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The Effect of General Strength Exercises by Repetition Method on Developing Passing and Shooting Skills in Youth Football

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Abstract

This study aimed to identify the changes caused by Pro-Split training in certain The importance of this research lies in utilizing general strength exercises with a repetition method, based on scientifically studied foundations, to develop passing and shooting skills in youth football players, and to overcome the existing weaknesses in these skills, serving the future development of the game. The research problem is the significant deficiency in passing and shooting skills among youth players. Through the researcher's experience, a lack of performance in these skills was observed, along with a lack of focus by some coaches on essential elements for youth players, including general muscular abilities, which are a crucial foundation for developing basic skills. Therefore, the researcher aimed to address this issue by designing general strength exercises with a repetition method to enhance these skills.The research objectives were:To prepare general strength exercises using the repetition method to develop passing and shooting skills in youth football players.To identify the statistical differences between pre-test and post-test results for the sample in passing and shooting skills The experimental method with a one-group design was used. The sample consisted of 20 youth football players (ages 14–16) from Al-Nasiriya Club in Dhi Qar Governorate. Key conclusions: The general strength exercises with a repetition method, designed by the researcher, contributed to the development of passing and shooting skills among youth football players.

Keywords: **General Strength Training**, **Repetition Method**, **Passing Skill**, **Shooting Skill**

1- Introduction to the Research

1-1 Introduction and Importance of the Research

The field of sports training has witnessed significant development thanks to serious scientific research that has contributed to raising the level of performance in various sports, including football. Despite this progress, researchers and football specialists continue to explore innovative training methods and techniques, utilizing With the tools and devices that assist in achieving training goals, this development requires the integration of theoretical and applied sciences, whether physical, skill-based, or tactical, to enhance the players' levels and achieve the highest possible accomplishment

Despite scientific progress, there remains a need for further research and studies to discover the best ways to develop each sport optimally, with the aim of maximizing human potential. Football is one of the sports that is trained in diverse ways that suit different age groups and genders. Competition, and combined training is suitable for the junior category as the exercises combine physical and skill aspects at the same time. Today's athletic achievement requires scientifically programmed and focused training that varies according to the sport. In football, training programs rely on developing strength and speed within a coordinated movement framework that links strength, speed, and muscular coordination. These features are essential in physical fitness and enable the player to develop his muscular abilities.

Football is a prominent sport that has garnered global attention. This interest has driven researchers to develop the game by raising the players' physical, tactical, and psychological levels, in addition to enhancing the technical aspect. Basic skills are the distinctive technical aspect of the game, and without them, the true nature of the activity is not revealed. The development of playing styles and defensive and

offensive plans requires a football player to have superior muscular ability and precise execution.

The importance of this research lies in proposing general strength exercises in a repetitive manner based on scientific principles that aim to develop some basic football skills for the junior category in order to overcome weaknesses in those abilities, thus serving the development of the game in the future.

1-2 Research Problem

Through the researcher's experience, he noticed a weakness in the young player's performance in some basic skills, especially the skills of passing and scoring, and the lack of focus by some coaches on general strength exercises in the repeated style for the young player.

Therefore, the researcher decided to study this problem by developing general strength exercises in a repetitive manner that would improve the level of passing and shooting skills towards the best.

1-3 Research Objectives

1- To develop general strength exercises using a repetitive method to improve passing and shooting skills in junior football players.

2- To identify the statistical differences between the pre- and post-tests of the research sample in developing passing and shooting skills in junior football players.

1-4 Research Hypotheses

1- There are statistically significant differences in the passing and scoring skills of junior football players in the pre-test and post-test, in favor of the post-test.

1-5 Research Areas

1-5-1 Human Area: Al-Nasiriya Club Youth Teams for the 2024-2025 Sports Season

1-5-2 Temporal Area: 10/12/2024 - 15/4/2025

1-5-3 Spatial Area: Military District Stadium

2- Research Methodology and Field Procedures:

2-1 Research Methodology:

The methodologies used in research are diverse, allowing for the selection of a methodology appropriate to each study. Choosing the correct methodology to address problems depends on the problem itself and its nature (Aqeel Hassan, 2011). Therefore, the researcher used the experimental method with a single-group approach.

3-2 Research Population and Sample:

The objectives set by the researcher and the procedures used in the research determine the nature of the sample to be chosen. Therefore, the researcher selected the research population purposively. They represent the junior players of Al-Nasiriya Football Club in Dhi Qar Governorate (junior category) aged (14-16) years, and their number is (20) players, where (6) players were allocated to conduct the exploratory experiment, then the researcher selected the sample members, whose number is (14) players.

2-3 Sample Homogeneity:

To verify sample homogeneity, the researcher performed several procedures to control the variables, even though the selected sample was from a similar age group and homogeneity was established for the research sample. Therefore, statistical methods were used, specifically the arithmetic mean and standard deviation. The coefficient of variation for anthropometric measurements is used to determine whether there is actual variation, as illustrated in Table (1).

It has been established that the value of the coefficient of variation is less than 30%. Sources indicate that the lower the coefficient of variation, the more homogeneous the sample.

2-4 Methods and Tools Used:

Information Gathering Methods:

* Arabic and foreign sources.

* Personal interviews.

* Experimentation.

* Testing and measurement.

Tools and Equipment Used:

Measuring tape.

A Japanese-made whistle.

A medical scale.

A Japanese-made Casio calculator.

A Dell Ci7 laptop (Irish-made).

Six DVDs.

A regulation-size football field.

Three regulation-size footballs.

A 5 cm wide adhesive tape and stationery.

A Casio electronic stopwatch.

2-5 Tests Used in the Research:

First: Passing Skill Test (Zuhair Al-Khashab, 1999).

- Test Name: Test of Average Passing Accuracy towards Three Circles Drawn on the Ground over a Distance of (20) m.

• Purpose of the test: To measure average passing accuracy.

• Required equipment: A designated testing area, (5) balls, a measuring tape, and a burr.

• Procedure: Three overlapping circles are drawn with diameters of (2m, 4m, 6m) respectively, and are assigned scores of (6, 4, 2) respectively. The center of the circles is the point of separation between the starting line and the three circles, which is a distance of (20)m.

Scoring: - The player is given (5) consecutive attempts.

- The number of points the player earns from the five attempts is tallied.

- The highest score a player can achieve is 30 points.

General Guidelines: - An attempt is considered a failure if the ball lands outside the circles.

- If the ball lands on the line of the circle, the next point is awarded according to the order of the circles (5, 3, 1) points.

Second: The shooting test from rolling (Risan Khribat: 1989)

• Purpose of the test: To measure shooting accuracy from rolling between the cones.

• Equipment: A regulation football, (5) cones, a stopwatch, and borax.

• Test procedure:

1- Marking out the test area (Place five cones 9 feet apart, and each cone 9 feet from the starting line), as shown in Figure (7).

2- Test Administrator: Recorder, who first calls out the players' names and then records the test results.

Performance Method: The player stands with the ball behind the starting line. When the starting signal is given, the player runs with the ball between the five markers and then attempts to score on the designated squares. Each player has 8 attempts.A player scores eight goals, with each of the eight balls awarded as follows:

(3) points for scoring in area (3).

(2) points for scoring in area (2).

(1) point for scoring in area (1).

(0) points for scoring in all other goal areas.

The highest score an individual can achieve is (24) points through (8) attempts.

2-6 Pilot Tests:

The researcher conducted a pilot test on Friday, December 13, 2024, at 4:00 PM in the Military District Stadium on a sample of (6) junior players from Al-Nasiriya Football Club, both from the research population and from outside the sample, to administer the tests. After a period of time (7) The test was repeated within 7 days, following the same procedures in terms of time, place, and purpose. The aim of this experiment was to identify the negative aspects and variables that the work would encounter, as well as to confirm the following:

1- Establishing the scientific basis for the tests

2. Identifying the appropriate tools and equipment for conducting these tests.

3. Determining the suitable time and place for conducting them.

4. Ensuring the adequacy of the support staff.

5. Training the support staff on how to administer these tests.

6. Identifying the difficulties and problems the researcher might encounter in administering these tests before implementing them in the main experiment.

2-8 Field Research Procedures:

2-8-1 Pre-tests of the Research Sample:

The researcher conducted pre-tests for the research sample before commencing the training program on Friday, December 20, 2024, at 4:00 PM (at the Military District Stadium). All (16) players in the research sample were present, and the measurements were recorded. (Heights, weight, and age) Then the researcher and the assisting team conducted the tests on the research sample.

2-8-2 Proposed Exercises

To obtain effective exercises, it was necessary to consult modern sources and references in sports training science, which would provide the researcher with the information needed to develop general strength exercises using a repetitive method. Therefore, the researcher prepared the following exercises.

The research sample was prepared based on the scientific principles of training and on some scientific sources and references, as well as the opinions of some specialists in the field of sports training science and the game of football.

The exercises began on Sunday, December 22, 2024, and continued until Sunday, February 10, 2025, for a period of eight weeks, with three training sessions per week (Sunday, Tuesday, Thursday).

The following are some clarifications regarding general strength exercises using the repetitive method:

- Training phase (specific preparation phase)

- Number of training units per week (3) units.

- Total number of training units: 24.

- Training days: Sunday, Tuesday, Thursday.

- Duration of the main session: 55-90 minutes.

- Type of training unit in terms of duration: Moderate.

- Submaximal and maximal intensity levels were used.

- The training method used was low-intensity and high-intensity interval training.

- The average intensity was calculated for the research sample to standardize intensity and establish a single starting point.

- The researcher employed a progressive intensity progression (2-1).

- The researcher considered the scientific principles governing the relationship between the components of the training load (intensity, volume, and rest). - Rest periods were determined based on the work performed.

2-8-3 Post-tests for the research sample:

The post-test for the research sample was conducted on Sunday, February 16, 2025 (at the Military District Stadium) after the completion of the methodology application period, which lasted (8) weeks. The researcher ensured that the same conditions as the pre-tests were provided.

2-9 Statistical Methods:

The researcher used statistical methods to analyze the results and test the research hypotheses using the IBM SPSS Statistics 24 package. These methods include:

• Arithmetic mean.

• Standard deviation.

• Coefficient of variation.

• Pearson correlation coefficient.

• T-test for paired samples.

3-1 Presentation and Analysis of Passing and Scoring Skills Results for the Pre- and Post-Tests of the Research Group:

Table (1)

Shows the arithmetic means, standard deviations, and calculated t-value for passing and scoring skills in the pre- and post-tests of the research sample

Skills	Unit of Measurement	before		after		Calculated T-value	Sig	Result
		x	Sd	x	sd			
Passing	Score	**11.17**	**4.02**	**19.49**	**2.58**	**9.60**	**0.000**	Significant
Shooting	Score	**10.53**	**5.21**	**16.03**	**3.48**	**8.39**	**0.000**	Significant

The values for the passing and scoring skills were extracted, and the results for the pre- and post-tests of the research sample were shown in Table (1).

3-4 Discussion of the results of some basic football skills

Table (1) shows that there are significant differences in the results of the passing and scoring skills between the pre-tests and post-tests for the research group, in favor of the post-tests. This confirms the research hypothesis.

The researcher attributes the development of passing skills to the use of diverse exercises with different types of passes, which led to the development of the player's technique as a result of increased ball feel. This aligns with what Al-Khashab indicated: "It is essential for the player to learn different passing styles in order to be able to..." To serve his team, and the mastery of passes is attributed to the technical aspect of the player (Zuhair Al-Khashab 1999)

The application of specific (special) physical skill exercises, which include two axes—the physical aspect and the skill aspect—and the performance of the standardized exercises prepared by the researcher in terms of (intensity, volume, rest), led to the improvement and development of the first axis, and the repetitions of performance led to the development of Developing the second axis (long passes) led to improved passing accuracy, as passing is fundamental to team play. When a

team can execute passes correctly and accurately, it can overcome the opponent. This was confirmed by Abdullah Hussein Al-Lami: "The essential element in transfer The ball is moved towards the opponent's goal as quickly as possible through various passes, and this is what distinguishes the match. Nothing serves the team more than accurate and good passes (Abdullah Hussein: 2010)

Therefore, leg strength during performance is the primary criterion for developing and improving skill performance from a physical standpoint, which is reflected in skill performance. The repetition of (specific) exercises has played a prominent role in developing and improving passing in its various forms, which are characterized by a specific style. High precision and therefore repetition of the exercise leads to harmony and compatibility between leg strength and skill accuracy for the players, as it uses passing with the inside of the foot and is one of the most frequently used passes and it is preferable to use it for the player in a free space and to act quickly and appropriately.

The researcher attributes the improvement in shooting skills to the general strength exercises performed repeatedly with the ball, which were included in the shooting skill training units, and to the commitment of the research sample to the shooting exercises, as practical training is the optimal method for developing a player.

Physically and technically, it gives players the necessary experience to solve the problems they face in the match. Through the preparation of specific physical and technical exercises that were well implemented by the research sample, which included repeated shooting from movement, this led to the development and improvement of this skill, which was reflected in The physical aspect involves the strength of the thigh and leg, while the technical aspect focuses on accuracy in scoring. Scoring is considered a crucial and fundamental skill in football, and it can determine the outcome of matches. Everything players do on the field aims to create a suitable scoring opportunity. It requires precision and strength, as Muwaffaq confirmed: "Goals cannot be achieved unless the player possesses the

precision and strength to strike the ball powerfully and the speed to score" (Muwaffaq As'ad Mahmoud, 2000).

Increased focus among players during shooting drills is a result of... Continued practice of shooting drills, including general strength exercises performed repeatedly, requires concentration, high technical skill, and the ability to execute various types of kicks (Salam Jabbar Sahib, 2000). This is also agreed upon by Osama Kamel. Salary: 2000) "The motor skill that requires the element of speed benefits more from the degree of attention, given that the increase in muscle tension that accompanies the high degree of arousal in the targeting process leads to a decrease in the latency period for response. This development in the research sample involves (physical-skill) exercises that were applied to the sample during the special preparation period. It is essential that the exercises during this period be similar to the performance and effective, in addition to the players' adaptation to the exercises in terms of intensity, repetition, performance, and duration. Rest. Football is a team sport that requires cooperation between players on the field. The team in possession of the ball achieves this through coordination between team members, by dribbling the ball or moving off it, as well as through various types of passes (short, medium, and long) and different types of scoring. Skills require physical attributes, which necessitated the researcher's focus on developing and enhancing physical capabilities and utilizing them in the workplace.

Development is not necessarily direct but rather indirect, achieved by focusing on all aspects of performance. Mastering a skill can, in turn, contribute to... Developing physical performance through variations in exercise routines using a diverse and specialized set of exercises positively impacts players' skill performance, as "skill performance is closely linked to physical and motor ability, since mastery of skill performance depends on the extent of Developing the specific physical and motor skills required for this performance. Therefore, developing the player's physical and technical aspects of the game, as performance

components that serve and facilitate the application of the team's tactical aspects, thus improving the team's overall and optimal performance, has played a role. It is effective in developing the physical and technical aspects, and therefore in performance, and executing skills during a match requires quick execution.

4- Conclusions and Recommendations

4-1 Conclusions

Based on the research findings, along with the accompanying statistical analyses, discussion, and extrapolation within the scope and nature of the research sample, the researcher was able to reach the following conclusions:

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(1) Essam Abdel Khaleq: Sports Training, Egypt, Dar Al-Maaref, 1992, p. 171.

1- The general strength exercises, prepared by the researcher using a repetitive method, contributed to the development of the passing and scoring skills of young football players.

2-

3- The results of the study showed that general strength exercises in the repetitive style have a remarkable positive effect on developing the passing skill of young footballers, as the research group recorded a clear improvement in passing accuracy compared to the pre-test.

3. Frequent general strength training contributed to improving the shooting skills of young players, thus increasing their chances of scoring goals more effectively during matches.

4. The study confirmed the importance of frequent physical exercises within the training programs for young footballers to achieve a balance between developing physical and technical abilities.

5.2. Recommendations:

1. Adopt repetitive general strength training exercises in training programs for all age groups, especially junior players aged 16-18.

2. Conduct similar studies on physical abilities and specific skills not addressed in this study.
3. Conduct similar studies with other age groups and using different training methods focused on developing specific skills, and observe the results of these studies.

4. The researcher recommends that coaches adopt repetitive general strength exercises as a fundamental part of training young players, given their effective impact on improving skill performance in football.
The foot.

Sources

• Zuhair Qasim Al-Khashab et al.: Football, 2nd ed., Mosul, Dar Al-Kutub for Printing and Publishing, 1999.

• Risan Khribat Majid: Encyclopedia of Measurements and Tests in Physical Education and Sports, Vol. 1, University of Basra, Higher Education Press, 1989.

• Abu Al-Ala Abdel-Fattah and Muhammad Nasr Al-Din Radwan: Physiology of Physical Fitness, 1st ed., Dar Al-Fikr Al-Arabi, Cairo, 1993.

• Sabri Al-Adawi: Attention Acuity in Football Players and its Effect on Different Physical Loads, research published in Al-Arabi Sports Journal, Helwan University, 1997.

• Muwaffaq Asaad Mahmoud: Learning and Basic Skills in Football, Amman, Dar Dijla, 2009, p. 131.

• Abdullah Hussein Al-Lami: Sports Training, Najaf, Dar Al-Dhiya for Printing and Design, 2010. • Salam Jabbar Sahib: The Effect of a Proposed Training Method on Developing Speed-Strength and Shooting Skills in Football, Master's Thesis, College of Physical Education, University of Babylon, 2000.

• Osama Kamel Rateb: Training Psychological Skills: Applications in the Sports Field, 1st ed., Helwan University, Dar Al-Fikr Al-Arabi, 2000.

• Essam Abdel-Khaleq: Sports Training, Egypt, Dar Al-Maaref, 1992.

Appendix (1)

ON	Description	Repetitions	Sets	Rest Between Reps	Rest Between Sets	Exercise Duration	Work Time	Total Workout Time
1	(Squats)	4	3	30 s	90 s	11s	132s	6.18 minute
2	(Push-ups)					9s	108s	8.20 minute
3	(Agility Drills)					10s	120s	8 minute
4	Vertical Jumps)					8s	96s	8 minute