The effect of complex skill exercises to develop the kinematic speed of rolling and Suppressions football for young adults (14-16 years)

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Abstract

The development in the level of football was not a coincidence but rather the efforts of specialists and experts in the field of the game to multiply the basic skills and their diversity in football, making the technical numbers of these skills take more attention and complex exercises is one of the most important exercises of the game that works to develop the skill side of the player Football and the speed of the kinetic response is considered one of the capabilities that are not free from any sporting activity. Naturally, the need for it varied from one activity to another according to the skill and planning requirements in each activity and the research problem was that there is a slow movement speed when performing scoring and handling skills and research goal setting exercises special skill to develop a vehicle-speed motor rolling and suppressions junior aged (14-16 years). The research hypothesis there were statistically significant differences between the pre and posttests in the experimental and control groups and theoretical studies concerned with complex exercises, kinetic speed and basic skills in football and rolling the ball and Suppressions and the research sample was (16) players from the Amo Baba School of Football for young people ages (14) -16 years. The search tests were the choice of kinematic speed, the choice of rolling and the choice of Suppressions, and the researcher discussed the results, and from the research conclusions the effect of complex exercises for the ball in developing the kinematic speed of rolling and Suppressions for members of the experimental group, hence the importance of the research in preparing special exercises to develop kinematic speed. Rolling and Suppressions football.

Keywords: complex skill, kinematic speed, suppressions football

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Introduction

The development in the level of football was not a coincidence, but rather came as a result of the efforts of specialists and experts in the field of the game relying on various sciences, and the achievement of tournaments in football depends on the use of scientific foundations, planning and preparation for the skills, planning, physical, psychological and cognitive aspects and other auxiliary factors. The multiplicity and diversity of basic skills in football has made the technical preparation of these skills take more attention, and the search for new training methods always aims to acquire and develop these skills. Compound exercises are one of the most important exercises of the game that work to develop the skill side of the football player, as they are similar to the player's duty in competition conditions, and collect more than one skill in one exercise, and also perform during the various preparation stages as well as its diversity, which helps to increase the elements of desire and excitement when exercising.

The basic skills are one of the most important components of football, which is one of the main requirements of this game, and (rolling) skills are the most used at the time of the game among players, and mastering these skills accelerates the process of ending the attack and scoring goals in the opposing team's goal. The speed of the kinetic response is one of the capabilities that are not free from any sporting activity, and it is natural that the need for it varies from one activity to another according to the skill and planning requirements in each activity,
where these games and activities differ between them according to their need to the speed of the kinetic response to certain stimuli resulting from the type of game or Type of activity.

- As he (Yarub Khion) defined it as "the time from the moment the stimulus enters through the senses to the end of the entire movement and contains the reaction time and the time of the movement." \(^2\)
- (Richard) defines it as the time period between reaction time and movement time, which means the time from the moment the stimulus enters the end or the word response. \(^3\)

In light of the foregoing, the researcher sees that the speed of the kinetic response is the total sum of the kinetic expectation time, the reaction time and the movement time, that is, from the moment the stimulus enters the end of the movement.

**Research problem**

Through the field follow-up of the researcher to the matches of the junior teams, he observed that there is a slow movement speed when performing scoring and handling skills and the researcher attributes the reason to the lack of interest in complex exercises, which led to a weakness in the skills of rolling and Suppressions among the research sample. Therefore, the kinetic speed of rolling and Suppressions skills must be developed to serve the sporting process and to achieve the best achievements of Iraqi football.

**Research objectives**

1. Putting in place special skillful exercises to develop the kinematic speed of rolling and quenching for young adults (14-16 years).
2. Knowing the effect of special complex skills exercises in developing the kinematic speed of the rolling and suppression for young people ages (14-16) years.

**Research hypothesis**

1. There are statistically significant differences between the pre and posttests in the experimental and control groups.
2. There are statistically significant differences in the tests between the experimental and control groups.

**Research fields**

- The human field: (16) junior players at Amo Baba School.
- Domain Temporal: 15/08/2015 to 10/10 / 2015.
- Spatial field: pitch selected for the training of youth in the Amu Baba School at the International People's Stadium.

**Combined exercises**

Football specialists and coaches search for new methods and methods that contribute to developing the skill, planning and technical aspects of this game players, as it is necessary to refine these methods and apply them in conditions similar to the conditions of the game. Learning the basic skills of football and mastering it is the first stage in the process of preparing a player skillfully. As for the second stage, it is the development of those skills. One of the most important exercises used in this is the combined exercises that can be defined as follows:

- "It is in which each training includes two or more basic skills". \(^4\)
- And "which the main part of it contains a variety of exercises".\(^5\)
- And "These are exercises that consist (are composed of) several activities and basic principles, and they are based on basic exercises that players have already mastered, and it is one of the game exercises that develop and advance the player in the game."\(^6\)
And "it contains many exercises, in order to gain the player more than one skill or ability, and interest in this type of exercise has increased in recent years for the following reasons:"

1. Its variety increases when players desire to exercise it.
2. It has been proven that it is in the interest of the player’s functional system to diversify the exercises, so that the body can bear them in a special way, while performing them with a single load exhausts the player’s internal systems.

**Forms of combined exercises, The complex exercise has two types**

1. A complex exercise of more than one basic skill.
2. A complex exercise of one or more skills and elements of physical fitness.

The coach tries to create during the training conditions close to the conditions of actual competition during the game, and this requires that the series contains exercises, especially exercises that are shared by two players, more and more that can be adopted well to develop training, technical, planning, psychological, legal and adaptive aspects all, and when the player performs the exercise with his colleague Thus, it represents a recurring activity of play. "Expectation and timing become one of the most critical factors for the success of these exercises" as "mediated" these exercises do not take root and complement the technical capabilities only, but go beyond the tactical and physical capabilities, and the drawing elements can be more proficient in the use of complex exercises.

**Kinetic speed**

Kinetic speed is of great importance in various sporting activities, because it has an impact on the performance of different movements in the field of football, this is clear according to the changing and many situations, which differ from one place to another throughout the field of play as well as the use of various skills to implement the playing plans, whether these Skills with the ball, or without it, are simple or complex. In all these situations, we notice that the team that possesses good motor speed is able to face all the variables that it is exposed to during the matches. Kinetic velocity means "performing several complex movements or movements in the least possible time."

"The kinetic speed with the ball is one of the basic factors in modern football, and this speed does not depend on the kinetic speed of the player in a straight line or without a ball, but also depends on the speed characteristic to assess the conditions of play and develop appropriate solutions to them."

**Football Basic Skills**

The multiplicity and diversity of football skills and making the fans always tend to watch and follow up on their matches and in order to reach the team to the best results, basic skills must be mastered at the level of all players. As for the basic skills of football, it was known as:

- "A term given to those activities that the player performs with the ball and in the areas close to it, and these activities are performed by all players."
- "It is the means to implement the plans."
- "It is all the movements the player performs with or without the ball to achieve a specific purpose within the limits of football law."
- It is the way in which the attack and defense of the ball can be exceeded, without them individually or by clashing in the opponent's interview.
- (Furat Jabbar) indicates that the most important characteristic of a good performance of basic skills is:
  1. Ease of performance.
  2. Precision and performance control.
  3. Compatibility in performing the movement.
**Roll the ball**

No player, whether defender or goalkeeper, can dispense with this skill during the game and all members of the football team must master the skill of rolling the ball as well as the rest of the basic skills in this game. "Rolling the ball is the basis of the individual effort of the player in advancing the ball and penetrate the opponent's defense and create joy. For fellow players, the term rolling refers to a mixture of ball driving movements or stopping with the ball and then re-starting the ball and changing the direction or making attempts and movements of camouflage. The player must have the ability to control the ball during the fast running with it and taking into account after the opponent and the proximity of the player is raised to the head to see the playing field and the players' movements. There are special cases for rolling:  

1. The situation in which the ball is very close to the player's foot, especially in areas where there is a vacuum and an opponent watching close observation.
2. Rolling during running distances are long distances, as there is room for emptiness. Rolling can be divided into the following types:
   A. Roll the ball out of the foot.
   B. Roll the ball inside the foot.
   C. Roll the ball in the front section of the instep.
   D. Roll the ball into the top instep.

**Suppressions**

The development in football, whether in the ways of playing or plans depends a lot on the player's mastery of the basic skills in this game and one of the most important of these skills is the Suppresses skill that requires the player timing and high sensitivity of all parts of the body that are used in it so that the player does not hold the ball and become a share of the team. The opponent is dangerous on goal. The Suppresses is "bringing the ball under the player's control in order to dispose of it according to the position that his team wants, and it can be used with all members of the body (except for the arms), but it is advisable to use the feet in order to dispose of the ball quickly" as the player's success in carrying out any duty depends on his good reception for the ball from which side the ball reaches. "If we want to divide the dousing skill, we can divide them in two phases. The first stage of Suppresses is how to bring the ball under the control of the player. As for the second stage, it is how the player behaves with the ball, whether he hits it or running with it."

**Research methodology and field procedures**

**Research Methodology**

The researcher used the experimental approach to suit the nature of the problem that the researcher wants to address. The experimental approach is "an approved and accurate expression of the specific conditions of an accident and observation and interpretation of changes in the incident itself."

**The research sample**

The researcher used the experimental approach to design the two equal groups (experimental and controlling). The research sample identified the Amo Baba School football players for young people (14-16) years old who are (16) players. The experiment was conducted (8) weeks at (3) units per week.

**Means and tools used in the research**

- Arab and foreign sources and reference.
• Questionnaire.
• Information Dump Form.
• Personal interviews.
• Assistant Work Team.

Devices and tools

• Goals.
• No. 15.
• Whistles.
• Football stadium.
• Burke.
• Soccer number 15, size 5.

Define the tests

Through polling expert opinions and personal interviews, according to the expert opinion form, physical and skill tests were defined, which are (kinetic speed, rolling and damping) by a rate of more than (75%), as well as identifying tests, which are:

Kinetic speed test:

• Title of the test: The speed of the man's movement in the horizontal direction.  
• The purpose of the test: To measure the speed of a player's foot in its approximation and dimension in the horizontal plane of the two legs.
• The tools used: a stopwatch / device consisting of a wooden board fixed on it vertically in the middle, a beam length of (40.64) cm and a height of (15.24) cm. A chair without armrests.
• Test performance specifications: The player sits in front of the device, as the foot is on the right side of the device and upon hearing the starting signal he moves his foot to the left side from above the crossbar and then returns it to the Yemen side and is called a turn.
• Registration: The number of tournaments he has played for (20) seconds is counted, two attempts are given and the best attempt is calculated, as shown in Figure (1).

![Figure 1: Test the man's movement speeds in the horizontal direction](image)

Roll test: 23

Test: Rolling the ball between (10) characters

• The purpose of the test: to measure mobility
• Used equipment: Football - stopwatch - (10) characters suitable for height. The test area is determined as shown in the following figure, as the distance is between one person and another (1.5) m.
• Performance description: The player stands with the ball behind the starting line when the starting signal is given. He runs the ball between the bars and can use the right or left foot, or both, and in the direction shown in the same figure.
• Number of attempts required: The player is given two attempts and the best is counted, and another attempt can be given if an accidental mistake is made by the player such as passing two people together or dropping one of the characters.
• Measurement: The time taken to and fro is calculated and the time is recorded as close to 1/100 of a second.

![Figure 2: Ball roll test shows between (10) characters](image)

**Stop motion ball suppression:**

• **Aim of the test:** Speed in extinguishing the ball with all parts of the body except the hands.
• **Tools and capabilities:** (5) Five legal soccer balls.

**Test procedures:**

• The player stands in the location shown in Figure (3) behind the specified test area.
• The coach stands with the ball on line A, and after giving the starting signal, a (high ball) is thrown to the player who advanced from the starting line to the inside of the test area trying to stop the ball with any part of his body, except for the arms and then back to the starting line and start again, and so on. The player repeats the game five times in a row.
• The ball must be stopped within the specified test area.
• If the coach is wrong in throwing the ball, the attempt is repeated, and the player is not counted (throwing the ball is done with the movement of hands from the bottom up) and the attempt is not calculated correctly in the following attempts:
  A. If the player does not succeed in stopping the ball.
  B. If any of the lines of the test area passes.
  C. If the ball is stopped illegally in football.

**Registration method:**

• Two marks are given for each correct attempt within the specified time.
• (10) Scores are given for the total of five attempts during (15 Second).

![Figure 3: Stop stopping ball movement shows](image)
Pre-test:

Through testing and then identifying the kinetic speed of each player from the research sample, then the assistant work team conducted the pre-test for the control and experimental groups, at four in the afternoon on Wednesday, 5/8/2015. For physical tests, and on Thursday, 6/8/2015, for skill tests. As it has been a physical and skill tests for the experimental and control groups on the pitch selected for the training of youth in the Amu Baba School at the International People's Stadium. The researcher recorded the observations and conditions accompanying all the tribal tests in terms of time, place, tools, devices, and the method of implementing the tests to create the same conditions when conducting the post-tests. The physical and skill tests included the following:

- Kinetic velocity test.
- Rolling skill test.
- Quench skill test.

Main experience

The researcher relied in its preparation on some scientific sources and references, in addition to taking the opinions of a group of experts in the football game, and the researcher took into account the use of prepared exercises and the level of physical ability of the research sample and tools used and the method of implementation and economic conditions. The training curriculum also included the following parts:

- He started training exercises on Saturday, August 15 2015 until Saturday October 10 2015.
- The exercises were intended for the junior class.
- Continuing the application time for the exercises prepared by the researcher for period of (8) weeks.
- The number of training units per week (3) training units conducted on days (Saturday, Monday, Wednesday).
- The total training units totaled (24) training units.
- The time for practicing the experimental group took a time ranging between (45-50) minutes.
- Working with the experimental group during the time allotted by the main department was limited to the time of the main section ranging from (40-100) minutes.
- The researcher used the method (low-intensity interval training).

Post-test:

The post-tests for the control and experimental research samples were conducted after the completion of the main experiment, at four o'clock in the afternoon on Monday, 12.12.2015, and the researcher took into account the availability of the same conditions and the location of the tribal tests to avoid the variables of conditions on the post-tests of the research samples.

Statistical means:

The researcher used the following statistical methods; these include the SPSS statistical package and the statistical methods below:

- Mean.
- Standard deviation.
- Pearson Link
- (T-test) for analog samples.
- Law of the rate of development.
- Statistical bag (SPSS).
Results

Table 1: Statistical processing for the pre and posttests of the control variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Units</th>
<th>Means</th>
<th>Mean diff.</th>
<th>(t) Value</th>
<th>Result</th>
<th>Evolution rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pretest</td>
<td>Posttest</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kinetic speed</td>
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<td>49.75</td>
<td>-3</td>
<td>0.654</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Mean diff.</td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>M.D²</td>
<td></td>
<td></td>
<td>Sig.</td>
</tr>
<tr>
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<td></td>
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<td>Calculated</td>
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<td></td>
<td>Indication*</td>
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<td></td>
</tr>
<tr>
<td>Rolling</td>
<td>Degree</td>
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<td>3.62</td>
<td>-1.125</td>
<td>0.548</td>
<td>1.57</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Mean diff.</td>
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<td></td>
<td></td>
<td>M.D²</td>
<td></td>
<td></td>
<td>Non sig.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Calculated</td>
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<td></td>
<td></td>
<td>Indication*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suppressions</td>
<td>Degree</td>
<td>1.75</td>
<td>2</td>
<td>-2.5</td>
<td>0.163</td>
<td>-1.528</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Mean diff.</td>
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<td>0.170</td>
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<tr>
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<td></td>
<td>M.D²</td>
<td></td>
<td></td>
<td>Non sig.</td>
</tr>
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<td></td>
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<td>Calculated</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Indication*</td>
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</tr>
</tbody>
</table>

* At a degree of freedom (7), and the significance level (0.05).

From Table (1) and Figure (4), which shows the arithmetic mean and the differences between the media for the pre and posttests of the control group, as well as the calculated value (t) and the statistical significance and the percentage of development? As the kinetic velocity variable for its arithmetic mean for the pre-test was (46.75) and for the post-test (49.75) and the difference between the circles (0.654) and the calculated value of (t) (-4.583) and the statistical significance (0.003) the result was significant and the rate of development The mean value for the pre-test (2.50) and for the post-test (3.62) was the difference between the media (0.548) and the calculated value of (t) (1.57), the statistical significance (0.080) and the result was not significant and the ratio was Evolution (30939). The damping variable for its arithmetic mean was for the pre-test (1.75) and for the post-test (2). The difference between the circles was (0.163) and the calculated value of (t) was (-1.528). Air statistical (0.170) and the result was not significant and the percentage of development (12.5).

Table 2: Statistical processing for pre and posttests of the research variables of the experimental group

<table>
<thead>
<tr>
<th>Variables</th>
<th>Units</th>
<th>Means</th>
<th>Mean diff.</th>
<th>(t) Value</th>
<th>Result</th>
<th>Evolution rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pretest</td>
<td>Posttest</td>
<td></td>
<td></td>
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<tr>
<td>Kinetic speed</td>
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<td>46.50</td>
<td>-0.8750</td>
<td>-0.737</td>
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<td></td>
<td>Calculated</td>
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<td></td>
<td></td>
<td>Indication*</td>
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<tr>
<td>Rolling</td>
<td>Degree</td>
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<td>3.125</td>
<td>-1.3750</td>
<td>-2.986</td>
<td>0.020</td>
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<td>Mean diff.</td>
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<tr>
<td>Suppressions</td>
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<td>-2.3780</td>
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<td>Mean diff.</td>
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</tr>
</tbody>
</table>

* At a degree of freedom (7), and the significance level (0.05)

The result of the pre and posttests of the experimental group, from Table (5) that shows the arithmetic mean and the differences between the medias for the pre and posttests of the experimental group as well as the calculated value of (t) and the statistical significance and the percentage of development, as the mean of the mean of the kinetic velocity variable for the pre-test was (44.50) and the post test (46.50) was The difference between the media (1.1868), the calculated value of (t) (-0.737), the statistical significance (0.0485), the result was significant, and the evolution rate (4.494). The mean of the rolling variable for the pre-test was (1.75) and for the post-test it was the difference between the means (0.4605) and the calculated value of (t) (-2.986) and the statistical significance (0.020), the result was significant and the ratio of Evolution (4.4). The suppression
variable was the arithmetic mean for the pre-test (1.500) and for the post-test (4). The difference between the circles (0.3780), the calculated value of (t) (-6.614) and the statistical significance (0.0003002) and the result was significant. And the result of the development (62.5).

Discussion

Through Table (1) and Figure (4), which shows that there is a significant development between the pre and posttests of the control group in the tests (kinetic speed, rolling and damping) and there was an evolution, but significant differences emerged for the rolling and damping tests. The researcher attributes the development to, compound exercises contributed effectively to the development of (kinetic speed, rolling and suppression) among emerging players in Amo Baba school as well as the use of speed training at the beginning of the training unit as it is preferred to start speed exercises immediately after the warm-up operations, especially within training units that aim to develop more than one characteristic Physical. Through Table (2) and Figure (4) shows that there is a significant development between the pre and posttests of the experimental group in the tests (kinetic speed, rolling and suppression). The researcher attributes the development to, in the kinetic velocity test (a test of the man’s movement speed in the horizontal direction), the researcher sees the difference between the pre and posttests due to the exercises included in the combined exercises that positively affected the development of the movement of the man in the horizontal direction and this is consistent with (Qasim Hassan) that the muscle strength is an essential element for improving Level in the activities that require overcoming major resistance .

Conclusions

Based on the results of the research and the statistical methods for the data obtained, the researcher reached the following conclusions:

1. The combined exercise of the ball affected the development of the kinematic speed of the rolling and suppression of the members of the experimental group.
2. The experimental group development rate is greater than the control group development rate in kinetic speed, rolling and suppression.

Recommendations

In light of the research objectives and hypotheses, and through analyzing the results by statistical methods and discussing them, the researcher presented the following recommendations:

1. Attention to the preparation stage, especially the special preparation stage, by emphasizing the importance of physical and skill preparation in the vocabulary of the training curriculum.
2. Emphasizing the use of scientific research in the process of athletic training for its contribution to achieving athletic achievement.

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