perform attempts from their specific locations and one of the working team members standing on the left tested player to deliver four covers and four covers by a member of the second working team standing to the right of the tested player, with exchanging and stop the performance and control the correct steps and the correct arm for peaceful throwing and for each
player only one attempt. The test arbitrator start with the start signals as well as calculate the time taken to perform the test record calls on the names first and indicating both successful and failed attempts, the time secondly to calculate the time of the tested player the ball until the end of the tenth attempts after leaving the tested player the ball and divide the time on 60 seconds, the player score is calculated for each a successful peaceful throwing. The player given 0 degree for each failure peaceful throwing or if incorrect collection of grades, accuracy of successful attempts, the final degree, college specialty, successful technical division, accuracy time.


- The purpose of the test: Evaluation the long handling accuracy.
- Equipment and tools used mini basketball, mini basketball court indicate of the fall area of the ball and the dimensions of each area is two in two meters away from the side line, the midline and the end line 2 meters of performance way, the coach or one of my tested colleagues gives the ball to the player who will pick up and performing a long quick handling to the specified area to fall the ball by straight from the shoulder with one hand. test conditions give the player ten straight attempts may not purl or triple perform upon pick up the ball and must be directed to the drawn area on the ground within the limits of the court.
- Scoring: gives the tested player points according to the importance of the area in the court and as specified with drawing according to requirements of speed attack with average from one to three points, the highest points can be collected by the tested player score 30 points if fell in the area number three, the tested player gets three points and if it fell in area number two gets tested player on two points, as well as if fell in area number one the tested player gets one point, but if the ball fell outside the boundaries of the drawn area on the ground is not considered any points.

5.3 Third: The Defensive Tracking Test: (Fawzi: 1986: 43)

- The purpose of the test to measure the ability to Bounce pass.
- Tools used: basketball goal, basketball stopwatch.
- Performance test: The player stands at a distance of three meters from the drawngoalon the line parallel to the ground and at height of 3 meters, the player throwing the ball with one hand or one hand in the direction of the goal and stand on the line and then progress to the people to starts from the highest point of the goal and return again to the starting line and repeats the same attempt for one minute and the recording count the attempts number which touch the ball on the target line on the drawn line in the limited time period.

6. Field Research Procedures

6.1 Exploratory Experience

The exploratory experience of physical variables and skill tests was conducted on Wednesday, 20/2/2019 on the players with assistant working team on the indoor sports hall of Diyala Club and the purpose of the exploratory experience is

- Knowing the difficulties and problems that researchers may face.
- Recognize the taken time to implement the test.
- Ensuring the efficient of team work.
- Accuracy of implement the test.

6.2 Testing the validity of tools and assistant devices.

Identification of the first level tests of the research subject.

7. The Main Experience

7.1 Pre-Tests

The researcher conducted the pre-tests on the members of the research sample on Thursday, 22/4/2019 on the closed hall of Diyala Sports Club and assisted by the working team has been attended by all sample members of 12 players and conducting the following tests.
First: Physical capacity tests and explosive strength and speed of withstand the strength and after ending the physical tests time of 20 minutes to rest

Second: Tests of the following skills, long handling and passing, high purl and peaceful throwing, handling and defensive tracking and before the start of the implementation of physical and skill tests were explained a full explanation of the sample by the researchers about the mechanism of implementation in the test and what is the unit of measurement in order to form The idea is correct to carry out the tests required by the sample, as the curriculum started on 4/3/2019 and ended on 15/4/2019.

7.2 Experimental Approach

The researcher used the experimental approach high-intensity from 90-95 by two modules per week on Monday and Friday, and per two months, ie eight weeks, the approach continues of 16 modules, the exercises were applied in a training approach in the main part of the module in the special preparation period.

7.3 Post- Tests:

The post tests were conducted on 17/4/2019 by the same way as in the pre-tests after the completion of the duration of the experiment, the researcher want to find all the conditions of the pre-tests and its requirements when conducting post-tests of time, place and testing means.

8. Statistical Means

The researchers used the spss in getting the results and obtaining the data.

8.1 Presentation, Analysis and Discussion of Results

Showing and analysis of arithmetic media, standard deviations and standard error for the research sample members in the physical variables in the pre and posttests.

Table 1: It shows the difference of the arithmetic media, the standard deviations, the standard error, the calculated (T) value and the percentage of error for the research sample members in the physical variables in the pre and post tests.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Test</th>
<th>Different the Media</th>
<th>Different the Deviations</th>
<th>Standard error Differences</th>
<th>T Value</th>
<th>Freedom Degree</th>
<th>Error Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Characteristic strength with speed arms</td>
<td>pre</td>
<td>0.080</td>
<td>0.043</td>
<td>0.012</td>
<td>6.435</td>
<td>11</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>post</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Characteristic strength with speed legs</td>
<td>pre</td>
<td>-0.080</td>
<td>0.283</td>
<td>0.0816</td>
<td>-9.798</td>
<td>11</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>post</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exploration strength of arms</td>
<td>Pre</td>
<td>-0.725</td>
<td>0.114</td>
<td>0.329</td>
<td>22.066</td>
<td>11</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>post</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exploration strength test</td>
<td>Pre</td>
<td>-6.750</td>
<td>1.485</td>
<td>0.429</td>
<td>15.748</td>
<td>11</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>post</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Withstand the arms strength test</td>
<td>Pre</td>
<td>-6.083</td>
<td>1.621</td>
<td>0.468</td>
<td>12.997</td>
<td>11</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Withstand the legs strength test</td>
<td>Pre</td>
<td>0.080</td>
<td>0.043</td>
<td>0.0124</td>
<td>6.435</td>
<td>11</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2 - Showing and analysis of the arithmetic media, standard deviations, the standard error of the members of the sample in the skills tests for the pre and posttests.
Table 2: Arithmetic Media, Standard Deviations, and Standard Error of members of the sample in the skills tests for the pre and post tests.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Test</th>
<th>n</th>
<th>s</th>
<th>a</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shoulder pass</td>
<td>Pre</td>
<td>12</td>
<td>12.000</td>
<td>1.954</td>
<td>0.564</td>
</tr>
<tr>
<td></td>
<td>post</td>
<td></td>
<td>22.083</td>
<td>2.109</td>
<td>0.609</td>
</tr>
<tr>
<td>Defensive tracking</td>
<td>Pre</td>
<td></td>
<td>12.583</td>
<td>1.505</td>
<td>0.434</td>
</tr>
<tr>
<td></td>
<td>post</td>
<td></td>
<td>22.417</td>
<td>3.118</td>
<td>0.900</td>
</tr>
<tr>
<td>Purl + Peaceful throw</td>
<td>Pre</td>
<td></td>
<td>0.086</td>
<td>0.021</td>
<td>0.006</td>
</tr>
<tr>
<td></td>
<td>post</td>
<td></td>
<td>0.176</td>
<td>0.032</td>
<td>0.009</td>
</tr>
</tbody>
</table>

Table 3: It shows the difference of the arithmetic media, the standard deviations, the standard error, the (T) calculated value and the percentage of error for the members of research sample in the pre-and post-test skills tests.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Test</th>
<th>Media Differences</th>
<th>Deviations Differences</th>
<th>Standard Error Differences</th>
<th>T Value</th>
<th>Freedom Degree</th>
<th>Error Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shoulder pass</td>
<td>Pre</td>
<td>10.083</td>
<td>10.083</td>
<td>2.937</td>
<td>0.848</td>
<td>11</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Defensive Tracking</td>
<td>Pre</td>
<td>9.833</td>
<td>2.623</td>
<td>0.757</td>
<td>12.988</td>
<td>11</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purl + Peaceful throw</td>
<td>Pre</td>
<td>0.089</td>
<td>0.043</td>
<td>0.013</td>
<td>7.137</td>
<td>11</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>post</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9. Discussion of the Results

Discussion of the results of physical abilities It has been shown through the data and the results of pre and post tests, the exercises effect followed by the researcher to develop physical abilities as all calculated values have an error rate (0.000). These results indicate significant differences in favor of post tests in all research tests. With regard to explosive strength, the researcher attributes the development to the nature of the used exercises to generate explosive strength to meet the performance of these exercises, (crossly) mentioned that if there is no delay between the work of decentralized contraction and central contraction and the amount of performed work under this case be a Flexible card and muscle-free during stretching (Crossly: 1984: 26) focused on the techniques used by the members of the sample was confirmed by the implementation of exercises and the researcher attributes the differences in the tests of the distinctive strength of the speed on the legs and arms to the effectiveness of the exercises used for the distinctive strength that has been implemented at the speed that has contributed Effectively in developing this general physical ability for basketball players which is highly reliable during speed attack, If the exercises were similar to the actual performance and the intensity of high training taking into account the use of repetitions in the same group to allow the player to continue the effort and reminds each of (Iyad Hamid and Hossam Mohamed 2011) in directing the load in the development of the distinctive strength at speed this is exciting between (90 to 95%) of the maximum capacity of the individual and that the number of repetitions of the exercise for the group is not more than 50 of the maximum number of times the player does not even require to carry force on the speed of strength (Hamid and Hidan: 2011: 46). He attributes the significant differences in the tests of withstand the strength with the effectiveness of the
exercises used in special strength to mentioned each of Hassanein Naji (1998) that the true meaning of withstand the strength is to continue the exerted effort against medium strength resistances so that the greatest burden on the musculature. (Hassanein: 1998: 22).

9.1 Discuss the Results of Speed Attack Skills

It is noted that through the data and results of the pre and post test there are several indicators showing the impact of skill exercises followed by the development of speed attack skills and attributed the reason for the development of this impact of skill exercises prepared by the researcher in addition to the continuity and regularity of the players in the training, which had a clear role in the development of motor abilities, Saad Mohsen ensured on the training program leads to the development of achievement to develops on a scientific basis in the process of training and programming and the use of appropriate strength, gradient and observations of individual differences as well as the use of repetitive examples and periods of effective interfaces and under the supervision of specialized trainers under good training conditions in terms of space and time and tools used. (Ismail: 1996: 98) The researcher has shown the following indicators under the data and the results presented before as following:

9.2 Shooting

Through the above illustrated the development of skills and the researcher attributes the development of skill exercises prepared according to the organized and stressed repetition appropriate the age of sample research if the researcher in the exercises preparation care to be purposeful or focused on shooting because this skill is one of the most important attacking skills in Basketball game because its selection and playing to win and get points and this is consistent with what was stated by the researcher Abdullah he confirmed to give the approach a priority for this skill by placing it on the list of basic skills now all the skills applied by the attacking team have preparatory means to achieve the most favorable opportunities of successful shooting. (Ali: 2001: 20).

9.3 Handling

Through the showing and analysis of post-tests and handling tests show there are differences in the pre and post tests, the researcher attributed the reason for these differences to the effectiveness of skill exercises developed by the researcher to apply studied scientific formula according to the theoretical reference frame of the research and according to some experts in this field, which is based on the implementation of the duties of this approach by the research sample, which was adopted in the application onrepetition, which were developed to suit the level of the sample and give appropriate rest between exercises and groups of applied exercises, this is confirmed by Mowaffaq Asaad 2011 is not intend of repetition principle is repeat the same exercise, but also means the number of days in the week exercises and repetitions per day, as well as occurrences of rest periods. (Mahmoud: 2011: 48) . The process of perfection the basic skills, including handling skill is a process depends on the motor capabilities that were built in the stage before the preparation of the skill stage, but skill exercises are a mixture of motor skills i.emixed exercises in motor activity and skills to be implemented The approach based on the diversity of exercises in order to break Boredom and this is confirmed by Kamal Darwish between the diversity of the exercise determines the activity to play and the motivation for the continuation of performance, giving him the opportunity to face the changing play situations that occur in the competition (Darwish: 1998: 22) and therefore must be emphasized on the perfection of the players basic skills through performance of exercises positively and the commitment of the players in the implementation of the vocabulary of the approach also contribute to the development of these skills and perfect it, this is consistent with what was stated by Hussein Abdel Karim 2006 between the practice of several times enable the player to perfect the skills and performance better. (Allawi: 2006: 46). As well as, the continuous training on basic skills according to programmed scientific methods in the vocabulary of the approach performs the required when this procedure is based on steady training conditions using tools and devices that contribute to raise the level and to reach the purpose of exercise time faster while maintaining the performance of skills and The correct match to the performance of each technical skill of the researched down to the installation of the new technical performance where Abdul Wahab Ghazi 1998 asserts that the correct speed exercises indicate the level of performance of the team and the correct handling of accurate and timely makes it often It is the sixth player in the team since the ball flies and moves faster than any player. (Ghazi: 1998: 109).

10. Conclusion

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In light of the showing and analyzing the results and discussed, the researcher concluded that competition exercises have a positive impact on the development of physical variables of the research of members’ sample, in addition, competitive exercises have a positive impact on developing the basic skills of the research sample. The results showed that exercise significantly increased the speed of hooking attack in the study sample. As well as the development of physical abilities among members of the research sample.

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