



THE EFFECT OF RONDO EXERCISES ON DEVELOPING SOME PHYSICAL ABILITIES AND DEFENSIVE SKILLS IN YOUTH FOOTBALL IN MISAN

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Article history:	Abstract:
Received: 21 st March 2023 Accepted: 23 rd April 2023 Published: 28 th May 2023	The purpose of this research was to determine whether or not youth football players in Misan improved their physical talents and defensive strategies after participating in rondo exercises. The research was conducted using an experimental design, and the study population consisted of 120 young players and athletes in Misan Governorate, aged 17 to 19 years, for the sports season (202-2-2023). As for the research sample, which was purposefully selected from the research community, it consisted of twenty-five players who represent the youth of the club (Misan) and constituted a percentage of twenty-eight and three-tenths percent (20.83%). The statistical programme The most important (SPSS) was used to analyse statistical data. recommendations were the training of rondo as a key factor in the development of special physical abilities and fundamental skills in football, the development of different defensive aspects in different areas of the field, and the need to develop the general and special physical abilities of the football player, particularly for age groups, including the youth group.

Keywords: Rondo Exercises, Physical Abilities, Defensive Skills, Youth Football.

INTRODUCTION

Sports training is a science that derives a large portion of its theories, foundations, and principles in the implementation of its operations from other sciences, that the advancement of football depends on everything new that occurs on the scene (Renshaw et al., 2019), which in turn is reflected in the development of the basic pillars for building players, ranging from physical, skill, and tactical performance to mental and psychological, blended together in an effort to elevate the training status of the academies (Gondo, 2021). Through the use of modern and purposeful training, we hope to raise the level of players and accomplish success in the future, thereby positively influencing their performance and achieving advanced and prestigious results (Vătămănescu et al., 2020). The player's achievement of high levels or preparation for them is no longer left to chance or randomness, but the coach and player must have a goal that they strive to achieve by following a method subject to the foundations and principles of contemporary sports training science (Kapp, 2012). The rondo exercises are from possession and possession of the ball for the longest possible period of time by passing the ball between the players at a fast playing rhythm, as well as developing the process of perception and thinking on how to make the correct decision at the right time, and these exercises include various training aspects that reach match-like situations (Ramesh, 2020). Furthermore, rondo exercises have emerged as a contemporary training instrument in the realm of football (Neville, 2021). These exercises are versatile in their application, as they can be utilised both during the warm-up phase and the primary training section, owing to their ability to involve all players (Hassan et al., 2023). Several coaches have described it as a set of group exercises designed to maintain ball possession for as long as possible among the attackers, while keeping it away from the defenders (Coutinho et al., 2022). This is achieved through rapid ball transfers, quick delivery, reception, and movement towards unoccupied areas (Varma, 2022). The rondo is typically prepared in different and varied spaces, which can range to half the field depending on the level of skill of the players or the side to be achieved or training on it, it is a training dominated by the nature of suspense and excitement and designed to achieve fun and pleasure, and all players enjoy these drills (Odeh & Omar, 2022). These exercises aim to accomplish all physical, skill, and tactical aspects and can rely on the joker player, who is more of a tactical player than a skilled one and is, of course, a coach's favourite for filling in gaps in certain positions (Hameed, 2023). It is also used as tactical surprises from the coach to confuse the opponent and the player can be "Jokra in multiple positions or in defence such as the possibility of playing right back or centre back or moving to the left bank, as well as in the midfield, he can play as a ball cutter or a central midfielder or even his ability to move behind the attackers as a playmaker in a competitive training environment very similar to what occurs during matches and how to react (Odeh & Omar, 2022). It is also used as tactical surprises from the coach to confuse

the opponent and the player can be "Jokra in multiple positions or in defence such as the possibility of playing right back or centre back or moving to the left bank, as well as in the midfield, he can play as a ball cutter or a central midfielder or even his ability to move behind the attackers as a playmaker in a competitive training environment very similar to what occurs during matches and how to react (Odeh & Omar, 2022). The researcher was motivated to investigate the effects of Rondo exercises on the physical abilities and defensive skills of youth football players in Misan Governorate. This prompted the researcher to delve into the problem and identify exercises that could enhance players' abilities to acquire and maintain possession of the ball, as well as increase their self-confidence in passing and receiving.

The Objectives of the Study

1. Preparing rondo exercises for the youth players of Naft Misan football club.
2. Identify the effect of rondo exercises on some physical abilities of the youth players of Naft Misan football club.
3. Identify the impact of rondo exercises on some defensive skills of the youth players of Naft Misan Football Club.

The Hypothesis of the Study

The investigator formulated hypotheses to address the research problem and attain the objectives, and subsequently executed the necessary research procedures:

1. There is a positive result of the rondo exercises of the players of Misan Youth Club (18-19) for the season 2022-2023.
2. There is a positive impact between the exercises of rondo in some physical abilities and defensive skills of the players of Shabab Misan Club (18-19) for the season 2022-2023.
3. There are statistically significant differences between the pre- and post-tests of the control and experimental groups and in favor of the post-tests.

The Fields of study

Human Area: Misan Youth Club players (18-19) for the season 2022-2023.

Time Area: From 27/5/2022 to 2/10/2023.

Spatial Area: Annex of Misan Olympic Stadium in Misan Governorate.

Methodology

Research Methodology and Field Procedures

Research Methodology

The selection of an appropriate approach to solve the problem is one of the most crucial stages for ensuring the success of a research project. An approach is the method pursued by an individual until he reaches a particular objective (Sjödin et al., 2020). As a result of the fact that scientific research has identified a variety of methods that are applicable to the character of any scientific problem that necessitates study and research, the researcher is now free to select the method that best fits his research problem. Consequently, the researcher employed the experimental method, which is founded on a sanctioned and controlled modification of the specific conditions of an event, as well as the observation and interpretation of the resulting changes. In the experimental design method, the control and experimental groups are identical in all factors that may affect the dependent variable, with the exception of exposure to the independent variable (Kock, Berbekova & Assaf, 2021).

Research Community and Sample

The nature of the population or sample a researcher selects is determined by the objectives he establishes and the methods he employs (Campbell et al., 2020). The researcher selected the research community according to the intentional method of young players in Misan Governorate, who numbered (120) players aged (17-19) years for the sports season (2022-2023); as for the research sample that was also selected intentionally from the research community, it amounted to (25) players, who represent the youth of Misan Club, to make up a proportion (20.83%). They were randomly split into two teams of ten players each via a lottery system, with one team consisting of experimental first timers who applied unusual harmonic exercises designed by the coach and the other team led by an officer who relied on time-honored drills. Table (1) displays the research community, its sample, and the proportion of the research sample; the goalkeepers and the number of goalkeepers were removed from the study, as were the players in the exploratory experiment.

Table 1: Shows the research population, its sample, and the percentage of the research sample.

Groups	No	Number of players excluded	Sample exploratory experiment	Percentage
Experimental Group	10	2	3	20,83%
Control group	10			

Sample Homogeneity

Researchers achieve homogeneity in their samples by eliminating any and all disparities between their participants. This is done so that the data collected may be relied upon, regardless of any inherent individual variances among the participants. (Chronological age, training age, height, weight). Following this, statistical treatments of these variables were conducted using the law of torsion coefficient, as the values were contained within (3), indicating a reasonable

distribution of the sample and a moderate degree of dispersion within each of the two research groups, as shown in Table 2.

Table 2: Shows the homogeneity of the two research groups in the variables (chronological age, training age, height, weight).

Variables	Unit of measurement	M	SD	Torsion coefficient
Chronological Age	year	18.30	0.675	0.434
Training Age	year	3.400	0.516	0.484
Height	CM	171.20	6.90	-0.008
Weight	kg	58.80	3.19	0.638

Determine the Tests Used in The Research.

Frequently, the researcher must select or devise multiple tests in order to measure variables related to the phenomenon he is investigating (Allan, 2020). Despite the fact that the majority of the tests are described in scientific literature, the researcher designed a questionnaire and presented it to a group of experts, as shown in Table (3).

Table 3: Shows the relative importance of the tests used in the research.

NO	Tests	Relative importance
1	Distinctive strength speed	%80
2	The explosive power of the legs	%85
3	Responsiveness	%85
4	Coverage in defensive	%90
5	Movement of the feet in defense	%80
6	Cut the ball from the opposing player	%90

Tests used in the study:

1. Distinctive strength speed test (Ebben & Blackard, 2001).
2. The explosive power of the legs test (Gherghel et al., 2021).
3. Responsiveness test (Kaufman et al., 2014).
4. Coverage in defensive test (Ehrlich, Harmon & Sanders, 2020).
5. Movement of the feet in defense test (Young, Miller & Talpey, 2015).
6. Cut the ball from the opposing player test (Strudwick & Doran, 2002).

Exploratory Experience

An exploratory experiment, which is a preliminary experimental study conducted by the researcher on a small sample before conducting his research to select research methods and tools, is one of the most essential requirements of scientific research (Pérez Bentancur & Tiscornia, 2022). Therefore, the researcher conducted his first exploratory experiment on November 12 and 13, 2023 with three participants whose objectives are:

1. Suitability of the tests of the study sample members.
2. Ensure the time and place for conducting the tests.
3. Ensure the safety and validity of used devices and tools.
4. Identify errors that are likely to occur in the implementation of tests.
5. Learn about the time it takes for tests.
6. Identify the competence of the assistant team members.

Main Experience

Pre-Test

After the researcher distributed the tests to the youth coaches in Misan for the entire sample and agreed to conduct the tests on time, the pre-tests were conducted prior to the start of the training curriculum at Misan Olympic Stadium on 15-16 June 2023 at precisely 4:00 p.m. and included physical tests and defensive skills.

- ❖ The first day 15/6/2023 was conducted in which tests were conducted on defensive skills.
- ❖ The second day 16/6/2023 in which physical abilities tests were conducted.

Application of the Training Curriculum

A review of empirical sources and references in the field of sports training led to the development of a curriculum specifically for Misan youth football players. Thus, the curriculum was developed in accordance with the study sample and the training period of the sports season. The construction of the curriculum was for the period (special preparation) and was based on what was trained in the general preparatory period and according to the main goal of the training process, which began on 18/6/2023. The application of the curriculum lasted (10) weeks by (30) training units and at a rate of (3) training units per week, and the applicability of the curriculum was evaluated. Thus, the curriculum was developed in accordance with the study sample and the training period of the sports season. The construction of the curriculum was for the period (special preparation) and was based on what was trained in the general preparatory

period and according to the main goal of the training process, which began on 18/6/2023. The application of the curriculum lasted (10) weeks by (30) training units and at a rate of (3) training units per week, and the applicability of the curriculum was evaluated.

Post-Tests

The post-tests for the research sample were administered immediately following the implementation of the training curriculum on September 19th and 20th, 2023, in accordance with the pre-test sequence.

Statistical Means

The researcher utilised the Statistical Package for the Social Sciences (SPSS) to perform statistical analyses on the data and extract relevant statistical treatments for the purpose of analysing the results.

RESULTS

Presentation, analysis, and discussion of the results of the pre- and post-tests of the research variables of the control group.

Table 4: Shows the arithmetic means, standard deviations, calculated t-value, error level, and significance of the differences between the pre- and post-tests of the control group in the search variables.

Variables	Unit of measurement	Pre-Test		Post-Test		T	Sig
		M	SD	M	SD		
Distinctive strength speed	Meter	1.55	1.31	1.65	1.56	5.19	0.01
The explosive power of the legs	Second	13.66	0.79	13.90	0.88	4.89	0.01
Responsiveness	Second	7.08	1.50	6.78	2.75	6.88	0.00
Coverage in defensive	Grade	1.60	0.966	2.40	0.966	2.44	*0.037
Movement of the feet in defense	Second	25.17	0.671	23.72	1.80	2.27	*0.049
Cut the ball from the opposing player	Grade	1.20	0.422	1.90	0.568	4.58	*0.001

*Moral under a level of significance smaller or equal to (0.005) at the degree of freedom.

Upon examining Table (3), a notable positive trend is observed in the disparities between the arithmetic means of the pre-test and post-tests for all research variables favouring the post-tests. Additionally, the corresponding samples' law (T-Test) values were calculated, and their levels of significance for all variables were found to be less than (0.05). This indicates that the differences are significant in favour of the post-tests, thereby confirming the researcher's assumptions in the first and second hypotheses. The continuity of training and involvement in training are the causes of the substantial differences in the control group's post-test scores and for all research variables. All of this is done to help young football players enhance their physical prowess and defensive talents.

Presentation, analysis, and discussion of the results of the pre- and post-tests of the research variables of the experimental group.

Table 5: Shows the arithmetic means, standard deviations, calculated t-value, error level, and significance of the differences between the pre- and post-tests of the experimental group.

Variables	Unit of measurement	Pre-Test		Post-Test		T	Sig
		M	SD	M	SD		
Distinctive strength speed	Meter	1.54	1.45	1.90	1.44	6.22	0.01
The explosive power of the legs	Second	13.77	0.64	10.11	0.75	5.50	0.01
Responsiveness	Second	7.21	1.48	5.22	2.22	7.45	0.00
Coverage in defensive	Grade	1.40	0.843	4.300	1.88	5.513	*0.000
Movement of the feet in defense	Second	25.05	0.731	20.01	0.868	14.49	*0.000
Cut the ball from the opposing player	Grade	1.30	0.483	4.10	0.738	9.63	*0.000

*Moral under a level of significance smaller or equal to (0.005) at the degree of freedom.

Upon examining Table (5), a noteworthy positive trend is observed in the disparities between the arithmetic means of the pre- and post-tests for all research variables favouring the post-tests. Additionally, the corresponding samples' T-Test values were calculated, and their levels of significance for all variables were found to be less than (0.05). This indicates that the differences are significant in favour of the post-tests, thereby validating the attainment of the first and second hypotheses. The observed differences in the post-tests of the experimental group across all research variables can be attributed to the significant impact of rondo exercises. These exercises are known to enhance physical abilities, which in turn positively influences the development of basic skills in football, particularly defensive skills. The findings of Doewes et al. (2020) support the notion that technical proficiency alone is insufficient without the corresponding tactical acumen. This underscores the importance of developing high-level technical skills that are aligned with tactical objectives, as evidenced by the significant impact on tactical behaviour. In the context of football, coaches

who prioritise the accurate and principled instruction of technical skills can facilitate the integration of tactics with skill execution, thereby enhancing overall performance.

Presentation, analysis, and discussion of the results of the post-tests of the research variables of the control and experimental groups.

Table 6: Shows the arithmetic means, standard deviations, calculated t-value, error level, and significance of the differences between the two-dimensional tests of for the control and experimental groups.

Variables	Unit of measurement	Control Group		Experimental Group		T	Sig
		M	SD	M	SD		
Distinctive strength speed	Meter	1.65	1.56	1.90	1.44	5.19	0.02
The explosive power of the legs	Second	13.90	0.88	10.11	0.75	9.74	0.00
Responsiveness	Second	6.78	2.75	5.22	2.22	6.91	0.01
Coverage in defensive	Grade	4.30	1.88	2.40	0.966	2.83	*0.011
Movement of the feet in defense	Second	20.01	0.868	23.72	1.80	5.86	*0.000
Cut the ball from the opposing player	Grade	4.10	0.738	1.90	0.568	7.47	*0.000

*Moral under a level of significance smaller or equal to (0.005) at the degree of freedom.

Upon examining Table (6), a noteworthy positive trend is observed in the disparities between the arithmetic means of the post-tests for all research variables, favoring the experimental group. Additionally, the values of the law (T-Test) computed for the independent samples indicate levels of significance for all variables that were below (0.05). This implies that the differences in favour of the experimental group, which implemented the rondo exercises, are statistically significant. The observed post-test results indicate significant differences between the two groups, with the experimental group demonstrating superior performance across all research variables. These outcomes are attributed to the impact of the rondo exercises administered by the researcher to the experimental group, which encompassed physical and skill-related components, as well as planning and cognitive aspects of the complex. This is consistent with the findings of Vaughan et al. (2019), who found that the purpose of rondo training is to enhance complex and tactical skill aspects, awareness, and perception through their application in squares that descend to the actual playing area. The aim is also to get players into excellent physical condition, as high-level technical performance cannot exist without it (Hameed, 2023). This development occurred as a result of the adoption and use of training curricula, methods of play, and training that contribute to the appearance of this form of advanced performance (Badawi & Nasrulloh 2023), and based on the foregoing, the researcher believes that the use of modern methods in training is what we can use to develop our teams by resorting to Rondo training, which combines the physical aspects and skill complex and tactically assists greatly in the development of all aspects of integrated sports preparation. Consequently, the researcher attributes the level of development of the experimental group to their high commitment to the curriculum, which resulted in the development of their complex physical and skill level and plans, as well as the development of their mental level due to the high mental aspects of these exercises. This resulted in the remarkable development of the players, and it is for this reason that we believe the implementation of modern training techniques will have a positive impact on the team's future. The physical, technical, and tactical aspects of football have undergone significant development in recent years, and this is evident when watching and following football matches, where performance speed, ball transfer, comprehensive play, and tactical discipline are evident (Mangan, 2020). The impact of rondo exercises on the development of physical abilities and defensive skills has been observed (Odeh & Omar, 2022). The group's focus on the goal of the exercise is similar to the reality of play, and play exercises are designed to include all the variables studied during playing situations. As a result, the research has successfully achieved its goal of examining the impact of rondo exercises on physical abilities and defensive skills in football.

CONCLUSIONS

1. The proposed rondo exercises have a high impact on physical abilities.
2. The proposed rondo exercises have a high impact on defensive skills.
3. Rondo exercises are a key factor in the development of special physical abilities and basic football skills.
4. Develop diverse defensive aspects in different areas of the pitch.
5. High physical fitness and special abilities are among the ingredients of a football player.

RECOMMENDATIONS

1. It is imperative to enhance the overall and individual physical proficiencies of football players, particularly those belonging to younger age brackets, such as the youth.
2. It is imperative to enhance the overall and individual physical proficiencies of football players, particularly those belonging to younger age brackets, such as the youth.
3. It is imperative to tailor exercises to the specific physical and skill capabilities of each individual football player.
4. Conducting similar research and studies.

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