

The Percentage of the Contribution of Kinetic Speed in Some of the Complex Defensive Skills of Basketball for Young Players

Lara Abdulridha Kreidi

College of Physical Education and Sports Sciences/ Al-Muthanna University, Iraq.

Assistant. Prof. Dr. Ahmed Karim Latif

College of Physical Education and Sports Sciences/ Al-Muthanna University, Iraq.

Abstract

The research included the introduction and its importance, and the problem is that these curricula and research devoted a large amount of their contents to offensive skills, while few of them were exposed to the defensive side and not the same amount of care and attention. Which is characterized by the performance of defensive skills with the same care and attention. Therefore, the researcher noticed the weak performance of the individual defensive skills of young players, which is accompanied by weakness and neglect of motor speed by coaches and players. The aim of the research is to know the reality of special endurance (kinetic speed) among young basketball players and to know the individual defense movements of young basketball players and to know the percentage of speed contribution Kinetics in some complex offensive skills. To achieve these goals, the researchers used the descriptive approach in a survey method and studied correlational relationships, while the research sample was represented by the players of Al-Hilla Sports Club and Al-Tadhamon Sports Club, for the sports season (2020-2021), as well as the means of data collection. After a series of field procedures represented in determining the kinetic speed that has a direct relationship with the performance of individual defense movements, ensuring the validity of the tests, conducting the main experiment, and using appropriate statistical means to process the results in a way that serves the research and achieves the goals, the researchers concluded: The kinetic speed is related to a relationship Function, with some individual defense movements, and that the increase in motor speed is accompanied by an increase in the accuracy of the performance of these skills. Knowing the reality of special endurance (kinetic speed) among young basketball players.

1. Knowing the reality of the complex defensive skills of young basketball players.
2. Knowing the percentage of the contribution of motor speed in some complex defensive skills.

To achieve these goals, the researchers used the descriptive approach in a survey method and studied correlational relationships, while the research sample was represented by the players of Al-Hilla Sports Club and Al-Tadhamon Sports Club, for the sports season (2015-2016), as well as the means of data collection. After a series of field procedures represented in determining the kinetic speed that has a direct relationship with the performance of the defensive skills complex in basketball, ensuring the validity of the tests, conducting the main experiment, and using appropriate statistical means to process the results in a way that serves the research and achieves the goals, the researchers concluded: that kinetic speed is related to In a significant relationship, with some of the composite defensive skills in basketball, and that the increase in kinetic speed is accompanied by an increase in the accuracy of the performance of the composite defensive skills of young basketball players.

Introduction and Research Importance

Basketball is one of the advanced games that the athlete can notice from the aspects of that development. That is why specialists have been developing this game by raising the levels of players in all aspects of preparation, which was reflected in the development of playing methods, plans and laws that contributed to giving aesthetic performance through mastering skills and reach the high level in the game. Therefore, mastering these skills is one of the most important issues that concern those involved in the game, and it has become a given that raising the training level of any player cannot be promoted, whether it is physical, tactical or psychological without learning the technical ability of all the basic and complex skills of the game, as it includes all the vocabulary with different duties that perform Within the framework of the law of the game and the extent to which the members of any team have mastered all forms of basic skills are among the most important factors that lead to success and excellence. As there is nothing important between these skills and what is less important because the player is in dire need of all these skills throughout the match, although he may not use some of them due to the conditions of the match that do not allow him to use them. The game is characterized by the fast pace and the transition from defense to attack very quickly, as well as sudden launches, whether with or without the ball, unexpected stops, jumps, rotations, changing directions and transferring movement according to the events of the match. A greater chance of receiving the ball as well as recording an injury, by doing complex skills that start without the ball and end with receiving the ball and shooting. All of these skills need to withstand high performance so that the player can perform them appropriately and effectively at all times of the match. Therefore, the researchers decided to study the contribution ratios between the motor speed and the performance of the defensive skills compounded in basketball for young players.

1-2 Research Problem

In this study, researchers will attempt to answer the following questions:

- 1- What is the reality of kinetic speed of young basketball players?

The Percentage of the Contribution of Kinetic Speed in Some of the Complex Defensive Skills of Basketball for Young Players

- 2- What is the reality of the performance of some complex defensive skills among young basketball players?
- 3- What is the relationship between motor speed and the performance of some complex defensive skills among young basketball players?
- 4- What is the percentage of the contribution of kinetic speed under study in some of the complex defensive skills of young basketball players?

1-3 Research Objectives

- 1- Knowing the reality (kinetic speed) of young basketball players.
- 2- Knowing the reality of the complex defensive skills of young basketball players.
- 3- Knowing the relationship between (motor speed) and the performance of some complex defensive skills among young basketball players.
- 4- Knowing the percentage of contribution (kinetic speed) and the performance of some complex defensive skills among young basketball players.

1-4 Research Hypotheses

- 1- The researchers hypothesize that: (there is a significant correlation between (motor speed) and the performance of some complex defensive skills among young basketball players).
- 2- The motor speed contributes significantly to some complex defensive skills.

1-5. Research Scopes

1-5-1 The human field: Al-Hilla Sports Club and Al-Tadhamon Sports Club players for the season (2020-2021)

1-5-2 The spatial domain: Hall of Martyr Hamza Nuri and Hall of Martyr Asaad Shuker

1-5-3 Temporal domain: the period from (1/3/2020) to (1/6/2020)

2- Research Methodology and Field Procedures

2-2. Research Methodology:

The nature of the problem at hand is what determines the approach, so the researchers used the descriptive approach in the style of associative relations.

2-3 Research Tools:

3-2-1 Research Sample:

The research sample included (20) players from Al-Hilla Club and Al-Tadhamon Club, and they were chosen intentionally for the sports season (2020-2021). (10) players from Al-Hilla Club and (10) players from Al-Tadhamon Club were tested, representing 60.6 of the research community, as shown in Table (1).

Table (1): Distribution of The Sample Members According to Their Clubs and Geographical Location

No.	Club Name	Geographical Location	Number of Players	Total	Percentage
1-	Hila	Al Muthanna	10	12	66.66
2-	Tadhamon	Najaf	10	18	55.55

2-2-3. Data collection methods:

In order for researchers to complete their research and complete it in the best way, it is necessary to use some devices and tools that help it.

The researchers used the following scientific tools and methods:

- 1- Arabic and foreign references and sources
- 2- Observation
- 3- Objective physical exams

3-4 Devices and Tools Used:

- 1 - Electronic calculator (laptop) number (1).
- 2- Hand-held calculator (Casio) type (1).
- 3- An electronic stopwatch, type (Diamond), number (2).
- 4- One (1) textile tape measure.
- 5- Plastic poles (6).
- 6- Legal basketballs of type () number (4).
- 7- A Fox whistle (2).
- 8- sticky tape
- 9 - Basketball arena.
- 10- Forms for recording test results.

3-4 Field Research Procedures:

3-4-1 Determining the search variables:

In order to determine the variables that the researchers depend on in completing their research requirements, they surveyed the most important sources and references related to the topic of research, which resulted in the numbers of some tests related to motor speed and the performance of some defensive skills complex in basketball.

3-4-2 Tests used in the research:

Kinetic speed test

Run in place for (10) seconds: (1)

The purpose of the test: To measure the motor speed of the muscles of the legs.

The Percentage of the Contribution of Kinetic Speed in Some of the Complex Defensive Skills of Basketball for Young Players

Necessary tools:

Basketball court, electronic stopwatch, rubber rope with a length of (1) meter, whistle to give start and end signal.

Performance description:

- The player takes a standing position in front of the rubber rope fixed on both sides by the work team.
- Then the player takes a half-standing position (one of the thighs parallel to the ground), that is, the height of the rubber rope from the ground is equivalent to the height of the tester's knee.
- Giving the start signal to the player who is running, starting with the right leg in place, as fast as possible, so that the rubber rope touches his knees alternately in all stages of running in place.
- The player continues to repeat this performance the maximum number of times for a period of ten seconds.

Test instructions

- The player took the correct position (standing half) for the purpose of fixing the rubber rope in proportion to the height of the player's knee and return to the standing position.

- You must start with the right leg when giving the signal.

- The player's knee must (alternately) touch the rubber cord.

Continuing and not stopping during the performance and when giving the start signal until giving the end signal.

- Speed in performance.

- Each player has only one attempt.

- The number recorded by the player is announced to the next player to ensure the competition factor.

Test administration:

- Recorder: He calls the names first and records the number of times the test is performed secondly.

- Timer: Give the start and end signal with timing and note the correctness of the test performance and counting

Scoring Calculation:

- One count for each time the player touches the ground with the right foot only.

- It counts and records the number of times the right foot touches the ground for 10 seconds.

Test name: Get out of the reservation to defend against a player who has a good score

The purpose of the test: To measure the skill of getting out of the reservation to defend against a player who has good scoring

Performance description: The attacking player No. (5) makes an offensive reservation for his colleague No. (1) in the front area and on the three-throw line. Here, the defending player No. (1) must cross over the reservation in order to be able to defend properly.

Recording: If the defender No. (1) manages to cross in front of the attacker and prevents the player from scoring, a (2) score is given.

Note: A time of (15) seconds is given to each laboratory, and the number of attempts is calculated, taking into account the evaluation of each case.

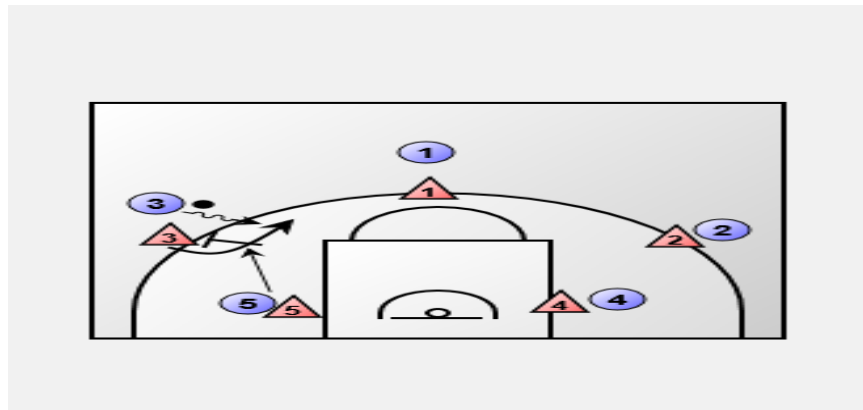
Test name: Coming down from behind the reservation to defend against the categorical player

The purpose of the test: to measure the skill of coming down from behind the reservation to defend against the categorical player.

Performance description: The attacking player No. (5) makes an offensive reservation for his colleague No. (3) in the side area of the goal and on the three-throw line. Here, the defending player No. (3) must come down from behind the reservation in order to be able to defend properly.

Recording: If the defender No. (3) manages to cross from behind the attacker and prevents the player from scoring, a (2) score is given.

Note: A time of (15) seconds is given to each laboratory, and the number of attempts is calculated, taking into account the evaluation of each case.

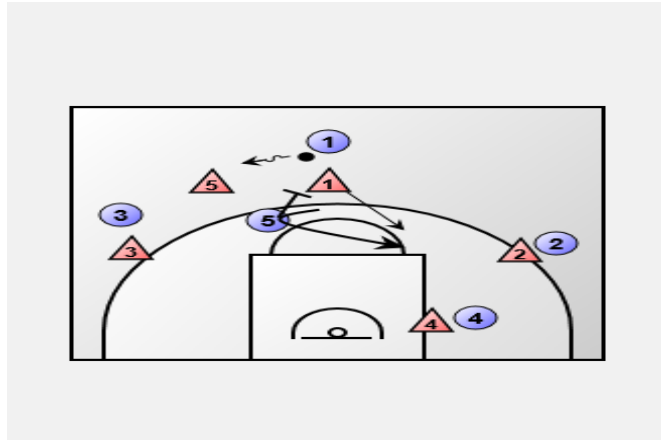


Note: A time of (15) seconds is given to each laboratory, and the number of attempts is calculated, taking into account the evaluation of each case.

1. The name of the test: switching between defenders during the offensive reserve (switch back)
2. The purpose of the test: to measure the skill of switching between defenders during the offensive reserve (switch back).

Performance description: The attacker No. (5) makes a reservation on the defensive player No. (1) and here we must switch back and on the defensive player No. (5), the defense of the attacking player No. (1) and the defender No. (1) Referring to the attacking player's defense No. (5).

The Percentage of the Contribution of Kinetic Speed in Some of the Complex Defensive Skills of Basketball for Young Players



Scoring: If the defending player No. (5) is able to make a defensive switch (switch back) and stop the attacker, he is given (2) a score. (Switch back) is given (0) score

Note: A time of (15) seconds is given to each laboratory, and the number of attempts is calculated, taking into account the evaluation of each case.

3-4-4 Experimental Experiment:

The exploratory experiment is “a preliminary experimental study carried out by the researchers on a small sample before carrying out his research in order to choose the research methods and tools.” Therefore, the researchers conducted their experiment on Friday, 1/4/2021, on the basketball team of Al-Hilla Club, and the aim of the experiment was to identify Difficulties, as well as identifying the efficiency of the work team, the accuracy of the implementation of the tests, the time taken, and ensuring the validity of the devices.

Identifying the efficiency of the work team, the accuracy of the implementation of the tests, the time taken, and ensuring the validity of the devices.

3-4-5 Validity of tests

3-4-6 The scientific basis of the tests

1- Honesty: it means “honesty” that the test measures with a high degree of validity and validity what it claims to measure.

2- Test stability:

What is meant is "that the test gives the same results if the test is repeated under the same conditions." The researchers used the test and retest method to extract stability.

3- The objectivity of the test:

It means "freedom from prejudice and intolerance, and not to include personal factors in the judgments issued by researchers." Therefore, the tests were evaluated by two criteria, namely, Dr. Bashar Abdel-Latif and Dr. Hassanein Juma'a.

Table (2): Coefficient, Stability, and Objectivity of The Tests of Motor Speed and Vehicle Defensive Skills.

No.	Test Items	<i>Coefficient</i>	Objectivity coefficient
1-	Kinetic speed	0,81	0.80
2-	Get out of the lock up to defend against a player who has a good scoring	0.79	0.89

No.	Variables	Mean	Std. Dev.
1	Kinetic speed	4	0,894
2	Get out of the lock up to defend against a player who has a good scoring	10,16	1,722
3	Come down from behind the reservation to defend against the cut player	11,500	1,26
4	Switching between defenders during the offensive reserve (switch back)	11,33	1,36
3	Come down from behind the reservation to defend against the cut player	0.87	0.84
4	Switching between defenders during the offensive reserve (switch back)	0.90	0.87

3-5 Main Experience:

After completing the reconnaissance experiment, and obtaining its results, through which it became clear that the test of motor speed and complex defensive skills was valid, and its conditions were met, the researchers began applying the tests to the remaining vocabulary of the research community, on (4/5/2021).

The statistical methods used in the research:

The researchers used the statistical bag (SPSS), to process the data and show the results.

The Percentage of the Contribution of Kinetic Speed in Some of the Complex Defensive Skills of Basketball for Young Players

4- Results - Presentation, Analysis:

4-1 Statistical description of the anthropometric distributions and the smash hit test:

The data were statistically processed to extract the arithmetic means and standard deviations for special endurance (motor speed) and some complex defensive skills, as well as to calculate the standard error for them, the results came as in Table (4).

Table (5) The mean and standard deviation of the research variables

No.	Variables	Capacity	Error Percentage	Sig.
1.	Get out of the lock up to defend against a player who has a good scoring	0,91	0,02	Significant
2.	Come down from behind the reservation to defend against the cut player	0,89	0,03	Significant
3.	Switching between defenders during the offensive reserve (switch back)	0,78	0,05	Significant

Table (5) shows that the correlation coefficients between the researched variables, special endurance (motor speed) and some defensive skills compound with basketball, were positive and statistically significant, and were (0.91, 0.89, 0.78) with an error rate (0.02, 0.03, 0.05), where all were These values are highly significant.

Table (6): The value of the motor speed contributing to the complex defensive skills and the percentage of its contribution

<i>Independent Variable</i>	<i>Dependent Variable</i>	<i>Contribution Percentage</i>
<i>Kinetic Speed</i>	Getting out of the lock up to defend against a player who has a good scoring	0,828
	Coming down from behind the reservation to defend against the cut player	0,792
	Switching between defenders during the offensive reserve (switch back)	0,608

When studying the above table, we find that the kinetic speed has contributed to getting out from above the reservation to defend against the player who has a good scoring, (0.828), and also contributed to the skill of coming down from behind the reservation to defend against the decisive player (0.792) and also contributed to the skill of switching between defenders during reservation Offensive (switch back) (0.608), which means that the kinetic speed has effectively contributed to the defensive skills of the complex basketball.

Conclusions and Recommendations

5-1 Conclusions:

Through the results, it was possible to reach the following conclusions:

- 1- The motor speed is related to a significant relationship, with some complex defensive skills for young basketball players.
- 2- The kinetic speed of young basketball players explains a large percentage of the accuracy of the performance of some complex defensive skills in basketball.

5.2 Recommendations:

In light of the research conclusions, the researchers recommend the following:

- 1- The need for basketball coaches in the Iraqi league to pay attention to complex defensive skills, and to put special exercises for them in the training curriculum.
- 2- Interesting in developing the special endurance of young basketball players due to its importance in maintaining the technical ability with high efficiency.
- 3- Conducting similar studies to find out the percentages of contribution of other physical and kinetic traits to the performance of technical and tactical skills in basketball and other categories.

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