

## **Motor Abilities and its Relationship to Defense Skill against Dribbling Basketball for Junior Females (14-16) Years Old**

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### **Abstract**

The research dealt with the importance of motor abilities and their relationship to the skill of defending against dribbling for young females (14-16) years in the game of basketball. Learn about the capabilities and developments that lead to obtaining satisfactory results during matches and help to develop and advance these skills. The issue of mastering and properly applying defensive skills is important because it will undoubtedly lead to the best in winning the match. The aim of the research is to find out the relationship between motor abilities and defense skill against dribbling and the research assumed the existence of a statistically significant relationship between the motor abilities and the defense skill against the tabby. The researchers used the descriptive approach. The research sample was identified by (ZIMA) organization's number (12) players. The researchers concluded that there is a relationship between the motor abilities and the skill of defending against the tabby. The researchers recommended giving adequate time in training on the skill of defending against the masters during training

**Key words:** Motor abilities, defense against dribbling.

### **Introduction:**

Training in basketball has become the main concern of most coaches working in this field, and the game of basketball is one of the sports that is widely practiced and occupies a good position, as it has become today so beautiful and wonderful that it has made those who practice it desire to express his rhythmic performance It is the wonderful combination of many different skills, whether offensive or defensive, which participate to appear in a technical painting in which the player separately expresses their ability to master these skills in matches, and then appears in a more beautiful and gentle manner in a collective movement rhythm that has its artistic expressions that impress the audience.

The rapid jumps of the basketball game and in all its training, organizational and legal aspects, increased the responsibility entrusted to workers in the field of the game in the country for the purpose of continuing to strive, each according to his competence, to keep up with these jumps that led to the development of the level of the game and keep pace with the advanced countries mathematically in order to stay in Competitive atmosphere to strive for a high level of sports. Therefore, we find that playing in basketball is not limited to attack only, but rather, we find that defense has a major role in the processes of stopping the movements of the attacking player by defending against the taboo or cutting the balls and possessing them to start the

offensive process and represent the basic skills in basketball, especially defensive one of them is the basis of competition that determines the level and ranking of teams. Accordingly, following the scientific method in trying to track defensive skills is one of the important foundations that must be taken care of when directing them in the correct technical form, especially the skills most used in the match, in order to reach the summit by building sound and strong foundations to overcome the changing, fast and escalating playing situations. the wanted.

Defense in basketball not only succeeds through the acquisition of defensive skills and defensive tactics, but also needs the movement capabilities of compatibility, agility, balance ... etc. The motor abilities are one of the basic requirements and the important abilities that have an effective effect in various sports, hence the importance of movement abilities cannot be overlooked, especially the junior category, it is considered one of the important age groups and the basis for the training process as it is the basis for the development of this game on the basis of sober scientific foundations. Hence the importance of research by knowing the relationship between the movement abilities and the defense skill against the young women. Hoping that this study will help trainers when preparing training curricula to achieve good future results.

### **Research problem :**

Following the correct scientific methodology in the process of sports training is one of the necessary indicators that reflect the amount of achievement of athletes. Advance planning of training curricula is necessary in order to avoid obstacles to training work and address problems that may face the training process and develop appropriate solutions to them, and the issue of mastering defensive skills, including the skill of defense against the taboo and their correct application is important because it will undoubtedly lead to the victory of the team concerned. And through the researcher's observation of the training of some women's teams in basketball, she found that there is a weakness in the performance of the defense skill against the chuck, which requires the player to possess the motor capabilities represented by agility and compatibility ... etc. And that some coaches do not allocate sufficient time for this skill during the training units, which leads to a lack of mastery of this skill well and this constitutes an obstacle in possession of the ball, and therefore reduces the chances of moving to attack and score points.

### **Research objective:**

- Identify the relationship between motor abilities and the skill of defending against dribbling.

### **Research hypotheses:**

- There is a significant correlation between motor abilities and defense skill against dribbling.

### **Research fields:**

**The human field:** Players from the Zima Youth Sports Development Organization.

**Time field:** from 1/1/2021 to 1/2/2021.

**Spatial field:** Interior Hall (Rose) in Sulaymaniyah Governorate.

### **Define terms:**

**Motor abilities:** Motor abilities are qualities that an individual acquires from the surrounding environment, or they may be present innately, and develop according to the individual's physical, sensory and cognitive ability, through training and practice. These abilities depend on motor control mainly, as motor control comes through the ability of the central and peripheral nervous system to send accurate signals to the muscles for the purpose of accomplishing the motor duty<sup>(1)</sup>.

### **Research methodology and field procedures:**

#### **Research Methodology:**

The researchers used the descriptive approach in the method of correlations as it is the appropriate approach to solve the research problem and achieve its goal, as the descriptive method is defined as (describing and interpreting what is being)<sup>(2)</sup>.

#### **Community and sample research:**

The researcher identified the research community, who are the players of the Zima organization, and (12) players were selected from the research community of (24) players representing the research sample randomly.

#### **Methods of data collection:**

- Arab and foreign sources and references.
- A questionnaire for the opinions of experts and specialists.
- Personal interviews.
- Tests and benchmarks.
- Team work.
- The basketball court is legal.
- Centimeter tape measure.
- Adhesive Tape - Show yourself.
- Cassette tape recorder.
- 4 electronic stopwatch to measure time.
- Electronic calculator.
- Forms to record data during tests.

#### **Field research procedures:**

##### **Tests used in research:**

##### **Motor abilities tests:**

##### **First - coordination test (Jumping Inside Numbered Circuits):**<sup>(3)</sup>

**The aim of the test:** To measure the compatibility between the legs and the eyes.

**Tools:** stopwatch + chalk + tape measure

**Description of the performance:** Eight circles are drawn on the ground, each with a diameter of (60) cm, and the circles are numbered from (1-8)

- The laboratory stands inside circle No. (1), when hearing the start signal, it bounces with both feet to circle No. (2) then to circle No. (3) then to circle No. (4) and so on until circle No. (8)
- Conditions: starting with circle No. (1) and ending with circle No. (8) in order as shown in the figure below.

- To be performed as quickly as possible.

**Registration:** Records the time taken for the laboratory to travel through the eight circuits.

**Second:** The Slalom Running Test :<sup>(4)</sup>

**Objective of the test:** to measure agility.

**Test specification:** drawing.

**Test tools:** an area of the ground, five conical feet, the stopwatch, draw a rectangle on the ground (3 \* 5) m, and install four vertical posts on the ground in the four corners of the rectangle. The fifth post is installed in the rectangular middle.

**Method of performing the test:** the player stands (next to one of the four lists specified for the rectangle) and after the start signal, the player runs in the figure (8) in English, and leads him three times until he reaches the starting point after cutting three rounds.

**Third: Moving Balance (Modified Bass Test):**<sup>(5)</sup>

**The aim of the test:** to measure the moving balance

**Tools:** tape measure, stopwatch, (11) signs fixed to the ground, the distance between the mark and the other is 75 cm

**Performance description:** The player stands on his right foot on the starting point, then begins to jump to the first mark with his left foot, trying to stabilize his position on the instep of the left foot for a maximum of 5 seconds. On the instep every time, noting that his foot is above the mark.

**Registration.** Calculates the time taken by the player from the start of the test to the finish line.

### **Defensive skills tests:**

**First:** A test of the skill of defense against dribbling:<sup>(6)</sup>

**Test name:** Defending against the chuck

**The purpose of the test:** to measure the speed of defense performance against chucks.

**The tools used:** adhesive tape, a leather tape measure (20 meters), three signs, an electronic stopwatch, a whistle, papers and pens for recording.

### **Test procedures.**

Four signs are distributed as follows:

The first mark is on the top of the far aiming arc moving away from the center of the throat (6.75 m), and the second mark is on the center line of the center of the circle, and the two marks (3, 4) are on either side of the stadium and are away from the two sides lines (90 cm) and from the center line (3.5 m) inward.

### **Performance description:**

The defending player stands with the first mark behind him (sign 1), and when the start signal is heard via the whistle, the player quickly runs forward towards the second mark with a stop by one kit, and then performs the defending player's movement against the pad towards the third mark, and from making a quarter turn inward with the left leg And to continue the movement of the defending player against the dribbling towards the first mark and then work itself from the left side, as shown in the figure in the six steps.

### **Test conditions:**

- Execute test steps quickly.

- The knees are bent when performing the movement of the defending player against the tabby, with the arms spread out to the side down.
- Only one attempt.

**Test administration:**

- Timer: giving the start and end signal via the beeper with timing.
- Register: It performs the roll call and performance notes with the recording of the test time.

**Calculating the score:** The player records the time spent on taking the test with his six steps by adopting the start and end whistles.

**Exploratory experience:**

The two researchers conducted an exploratory experiment on Sunday (10/1/2021) on basketball players not included in the research sample, to apply the tests to them, and to train the assisting work team to carry out the tests. The purpose of the exploratory experiment is.

- Determine and know the time required to perform the tests.
- Verify the validity of the equipment and tools used in measurement and testing.
- Knowing how well the research sample understands the tests.
- Verify the ability of the assisting team.
- Determining the most important negatives that may face the work in order to avoid them

**Main experience:**

- Research tests were conducted on the sample of (12) female athletes
- The tests were conducted on Tuesday 12/1/2021 at four o'clock in the afternoon
- All tests were conducted in the closed Rose Sports Hall in Sulaymaniyah Governorate.
- Before starting the implementation of the tests, the two researchers, in the presence of the trainer and the work team, explained in detail each test and explained the importance of the tests and the necessity for the laboratory player to do her best and implement them as quickly as possible.
- A warm-up was made for the players to prepare them for the tests. The two researchers took care to give an appropriate rest period between tests so that the sample could get the best results. The data were recorded in special forms for the purpose of analyzing them to extract the results.

**Statistical means:** The researcher has adopted the following statistical methods:

- Mean .
- Standard deviation.
- Simple Correlation Coefficient (Pearson).

**Presentation, analysis and discussion of results:**

In order to identify the level of motor abilities of the research sample, it is necessary to extract the arithmetic means for it and the standard deviations, as in table (1):

Table (1) shows the Mean and their Std. Deviations for the motor abilities and defense skill against the tabby of the research sample:

N	Tests of motor abilities and defense skill against dribbling.	Mean	Std. Deviations
1	Balance	0.57	5.61

2	Agility	1.12	16.39
3	Coordination	1.02	7.76
4	Defense against dribbling	1.18	15.97

We find through Table (1) the clear difference in the arithmetic means, where the arithmetic mean of equilibrium reached (5.61) and the standard deviation (0.57), which differs from the arithmetic mean of agility, which reached (16.39) and its standard deviation (1.12). from the rest, it reached its arithmetic mean (7.76) and its standard deviation (1.02), while we find that the skill of defending against the dribbling achieved the arithmetic mean reached (15.97) and its standard deviation (1.18). We find through table (2) that what was presented showed a clear difference In arithmetic circles and standard deviations, this indicates clear differences between motor and skill abilities. In order to identify the type of relationship between motor abilities and skill, the correlation coefficient must be extracted, as in the table (2) below.

Correlation coefficient values	Defense against dribbling	Sig level	Sig type
Balance	0.946	0.000	Sig
Agility	0.888	0.000	Sig
Coordination	0.915	0.000	Sig

Significant at significance level  $\leq (0.05)$ .

We find through Table (2) that the correlation coefficient for the equilibrium characteristic has reached (0.946) with the skill of defense against the taboo and this high percentage indicates the importance of this element for the basketball player, as for the agility component, we note that it obtained a correlation coefficient of (0.888), and this indicates the importance of this element for the basketball player. The process of changing positions during the movement and moving from defense to offensive mode needs agility and agility in movement during the match and training above, likewise, we find that the compatibility component has appeared, the value of the correlation coefficient reached (0.915) and this is a high percentage indicating the importance of the basketball game on developing a high degree of compatibility between basic skills and other requirements of the game such as developing the mechanical, nervous and muscular organization, especially between the eye, the arm, the eye and the leg to coordinate sports movements and reaching the optimum level of performance, meaning that sports skills and movements require a good match

## Conclusions and recommendations:

### Conclusions:

- The two researchers concluded that there is a correlation between the motor abilities and the skill of defense against the tabby, and this was evidenced by the results obtained in the statistical treatments.
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### **Recommendations:**

- Adopting the tests and the elements that have been chosen as a means of identifying the relationship between the motor abilities and the skill of defending against the puckering of basketball players.
- An interest in developing the elements of motor abilities, especially balance, because of its great importance in the success of the defense skill against the dribbling.

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