

# The Development of speed Transitional and Kinematic and their impact with some basic offensive and defensive skills in basketball for female students

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**Abstract---** *In recent years, great progress has been made in the field of education, and the educational process has received great interest from researchers and specialists, in order to keep pace with progress and reach the best education that students can access. One of the quick games that are taught in colleges within a curriculum that contains the basic offensive and defensive vocabulary of the game. Its performance requires a fast transition and mobility in line with the specificity of the game and its positions, and here lies the importance of research, and the problem of research lies in the movement of students while performing offensive and defensive skills as they are. Not at the required level and slow movement and performance, and the research aims to identify the differences between the pre and post tests to develop translation speed and movement of students, as well as to identify the differences in some offensive and defensive tests. The researcher used the experimental method in one experimental method with an experimental group, and it was conducted on a random sample of (4) four individuals and (20) ten students, at a rate of 19.42%. The subsequent preliminary tests for the research variables, and the search continued (21/10/2019 until 30/12/2019 AD), in addition to using appropriate statistical methods. The emergence of a big difference in the development of the navel and transitional movement, as well as in some offensive and defensive skills for students, and the researcher recommends practicing mobility, movement and diversification exercises within the practical lessons of their role. In influencing the performance of technically gifted students, offensive and defensive.*

**Type of Paper---** Review

**Key words---** movement and movement speed, offensive and defensive skills, basketball.

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## Research introduction and its importanc:

It has occurred in recent years, and has progressed on a large scale in the field of education and the educational process has taken a great deal of interest from researchers and specialists in the research and educational aspects, in order to keep pace with progress, in order to reach the best education that students can reach. And the fast-paced basketball game that is taught in colleges within the curriculum contains the basic offensive and defensive game vocabulary that students must perform quickly during performance and play in proportion to the specificity of the game, and this mainly depends on what students own and gain in terms of mobility and mobility, which Subject instructors can achieve it during practical lessons. The importance of the research lies in the importance of translational velocity and kinematics as they are two forms of velocity and their role in the performance of students' skills, as the game grasp and its directions necessitate that the performance of the skill be rapid while playing.

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**Research problem:**

The fact that the former researcher is a player and teacher in the college for the subject of basketball, I noticed the movement of students during their offensive and defensive skills are not at the required level, they are characterized by movement and slow performance that is not consistent with the reality of physical performance and the skill that he must have during the performance in the play and this gives a clear indication of the lack of Focusing on speed exercises and movement in the lesson, hence the problem of research in the study and the development of successful solutions.

**Research aims:**

- Identify the differences between the pre and post tests to develop the speed of translation and mobility of students.
- Identify the differences between the pre and post tests in some offensive and defensive skills in basketball for female students.

**Hypothesis research:**

- There are statistically significant differences between the pre and post tests for the development of translation and kinetic speed for female students.
- There are statistically significant differences between the pre and post tests in some offensive and defensive skills in female basketball.

**Research areas:**

- The Human Domain: A sample of the college's female students.
- In one field temporarily: Duration from 21/10/2019 to 30/12/2019
- Spatial domain: The outdoor playground of the College of Physical Education and Sports Sciences for Girls.

**Research methodology and field procedures:**

**Research Methodology:**

The researcher used the experimental approach and the one group method, which is one of the experimental research methods that searches for "variables in cause and effect" (5/217), and by the one group method, which is one of the experimental research methods.

**Research and sample community:**

The representation of the research community by the students of the College of Physical Education and Sports Sciences for Girls (third phase) for the academic year 2019-2020 and their number is (103) students distributed (4) four people, and the random method (lottery) (20) ten students from the people of four, and by (5) Five female students for each class, at a rate of 19.42%.

**Methods of gathering information:**

- Arab and foreign sources
- Choices and metrics
- Assistive Work Team\*
- An exploratory experience
- Basketball court, basketball, stopwatch, basketball goal, cones, whistles.

**Steps for conducting the research:**

**Determining the research variables:**

Determining the physical search variables represented by (the speed of movement and movement) in addition to identifying some offensive and defensive skills that represent (dealing with the bra, loud clapping, scoring, and defender movement).

**identification tests:**

**The physical and skill tests were determined for the studied variables as follows**

- ✓ Fast running test for a distance of (30) meters

- ✓ Purpose: To measure the players' transition speed (6: 116)
- ✓ Arm raise and lower test
- ✓ Purpose: measure the kinematic velocity of the arms (6: 97)
- ✓ Chest handling test
- ✓ Purpose: To measure handling and ball handling speed (10: 169)
- ✓ Test the high chuck for 20m with the dominant arms
- ✓ Purpose: To measure chuck velocity (6: 101)
- ✓ Choose the speed of scoring
- ✓ Purpose: To measure scoring speed under time pressure (9: 142)
- ✓ Defending player movement
- ✓ Purpose: To measure the performance of the basic defense movement (12: 284)

### **Exploratory Experience:**

The assistant work team, under the supervision of the researcher, conducted the exploratory experiment, which is “a preliminary experimental study that the researcher conducts on a small sample before he addresses him” (5: 95) and on a sample consisting of (8) eight students, randomly selected from the four departments on Monday corresponding to 10/21 / 2019 to find out what the experience means to him and make use of it as much as possible in terms of the time required, the greeting tools, and testing the work of the implementation team.

### **Preliminary Tests:**

The assistant team carries and supervises the researcher for cardiac examinations of a sample in Omen on Monday 28-30 / 10/2019, so that the day of physical tests for the experimental application of transmission and kinematic velocity and another day for implementation and application are skill tests for the game in question and in the college yard, and the researcher worked to determine all the conditions as possible To be available in subsequent tests in terms of time, place, tools and instruments. Work as one team.

Key Experience (speed and movement exercises)

The main experiment was conducted as follows

Exercises to develop mobility and mobility for students

Knowing the impact of development on some basic offensive and defensive skills in basketball

Exercise for (8) continuous weeks

Number of training units in the college: 16 units

The number of training units per week \*: 2 units

Weekly training days: Monday - Wednesday

The duration of the exercise in Unit J ranges from 30 to 35 minutes

Density is used below the maximum, all the way to the maximum

Exercise implementation of the disease from 4/11/2019 to 12/30/2019

### **Dimensional tests:**

On Sunday and Monday (12-29 / 30/2019 AD) the assisting working group and supervising the researcher conducted the following tests of the sample after completing the main experiment, where the same procedures were followed as in the initial tests.

### **Statistical Methods (91: 7/151)**

- percentage
- SMA
- standard deviation
- law (t-test) for the corresponding samples

**The fourth chapter:****Presentation, analysis and discussion of results**

Presentation and analysis of the results of moving speed, motor skills, offensive and defensive skills for the pre and post test of the experimental group.

**Table (1)**

Variables and unit explain the measurement, calculations, installments and deviations of difference circles, deviations and value ((calculated for pre and post testing of the experimental group))

Indication	Values t Calculated	P. P	P	Dimensional tests		Pre-tests		measuring unit	Variables
				±p	s	±p	s		
D.	13.852	0.263	1.115	0.415	4.320	0.334	5.435	Tha	Transition speed
D.	7.132	1.665	2.162	2.145	24.235	1.301	21.215	Number	Kinematic velocity
D.	10.722	0.638	2.101	1.249	8.566	1.018	6.465	Number	Chest handling
D.	8.852	0.468	1.103	0.680	6.222	0.925	7.325	Tha	The high chuck
D.	5.025	1.352	2.141	1.325	8.756	1.010	6.615	Number	Scoring
D.	13.150	0.731	1.860	0.915	11.962	1.276	13.822	Tha	Cannons move

Under the level of significance (0.05), the degree of freedom (20-1 = 19) and the tabular score (1.729) through Table No. (1) it appears that there are statistically significant differences between the pre-tests and the dimensional research sample (students) in the physical and skill research variables Offensive and defensive, it was found that all the calculated values are greater than the value of (t) of (1.729), and this indicates that there are differences between the pre and post tests.

**Discussing the results:**

Through Table No. (1), there is a significant difference between the pre and post test of the experimental research sample in all the physical and skill research variables from the characteristics of this researcher to the effect of the transition exercise T and the kinetic velocity Elmo Duah by the researcher. Which included fast arcade at different distances, including short, medium, long, and different Bozeman, tugging under the maximum limit, reaching the maximum intensity, with continuous training and special repetitions, with an emphasis on giving a suitable rest period between the repetitions. It is also confirmed by Raad Jaber, quoting Uzla n that "the speed has evolved. Mobility and mobility are two important and fundamental factors for physical and skill performance "(140: 1). This means that the physical and skill performance of the game appears through the muscles of the legs. And the hands when performing the movements or skills in the shortest possible time (45: 2). The researcher believes that the development of the speed of movement of its shape leads to the development of the physical performance of the movements performed by the students. William, Abdul Hakim and others on "the close interrelation between the elements of fitness and its adequacy, including the translational velocity and movement that is acquired in training." (125: 13) (158: 4) Finally, there is a scientific

training fact in which the researcher and Saad Mohsen agree on “The organization of exercises and their diversification in educational and training units inevitably leads to a well-developed development. These exercises came to him” (85: 8).

**Conclusions and recommendations:**

**Conclusions:**

- The use of exercises developed by the researcher after having proven their role in the physical development of the translational velocity and movement of students.
- Emphasis on the use of exercises to develop and diversify the speed of transition and movement within the practical lessons of students for their role in influencing offensive and defensive skill performance.
- Emphasis on conducting similar research for other physical characteristics and skills that were not covered by the research.

**Recommendations:**

- The emergence of a difference in the development of translational speed and kinematics for students.
- Teams appeared in some offensive and defensive basketball skills for female students.
- The appearance of the highest calculated value was for the transition velocity as it reached (852 .13) as a physical variable, and the lowest favorable value was for scoring as it reached (5.025) as a skill variable.

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**Accessory(1)**

A sample training unit for developing the transition speed for female students

Week :The first location :the outdoor playground of the college

Unit :the first day :Monday

Exercise time32 :d Date2019/11 /4 :

Total time for exercise	Rest between repetitions c	the size	Intensity	Exercise	No

370sec	120sec	3x 10 m	%90	Stand in the middle of the field and when you hear the whistle, run quickly 10 meters	1
620Tha	150sec	4x 15 m		Stand of the bird situation and when you hear the whistle fast jogging distance of 15 m	2
930Tha	180sec	5x 20 m		Long sitting, direct the student to the stadium with the whistle for a fast jog 20 meters	3
Total 32D.					

A model for the training unit for developing the kinematic speed for students

Week :The first location :the outdoor playground of the college

Unit :second day :Wednesday

Training time 31.5 min, Date :20/11/2019

Total time for exercise	Rest between repetitions	the size	Intensity	Exercise	No
375Tha	120sec	3x 5 m	%60	Fast running reverse teacher signal of ) the right , left , in front , behind ( and for a distance of 5 m	1
745Tha	180sec	4times		Draw lines on the playground at different dimensions 10 m 15 , m and 20 m with the indication of running from under the basket and suddenly standing on the line determined by the school	2
770Tha	150sec	5times		Jogging around a circle of 15 m in diameter and upon hearing the whistle , run quickly into the circle and touch the funnel in the middle	3
Total 31.5D.					