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The effect of special exercises on improving rolling speed and scoring accuracy in futsal

Turki Hilal Kadhimi Salman

Diyala University

College of Physical Education and Sport Sciences

turkihilal7@gmail.com

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Corresponding Author :

00647717014551

ABSTRACT

The goal of the research is to prepare special exercises to develop the speed of performance of the skill of rolling the ball and the accuracy of the performance of scoring futsal, and to identify the impact of special exercises on the development of the speed of performance of the skill of rolling and the accuracy of scoring futsal, and the researcher used the experimental approach to suit the nature of the research, and the research community identified futsal players in Diyala province, as for the research sample, they were chosen randomly by lottery, represented by the club Shahraban futsal with the 16 players. They represented (100%) of the research community, the researcher concluded **and the results showed that there were statistically significant differences in the ball rolling test between three signs between the experimental group and the control group in the pre- and post-measurements, in favor of the experimental group**, and it was found that there were statistically significant differences in the test of the accuracy of the performance of the scoring skill in futsal between the experimental group and the control group in the pre- and post-measurements, in favor of the experimental group, and a large and clear development was observed among the members of the experimental group that applied Special exercises in the ball rolling tests between the pillars and the test of the accuracy of scoring performance in futsal, and the researcher recommends the need to use special exercises applied by the researcher to develop the speed of performance of the ball rolling skill and the accuracy of scoring performance for all futsal sports teams, especially them, juniors and youth, and the best period for training on this type of skills is in the period of special preparation due to the presence of sufficient time.

1- Introduction:

No two in the world disagree that futsal is one of the most exciting and interesting games and that this abnormal interest is due to the nature of this game and the multiplicity of its skills and the integration and interdependence of its physical, skill, tactical and psychological aspects, which made its matches the focus of attention of millions and made its practitioners stars referred to them as Lebanon and on the basis of this balance that this game has as it is the concern of people and the enjoyment of peoples, those interested in it from coaches, educators and academics in continuous research and pursuit Diligent to upgrade this game for the better so that these studies included all aspects of preparation in futsal, but went beyond the research to the most accurate detailed matters related to this game and has an impact on its development and that what we see of fun and excitement in this game is to some of the products of this research.

The components of futsal — physical, skillful, tactical, and psychological — are closely interrelated, with any development or defect in one aspect having a direct impact on the others, either positively or negatively. This complementary relationship is reflected in the overall performance of the team as a collective unit, or at the level of players as individuals, which contributes to the development or decline of their level, depending on their ability to employ these aspects to achieve outstanding performance that serves the team's goals.

Basic skills in futsal are crucial to the implementation of tactical plans and the outcome of matches, as they form the cornerstone of performance on the field. Without mastering these skills, the process of implementing plans becomes extremely difficult. The skill of rolling with the ball is one of the most prominent skills that are relied upon in the success of many aspects of the plans, as it represents the basis for the individual performance of the player, whether in advancing the ball, penetrating the defense, or creating scoring opportunities for colleagues. This skill is also important Especially in the attack building phase, it is a vital element for orderly offensive progress.

Scoring is one of the most commonly used skills in futsal, as a team whose players have the ability to score accurately during matches shows a high level of collective performance. Mastering this skill contributes to enhancing the players' self-confidence, which makes scoring an influential and vital element in the team's dynamics, especially in modern methods of play. Accordingly, scoring skill should be given a clear priority in education and training programs, with a view to developing it to a high level of accuracy and efficiency. (Al-Tai 2007: 42)

Therefore, the development of rolling skills and scoring accuracy in futsal is crucial, as the researcher believes that the speed of the rolling

skill, along with the accuracy of the implementation of the scoring skill, is a prerequisite for achieving the applied requirements discussed earlier. Accordingly, the researcher sought through this study to contribute to the development of these two skills by adopting special exercises aimed at enhancing the speed of rolling with the ball, and improving scoring accuracy, in order to prepare players who possess The ability to perform futsal skills with the highest degree of speed and accuracy, in line with the desired technical and tactical objectives. Hence the importance of this research.

Search problem:

Futsal, with or without the ball, makes speed a key element in various aspects of play, such as moving to create space, kicks, changing direction and reflex. Performance analyses in international matches indicate that speed of all kinds is one of the most prominent features of the modern footballer, accordingly, the accuracy of scoring from different distances and angles is one of the basic requirements for the integration of skill performance in futsal, as accuracy is a decisive factor in the implementation of skills, and their weakness leads to the loss of many balls and scoring opportunities.

Through their academic and field experience, the researcher found that the performance of players in rolling and scoring skills is often slow and inaccurate, as a result of the adoption of traditional exercises that lack elements of suspense and motivation. Therefore, the researcher sought to develop these two skills through special exercises that were carefully selected with the aim of raising the efficiency of the players' skill performance.

Research Objectives:

1. Preparing special exercises to develop the speed of performance of the ball rolling skill and the accuracy of futsal scoring performance.
2. Identify the effect of special exercises on the development of the speed of performance of the rolling skill and the accuracy of scoring in futsal.

Research hypotheses:

1. There are statistically significant differences between the results of the pre- and post-tests of the experimental group and in favor of the post-tests.
2. There are statistically significant differences between the results of the post-tests of the experimental and control groups and in favor of the experimental group.

Research Areas:

Human field: A sample of the 16 players of Shahraban Futsal Club in Diyala Governorate.

Time Range: The period from 20/11/2024 to 26/2/2025.

Spatial area: Muqdadiya Club Hall in Muqdadiya District / Diyala.

3- Research Methodology and Field Procedures:

3-1 Research methodology: The researcher used the experimental method to suit the nature of the research.

3.2 Research community and sample

The research community and its sample determined the research community futsal players in Diyala province, while the research sample was chosen randomly by lottery, represented by the 16-player Shahrban futsal club. They represented 100% of the research community.

2-3 Devices and tools used in research:

2.3.1 Means of data collection

- Scientific sources.
- Questionnaire.
- Personal interview.
- Tests and measurements.

2.3.2 Tools used in research:

- Tape measure.
- Medical scale.
- Adanac stopwatch measures time to the nearest 1/100 second (8).
- Futsal footballs.
- Sign number (18).
- Whistle number (2).
- Small goals.
- DELL laptop calculator.
- Register to dump data.

2.4 Field research procedures:

2.4.1 Skill tests

First: Ball rolling test between the pillars (Kharibit: 1989: 227)

Second: Scoring test scoring towards a goal divided into squares (**Mahmoud: 2008: 57**)

1. 2.4.2 Exploratory experiment

The researcher conducted with the work team an exploratory experiment on (6) players from outside the research community, who were excluded when implementing the basic research procedures, on 11/20/2024, and the aim of the experiment was as follows:

- Identify the mistakes and obstacles that may accompany the experience.
- Identify the validity of the tools used.
- Identify the efficiency of the assistant team and the extent of their understanding of the implementation of measurements and tests.

2.4.3 Pre-tests:

The pre-tests were conducted on the research sample through the application of skill tests, in order to identify the results of each test and confirm them in the data dump form, which took place on 11/25/2024, at the Muqdadiya Sports Club hall in futsal.

2.4.4 The main experience:

The main objective of the experiment is to apply the customized approach so that the special exercises prepared by the researcher were used in the training unit in order to develop the speed of performance of the ball rolling skill and the accuracy of scoring performance in futsal using the experiences of the supervisor being a former coach and player, and the researcher's access to Arab and foreign sources and references, including previous studies carried out by Iraqi and Arab researchers, are all factors that helped the researcher in developing these exercises that the researcher applied to a sample Research These exercises were conducted by entering the main section of the training unit, which has a time of (90 d), the main experiment was started on 1/12/2024 and ended on 15/1/2025 for a period of (6 weeks) by two training units per week, and thus the final total number of units is (12) training units.

The special exercises developed by the researcher aimed to develop the skills of speed of performance of the skill of rolling and accuracy of scoring futsal because these two skills play a crucial and essential role in the implementation of many of the duties of the plan as well as their importance and on this basis and for the purpose of achieving the objectives of this study the researcher developed a set of exercises aimed at developing the two skills under study, then the researcher applied these exercises to the sample of their research represented by the experimental group as this group applied the exercises for a period of (6) Weeks and by two training units per week for each skill This sample was subjected to two measurements before and after in the tests under study.

The researcher has taken into account the following observations when applying their own exercises:

Special exercises were applied at the beginning of the main section of the training module.

The intensity of the exercises depended on the intensity of the training unit set by the team coach, and the number of training units reached (6) training units for each skill and the time taken to give these exercises varied from week to week.

- There was a diversity in giving exercises and in their application, as the researcher wanted through this diversity to put their research sample in the atmosphere of the match.

2.4.5 Post-tests:

The researcher conducted the post-tests on 18/1/2025 on the research sample under the same conditions as the pre-tests, and the presence of the assistant work team in the hall of the Muqdadiya Sports Club in the Muqdadiya district in Diyala Governorate.

2-5 Statistical Methods: The researcher used the statistical bag SPSS to extract the results.

3- Presentation, analysis and discussion of results:

3-1 Presentation and discussion of the results of arithmetic means and standard deviations of research variables:

Table 1

Shows the values of the arithmetic media, standard deviations, and T-value of the skills under consideration in the post-tests

Significance	Error rate	T value	Standard error	Standard deviations	Arithmetic media	The Collection	Unit of measurement	Variables	t
Moral	0.000	3,238	0.765	0,641	13,456	Adjuster		Rolling	1.
			0.567	0,494	11,786	Experimental			
Moral	0.004	3.584	0.719	2.594	17.692	Adjuster	degree	Scoring	2.
			0.498	1.797	20.307	Experimental			

4.2 Discussion of the results:

Through the results of Table (1) showed the significant results of the differences between the experimental and control groups and in favor of the experimental group in the post-tests, the researcher attributes the reason for this to the fact that the exercises that were used have a great ability to provide diversity in the development of special physical abilities, according to the intensity of the exercises and the times specified for them, as he indicates (Rabadi: 2001: 126-127) in this that "diversity in sports performance is one of the basic factors for the process of balance in physical integration, and works to increase the desire to train."

Before preparing special exercises aimed at developing the speed of rolling performance with the ball and the accuracy of scoring performance, the researcher was fully convinced that the speed of skill performance is one of the basic qualities of a futsal player. To enable the player to perform these skills at the ideal speed, the coach must carefully choose the exercises so that they are exactly similar to what happens in the matches, and train the players on them gradually so that they get used to performing them with the required strength and speed during the matches. Hanafi Mahmoud points out Mukhtar pointed out that the speed of skill performance is one of the important qualities of a futsal player, and in order for the player to perform skills during matches at the ideal speed, the coach must mean choosing exercises that are exactly similar to what happens during matches and train the players on them with gradation in performance so that the players get used to their performance with the same strength and speed that must be performed during the match. (Mukhtar:1989:93)

The researcher attributes the superiority and development of the experimental group that applied special exercises in developing the speed of rolling performance and the accuracy of scoring performance in futsal on the control group that did not apply these exercises, and relied on the coach's approach in developing the two skills under study, to the fact that the special exercises were largely identical to what happens in the matches. The researcher was also keen that the players perform these

exercises according to the intensity specified for each exercise, taking into account the performance of the exercises using both feet, so that the player can perform my rolling and scoring skills at all times and under different conditions. In addition, the researcher was interested in the diversity of exercises and their inclusion of the various situations that the player may face during the match, taking into account the diversity in the player's starting distances with the ball, different directions, and changing locations (Al-Rubaie: 2020: 69) Also, the curriculum contains exercises characterized by repetition and repetition, as repetition on the performance of the skill and its performance correctly will lead to mastery and thus proper performance.

The researcher attributes the development of this group any experimental group to several reasons located in the forefront is the impact of positive exercise on the members of the research sample and this refers Osama Kamel Rateb (1998) to (that good training methods are in themselves a driving force for athletes) (Salary: 1998: 7) As for the development of the skill of accuracy in the performance of scoring that occurred in the experimental group that used special exercises, the researcher confirms that this skill is one of the most used skills during the time of The match is also the most prominent in the field of futsal in general because it combines three main axes, which the player must focus on during the performance, namely accuracy, appropriate timing and required strength.

4. Conclusions and recommendations:

Conclusions:

2. The results showed that there were statistically significant differences in the ball rolling test between three indicators between the experimental group and the control group in the pre- and post-measurements, in favor of the experimental group.
3. It was found that there were statistically significant differences in the test of the accuracy of the performance of the scoring skill in futsal between the experimental group and the control group in the pre- and post-measurements, in favor of the experimental group.
4. A significant and clear development was observed among the members of the experimental group that applied special exercises in the inter-pedal ball rolling tests and the scoring performance accuracy test in futsal.
5. Special exercises have proven effective in developing rolling speed and scoring accuracy in futsal.

Recommendations:

1. The need to use special exercises applied by the researcher to develop the speed of performance of the ball rolling skill and the

accuracy of scoring performance for all futsal sports teams, especially juniors and youth.

2. The best period for training in this type of skill is in the period of special preparation since there is enough time.
3. The need to include futsal skills in the general preparation period and in proportion to the training vocabulary set.
4. Develop and plan training curricula based on scientific foundations and program them according to modern training methods in order to be more useful and objective to reach the best results and levels.
5. Deepen the impact of specialized exercises on the level of performance of the defensive and offensive team.

Sources:

- Naseer Mezher Al-Taie: The Effect of Using Some Multi-Purpose Teaching Aids on Learning and Retention of Some Basic Football Skills (Master Thesis, University of Baghdad-College of Physical Education, 2007)
- Raysan Khuraibet: Encyclopedia of Measurements and Tests in Physical Education (Baghdad, Higher Education Press, 1989)
- Education and Basic Skills in Football, 1st Edition: (Dar Dijla, Amman, Jordan, 2008)
- Sports Training for the Twenty-first Century, 1st Edition, Amman: Publishing House, 2001
- Hanafi Mahmoud Mokhtar: Scientific Foundations in Football Training (Cairo, Dar Al-Fikr Al-Arabi, 1989)
- Osama Kamel Rateb: Motives for excellence in sports activity (Cairo: Dar Al-Fikr Al-Arabi, 1998)
- Al-Rubaie, S. S. (2020). The impact of proposed exercises to develop some biomechanical variables for the skill of shooting with handball among students of the fourth stage of the College of Physical Education and Sports Sciences/University of Diyala. *JOURNAL OF SPORT SCIENCES*, 12(44).

Appendix (1)

Special exercises used

First: Ball rolling exercises:

T1: At the beginning of the exercises, the trainer gives speed exercises, which include:

- A- Quick departure from a standing position for a distance of 5 m.
- B- Rapid starting from a standing position for a distance of 10 m.
- C- Quick start from the position of raising the knees for a distance of 15 m.
- D- Rapid starting from standing, turning and brooking positions, from a sitting position, from a lying position on the back, and from a prone position for a distance of 5-15 m.

T2: The players are divided into two or three groups and the imam of each group is placed at a distance of 8 meters, and with a signal from the coach, the first player from each group starts towards the sign, and after it rotates around the sign, the second player starts from each group and so the exercise continues, the winning group is the one who finishes the exercise before others.

T3: The players are divided into two or three groups and placed in front of each group one sign 5-10 meters away, and with a signal from the coach, the first player from each group starts towards the sign, where he rotates around the sign and returns to the starting point to touch the hand of his colleague, who starts and so the exercise continues.

T4: Quick start with the ball for a distance of 5-10 m from standing, brooking, lying down and lying positions, repeat the exercise 3 times.

T5: Each player has a ball, the exercise begins with the player rolling the ball quickly and towards the direction determined by the coach.

T6: A square measuring 5 m×5m, each player rolls the ball inside the box quickly, provided that the player's ball does not touch the other balls, the roll is inside and outside the foot.

T7: Players stand on a straight line the distance between one player and another is 2 meters, the players roll the ball for 15-30 seconds with the roll inside and outside the foot.

T8: Two players distance between them 25 meters, one of them advances and rolls the ball towards the other and rotates around it and returns to his first place, then the other player performs the same exercise.

T9: Two players with a distance of 15 meters between them roll the ball towards each other and when they meet they exchange balls.

T10: Rapid starting of the ball for a distance of (5) meters and then passing between (5) signs, the distance between each sign and another (2) meters, repeat the exercise (3) times.

Second: Scoring exercises:

Precision exercises:

1. Scoring on small goals

- Place small cones inside the goal as specific targets.
- Try to score the ball towards these goals from different distances.
- Helps improve scoring accuracy under pressure.

2. Scoring after dribbling barriers

- Place 3-4 cones in a zigzag line, then dodge between them before aiming
- Use both feet to increase control and improve aiming accuracy after movement.

3. One-touch scoring

- The player receives a pass from his teammate or coach and then aims directly towards goal.
- Passes can be varied (ground, high, sideways) to increase the difficulty of the exercise.

4. **Scoring towards the corners**

- The goal is divided into 4 target zones (top and bottom corners).
- The player is asked to aim at each angle repeatedly to enhance his accuracy.

5. **Precise wall exercise**

- The player passes the ball towards the wall, then receives it and shoots directly towards a specific goal in the goal.
- Improves ball control before scoring and aids quick decision-making.

Speed and precision exercises together:

6. **Scoring after a sprint**

- The player starts by running 10-15 meters and then receives the ball and shoots towards goal.
- It aims to improve the accuracy of aiming during exhaustion.

7. **Scoring from different angles**

- The player is asked to aim from different angles around the penalty area.
- It contributes to improving the speed of decision-making during real gameplay.

8. **Push-ups and limited time**

- A specific time (such as 5 seconds) is set for the ball after receipt.
- Reduces reaction time and helps make quick and accurate decisions.

9. **Scoring during defensive pressure**

- A defender or two are placed to harass the player before shooting.
- Helps improve the ability to aim under defensive pressure.

10. **Scoring exercise after switching direction**

- The player moves quickly in a certain direction, then abruptly changes direction towards the ball and shoots.
- Enhances the ability to aim quickly after a change of movement, which is important in futsal.