

Effect of Rondo training on possession percentages and shooting effectiveness on some youth soccer matches

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Introduction and Research Problem:

Soccer has become highly developed, advanced and has become dependent on different sciences, training methods and techniques as well as technology in order to reach the highest possible level and raise the level of the game, all of this has brought about a great development in training methods, whether physical, skill or tactical, also a great development in plans and methods of play, which has contributed to raising the level of international competitions.

One of the modern methods in soccer that has spread widely on matches recently is to possession the ball for longest possible period and try to deprive another team of it. When team possession the ball, that make dangerous of opponent team is less. This method requires players to have high physical, skills and tactical efficiency so they can perform it under pressure. Therefore, players are trained on it by using training that aim to develop possession and depend on play in situations similar to what happens in matches. Among these methods are Rondo training that aim to develop skills and tactical aspects and master

them by repeating them during training in conditions completely similar to what happens in matches and under pressure in order to increase the player's confidence and ability to make the right decision at the appropriate time according to the situation he is exposed to.

Alan Launder (2001), **Qasim Lazam and Muwaffaq Majeed** (2007) and **Michael Metzler** (2017) agree that Rondo training is one of the exercises that contribute to improving skill and tactical performance through play. It works on learning ball skills, plans and performance in situations similar to what happens in the match. It is an effective means of teaching and developing skills, increasing tactical awareness and helping in making the appropriate decision, which contributes to proper implementation according to the playing situation and is very similar to what happens in matches. (2 : 87), (17 : 97), (12 : 249)

Linda & etc (2012) reported that Rondo training is a method that aims to increase the players' ability to deal with the different tactical situations that they may face during matches and teach them how to make

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the most appropriate decision for them. They are trained in a manner similar to what is done in the match, and the goal of the training is for the players to possession the ball and control the course of the game. It requires them to make good conscious movements so that possession of the ball is not lost. (8 : 39)

Mufti Ibrahim (2013) emphasizes that team in possession of ball tries to create a gap in opposing team's defense by organizing its lines and choosing the appropriate time to develop attack and then end it. (15: 16)

Refaei Mostafa (2005), **Mufti Ibrahim** (2013), **Hassan Abu Abda** (2023) agreed that game plans use the players' physical, skill, psychological, and mental capabilities in order to implement positive movements and activities, with or without the ball, and perform them in matches individually or collectively in order to achieve an offensive or defensive goal. The more players have high capabilities, the more they can implement them. Plans are situations that the coach expects to occur in the match as a result of his analysis of the opposing team. He must know them, teach them, and train the players on them for a sufficient period of time in order to master them and enable them to apply them in the match and then achieve the desired goal. (18 : 137), (15 : 237), and (5 : 174).

Mufti Ibrahim (2013) showed that keeping the ball and depriving the other team of it is one of the offensive means that gives the team solutions when attacking and requires a high skill level. The more players are skilled at exploiting their skills appropriately and employing them in a way that serves collective performance, this helps in the optimal implementation of game plans. While if their skill level is low, this reduces their ability to implement the plans required of them. (15 : 129)

Stephen Negoesco (1993), **Refaei Mostafa** (2005), **Muwaffaq Majeed** (2009), **Hassan Abu Abda** (2023) agrees that shooting is one of the most important skills in soccer, as it is used to finish an attack with the aim of trying to put the ball into the opponent team's goal. Effective shooting requires accuracy at foremost, and then strength. Coaches must be careful to use training in shooting, in which the player is exposed to pressure and is similar to what happens in matches. (19: 111),(18: 176),(16: 145), (5: 182)

Through the researcher's experience in soccer field and following international soccer, he noticed that most coaches depend on possession in matches, which requires special abilities, high level of skills and tactical awareness. Through following

youth training and matches, he noticed that there are deficiencies in tactical aspects of them, great randomness in performance, and an inability to possession the ball for long periods and get rid of it, and lose the ball in an exaggerated manner, as well as their inability to end attack. Also, that most youth coaches follow traditional methods in training and concerned on physical aspect and do not focus on offensive and defensive tactics this is clearly evident in performance on matches. All of this reflects that the training methods used in youth training are deficient and do not keep pace with what happens on matches. Rondo training is one of methods similar to what happens in matches, in which players are exposed to great pressure and attackers try to possession the ball for longest possible time and make quick decisions in a competitive environment. This prompted the researcher to ask whether if Rondo training is used Will it have a positive impact on possession, shooting effectiveness and attacking effectiveness for youth soccer players? Therefore, the researcher decided to use Rondo training and identify its impact on possession percentages, shooting effectiveness and attacking

effectiveness on some youth soccer matches.

Research objectives:

The research aims to identify:

- 1 -The effect of using Rondo training on possession percentages on some youth soccer matches U-19.
- 2 -The effect of using Rondo training on shooting effectiveness on some youth soccer matches U-19.
- 3 -The relationship between possession and attacking effectiveness on some youth soccer matches U-19.

Research hypotheses:

- 1 .There are statistically significant differences between the pre-measurement and post-measurement of possession percentages on on some youth soccer matches U-19 in favor of the post-measurement.
- 2 .There are statistically significant differences between the pre-measurement and post-measurement in shooting effectiveness on some youth soccer matches U-19 in favor of the post-measurement.
- 3 .There is a relationship between possession and attacking effectiveness on some youth soccer matches U-19.

Research Terminology:

1 -Rondo training:

They are training situations similar to what happens in matches works to develop teamwork and

depend on the numerical increase of attackers and their attempt to take possession of the ball and prevent defenders from cutting the ball.(11: 23)

Research procedures:

Research methodology:

The researcher used descriptive method by analysis way and experimental method by designing a single experimental group due to its suitability to nature of research.

Research community:

The research community included soccer youth players at Ismailia Governorate (under 19 years old), registered at Egyptian Football

Association Ismailia branch for season (2024/2025).

Research sample:

The research sample was selected deliberately, from youth soccer matches U-19 at Al-Shohda Sports Club played at Ismailia Soccer branch League, and it consisted from (6) matches divided to (3) matches on season (2023/2024) and (3) matches on season (2024/2025).

Homogeneity of the research sample:

The researcher calculated skewness coefficient for research sample in basic variables (age, height, weight, training age), some physical and skills abilities to ensure the moderation of sample.

Table (1)
Homogeneity of research sample in
basic variables and some physical and skill abilities N=24

Variables		Units	Mean	SD	Median	Skewness	
Basic Abilities		Age	Year	18.54	0.29	18.60	-0.42
		Hight	CM	172.13	4.87	173.00	-0.22
		Weight	Kg	71.38	2.08	71.50	-0.55
		Training age	Year	5.54	0.51	6.00	-0.18
Physical abilities	Explosive Power	Vertical Jump	CM	43.54	1.72	43.00	0.23
		Long Jump	CM	209.75	1.22	210.00	-0.25
	Speed	50m Sprint	Sec	4.97	0.11	5.01	-0.26
	Agility	Barrow	Sec	21.78	0.29	21.69	0.66
Skills		Dribbling	Sec	12.69	0.12	12.71	-0.71
		Pass Acc.	Deg	4.83	0.82	5.00	-0.19
		Shoot Acc.	Deg	12.33	2.58	12.00	0.57

Table (1) showed that values of skewness for basic variables (age, height, weight, and training age) and

some physical and skills abilities ranged from (-0.18) to (0.66) and these values between (± 3), which indicates

the homogeneity of sample in these variables.

Methods and tools for data collection:

-Scientific observation:

The researcher analyzed matches of basic sample and exploratory sample to identify possession percentages and shooting effectiveness.

-Analysis form:

The researcher designed analysis form to record data Attachment (1).

- Devices and tools used in research:

- Laptop.
- Matches of research sample were recorded on CD.
- A program for slow and fast show.
- Stopwatch.
- Measuring tape.
- Electronic medical scale.
- Training shirts.
- A graduated ruler.
- Soccers.
- Agility ladder.
- Small and large cones.
- Flags.
- Small goals.

Exploratory study:

The researcher analyzed a match from same community as research sample and outside of main sample, Match was between El-Nubiy Club vs El-Tal Al-Kabir Y.C, held on Thursday 12/7/2023.

This study aimed to ensure safety of analysis devices and how to use it, training on who record results of analysis, and made scientific transactions for analysis form (validity, reliability).

Scientific transactions for the analysis form:

Reliability of the form:

The researcher used Test-retest method by apply form and analyzed match between El-Nubiy Club vs El-Tal Al-Kabir Y.C, held on Thursday 12/7/2023 to insure about reliability of it, first applied was on 24/8/2024 and second applied was on 8/30/2024, and then calculate correlation coefficient between first and second applications.

Validity of the form:

To calculate the validity, researcher relied on intrinsic validity, by calculating the sqrt of form's reliability coefficient, and Table (2) shows reliability and validity of analysis form.

Table (2)
Scientific transactions for analysis form

Variables		Units	First applied	Second applied	Correlation (R)	intrinsic validity
Possession	By Bass	No.	343	348	0.99	0.99
	By Time	Min	41.96	41.82	1.00	1.00
Shooting effectiveness		No.	12	12	1.00	1.00

Table (2) showed high level of correlation and intrinsic validity coefficients of analysis form which indicates its validity and applicability.

Rondo training program:

1- Objective of Rondo training program:

The program aims to increase possession percentages and shooting effectiveness of youth soccer players using Rondo training. Appendix n. (2)

2- Basis for built training program:

The program should be compatible with age and abilities of research sample, individual differences as well as gradual intensity load and availability of necessary tools and devices.

3- Basic data of program:

- Program duration: 6 weeks
- Age: under 19 years.
- The Rondo training program was implemented during special preparation period and pre-competition period, starting from Saturday 9/14/2024 until Thursday 10/24/2024.
- The training program It has been implemented at Al-Shohada Sports Club Stadium in Ismailia.
- Number of daily training sessions were (5) days on (Saturday, Sunday, Tuesday, Wednesday and Thursday)
- Total number of program sessions (30) session.
- Training sessions duration (90 minutes)

- Total of training program time (2700 minutes)

- Warm-up duration (15 minutes)
Cool-down duration (5 minutes).

Rondo training duration in daily training sessions (20 minutes).

Rondo training duration in one week (100 minutes).

Total Rondo training time in program (600 minutes).

Steps for implementing the research:

1- Pre-measurements: Pre-measurement was conducted on research sample by analyzing the last three matches held at Al-Shohada Club Stadium in second round of season (2023/2024) during period between 7-9/9/2024.

2- Main experiment: The proposed of Rondo training program was applied to research sample starting from Saturday 14/9/2024 until Thursday 24/10/2024.

3- Post-measurements: Post measurements were conducted on research sample by analyzing the first three matches held at Al-Shohada Club Stadium in first round of season (2024/2025) during period between 20-22/11/2024.

Statistical treatments: Researcher used SPSS program to treat data by the following processing:

- 1- Mean
- 2- Standard deviation
- 3- Skewness
- 4- Correlation coefficient
- 5- T-test

Results and Discussions:**1- Results and discussion of first research hypotheses****1- Results of first research hypotheses:**

Table (3)
Significance of differences between means of pre & post-measurements in possession percentages for research sample (n=6)

Variables		Units	Pre-measurements		post-measurements		Mean Diff.	(T) Value
			Mean	SD	Mean	SD		
Possession	By Bass	No.	217.33	6.11	347.67	23.29	130.33	12.201
	By Time	Min	20.19	0.49	41.78	2.90	21.59	13.884

* (T) value at 0.05 = 2.75

Table (3) shows that the calculated (t) values for significance of differences between pre- and post-measurements of research sample in possession percentages by passing were (12.20) and by time of ball possession were (13.88), and those values are greater than (t) table value on level of (0.05), and this indicates that there are differences between two measurements in favor of the post-measurement with the better mean.

2- Discussion of first research hypotheses:

Table (3) showed there are statistically significant differences between mean of pre- and post-measurements of research sample in possession percentages, in favor of the post-measurement.

The researcher attributes the improvement in possession percentages of research sample to Rondo training cause it is suitable for this age group and it depends on

playing and competition between players, providing excitement and suspense in training, which increases their enthusiasm to exert maximum effort, as well as them applicate skills under pressure and situations similar to what happens in matches, which requires them to behave well and make appropriate decision quickly, and all of this contributed to raising their level in matches generally and possession rates in particular.

This is consistent with what **Lindsey Blom & Tim Blom (2009)** as they indicate that most soccer institutions are interested in idea of training by playing, because it allows a large number of players to participate and touch the ball more times and gives them the opportunity to learn and increases their enjoyment and motivation in training. (9 : 216)

Morrison (2007), Linda & etc. (2012) confirmed that use of rondo training is an effective method for

learning skills and tactics through playing and in a realistic way, as it increases players experience, excitement, suspense and makes them face different challenges and situations similar to match and in a better way than traditional training. (14 : 239), (8 : 6)

Marcus Dibernardo (2014) showed that Rondo training is different from other possession training as it depends on performance in narrow spaces and has many benefits as it increases the team's ability to possess in narrow spaces and helps in making the right decision, good behavior and conscious movement to overcome defensive formations, It is characterized by players performs a large number of passes in it, which improves teamwork and understanding between players, as it forces them to pass and try to advance forward and then score goals. (11 : 5)

Mufi Ibrahim (2013), **Hassn Abu Abda** (2016), **Amin Hilal** (2017) also agree on importance of make training programs for under-19 age containing competitive training similar to what happens in match, and must implemented Offensive and defensive tactics under pressure cause it help players get used to it and have quick response to changing situations. (15 : 100), (4 : 67), (3 : 192)

These results agreed with studies of **Mansour Al-Maghribi** (2020) (10), **Wissam Najib and Faiza Abdul-Jaber** (2022) (20), and **Ahmed Saba** (2023) (1) which indicated that the use of rondo training had a positive impact on possession for soccer players.

2- Results and discussion of second research hypotheses

1- Results of second research hypotheses:

Table (4)
Significance of differences between means of pre & post-measurements in shooting effectiveness for research sample (n=6)

Variables	Units	Pre-measurements		post-measurements		Mean Diff.	(T) Value
		Mean	SD	Mean	SD		
Shooting effectiveness	No.	0.46	0.08	0.60	0.03	0.14	3.39

* (T) value at 0.05 = 2.75

Table (4) shows that the calculated (t) values for significance of differences between pre- and post-measurements of research sample in

Shooting effectiveness were (3.39) and this value greater than (t) table value on level of (0.05), and this indicates that there are differences between two

measurements in favor of the post-measurement with the better mean.

2- Discussion of second research hypotheses:

Table (4) showed there are statistically significant differences between mean of pre- and post-measurements of research sample in Shooting effectiveness, in favor of the post-measurement.

The researcher attributes this to that most of rondo training were used end with shooting on goal, which gives positivity to training and motivates players to finish attack accurately. Also, the performance under great pressure from defenders in similar to what happens in matches, and this force them to choose execute timing to shooting on goal with high accuracy.

Mufti Ibrahim (2013) points out coaches must set shooting drills similar to what happens in matches, otherwise their players will be surprised by different situations from what they were exposed to in training and thus shooting will fail and even if it succeeds, it is often inappropriate for the situation and inaccurate. (15 : 190)

Marcus Dibernardo (2014) showed that Rondo training contributes significantly to raising level of ball possession and increases players' accuracy, speed, and ability to control rhythm of game, which affects how to

attack and finish it and increases their confidence, which allows them to overcome opponent's defense and participate effectively in attack and score goals. (11 : 4)

Juan Vidal (2016) indicates that Rondo training is one of the most used methods in building good ball possession, as it is ideal for training on all types of possession, and makes youth player manage the ball in a better way and get used to playing without anxiety or fear and helps him reach goal in easier ways until finds appropriate time to penetrate opponent's defense, and it also contributes to developing individual performance of player cause he repeats skills such as passing, receiving and shooting on goal frequently under pressure. (6 : 21)

These results are consistent with studies of **Mohammad Musalhi** (2020) (13), **Mansour Al-Maghribi** (2020) (10), **Wissam Najib and Faiza Abdul-Jaber** (2022) (20), **Ahmed Saba** (2023) (1), as they indicated that the use of Rondo training had a positive effect on skills in general and shooting in particular for soccer players.

3- Results and discussion of third research hypotheses

1- Results of third research hypotheses:

Table (5)
The relationship between possession percentages and attacking effectiveness for
research sample (n=6)

Variables		Units	Attacking effectiveness	(R) Value
Possession	By Bass	No.		0.792
	By Time	Min		0.803

* (R) value at 0.05 = 0.729

Table (5) shows that the calculated value of (R) between possession (by passing) and attack effectiveness reached (0.792) and the calculated value of (R) between possession (by time of ball possession) and attack effectiveness reached (0.803) All of these values are greater than (R) table value at a significance level of 0.05, which indicates the existence of a positive correlation.

2- Discussion of third research hypotheses:

Table (5) shows that there is a positive correlation at a significance level of 0.05 between possession and attack effectiveness, as the correlation coefficient between them is high.

The researcher attributes this to the fact that possession is an offensive method, and when team in possession that increases its offensive opportunities and enables it to control on rhythm of game and organize team lines to try to find gap on opponent's defenses, Possession exhausts the opponent physically, psychologically and makes them lose mental focus,

Possession will be positive influential if its basis for building and creating scoring opportunities.

Khalifa Al-Shabli (2017) show there are many studies confirmed that there is a positive relationship between possession and match results, by analyzing English Premier League matches for three seasons, it was found that the teams had possession at a rate between (50 - 59%) won at (43%) of matches, draw at a rate of (26%), and lost at a rate of (31%), which indicates association of possession with results. (7 : 37)

Refaei Mostafa (2005), Mufti Ibrahim (2013), Hassan Abu Abda (2023) agreed that players must work as a team and make positive possession with aim to advancing into empty spaces on opponent team's field and creating a gap in their defense, that helps them speeds up process of reaching their goal and increases scoring opportunities. (18 : 183), (15 : 137), (5 : 182)

Conclusion:

- 1 -Rondo training had a positive impact on possession percentages on some youth soccer matches U-19.
- 2 -Rondo training had a positive impact on shooting effectiveness on some youth soccer matches U-19.
- 3 -There was a positive relationship between possession and attacking effectiveness on some youth soccer matches U-19.

Recommendations:

- 1 -Paying attention to using Rondo training in training programs for youth soccer players U-19 in particular and on different age groups in general due to its positive impact on possession, shooting effectiveness and attack on soccer matches.
- 2 -Raising awareness of Soccer coaches in general and Youth coaches in particular about the importance of Rondo and possession training.
- 3 -Paying attention to possession due to its positive relationship to attacking effectiveness and matches results.
- 4- Conducting similar studies using Rondo training at different age groups.

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