The Effect of Proposed Exercises to Develop Maximum Transition Speed and Handling and Suppression Skills in Youth Football

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ABSTRACT

The importance of the research lies in the use of exercises proposed by the researcher based on studied scientific foundations to develop the maximum transition speed and the skills of handling and suppression in football for the youth group and to overcome the weakness in those abilities and skills **in order to serve the development of this game in the future**, and the research problem was through the researcher 's experience.The young man in the skills of suppression and handling and the lack of focus of some coaches on the modern exercises of the young player, so the researcher decided to study this problem by developing proposed exercises that would raise the level of the maximum transition speed and the skills of handling and suppression towards the better, while **the objectives of the research are** to prepare special exercises in developing the maximum transition speed and the skills of handling and suppression in football for young people. The researcher used the experimental **method** in the one-group method, andthe researcher selected the research **population** by the deliberate method, and they represent the players of the specialized academy in Dhi Qar in the youth group of (16-18) years old , which are (27)(7) players were allocated to conduct the reconnaissance experiment on them, then the researcher selected the **sample** members, which are (20) players, and one of the most important conclusions is the proposed exercises prepared by the researcher that contributed to the development of the maximum transitional speed of young football players.

1- Introduction to the research

1-1 Introduction and Importance of Research

Many efforts of those concerned with the sports field in various countries have been devoted to developing scientific foundations and rules in paying attention to preparing players physically, skillfully, strategically, and psychologically, and to create all the necessary conditions and requirements to reach the highest levels.

There are many ways and methods Sports training, all of which aim to develop the level of physical and skill performance in order to achieve advanced positions in various activities, and the trainers seek to choose the best types of training methods, apply the most appropriate ones, and use the latest means that suit the type of specialized activity, with the aim of achieving the investment of the most important physical abilities related to the specific type of activity because of their direct impact on the high level of physical and skill performance.

Achievement in any sport today can only be achieved through scientifically programmed training and Center As these training programs vary according to the different sports activities, whether individual or group, each of them programs depends on strength and speed training through the motor component that results from them in a harmonic motor framework that requires the use of maximum force and maximum speed of the individual, it is a special ability, and this characteristic is very important in all sports such as football.

Football is one of the most popular sports in the world, and the ability to perform well depends on a set of factors represented in the skill and planning aspect, as well as general and private physical preparation, and that each worker has his own way of preparation and training, as the success of any training process depends on a full and interconnected understanding of these factors, as they are interrelated and intertwined and cannot be separated from each other.

Hence, the importance of the research lies in the use of exercises proposed by the researcher based on studied scientific foundations to develop the maximum transition speed and the skills of handling and suppression in football for the youth group and to overcome the weakness in those abilities and skills in order to serve the development of this game in the future.

1.2 Research Problem

It is well known that the training process is a comprehensive and extensive process and it is natural that it should be properly planned and based on a scientific basis that includes all aspects. The training process is "an educational process based on scientific foundations whose aim is to develop the player's performance in all aspects and reach the integration of the required performance, so it requires coaches to develop integrated curricula to develop the player's capabilities, as it is not advisable to develop an ability or skill at the expense of other abilities and skills.

Through the researcher's experience, he noticed that there is a weakness in the performance of the young player in the skills of suppression and handling, and the lack of focus of some coaches on the modern exercises of the young player.

Therefore, the researcher decided to study this problem by developing suggested exercises that would improve the level of maximum transition speed and handling and suppression skills for the better.

1-3 Research Objectives

1- Preparing special exercises in the development of maximum transition speed and handling and suppression skills in soccer for youth.
2- Identifying the statistical differences between the pre- and post-tests of the research sample for motor speed and handling and suppression skills in youth football.

1-4 Research Hypothesis

There are significant differences in motor speed and handling and suppression skills in football for young people in the pre-post-tests and in favor of the post-tests.

1.5 Research Areas

1-5-1 Human Field: Players of the Specialized Academy in Dhi Qar Youth Group (16-18) years

1-5-2 Temporal Domain: 15/11/2024 - 19/3/2025

1.5.3 Spatial Field: Military Quarter Stadium

2. Research Methodology and Field Procedures:

2-1 Research Methodology:

The researcher may use the experimental method in the one-group method .

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 he will choose, and accordingly, the researcher selected the research community in the deliberate way, and they represent the players of the specialized academy in Dhi Qar youth group of (16-18) years old, which are (27) players, where (7) players were allocated to conduct the exploratory experiment on them, and then the researcher selected the sample members, which are (20) players. .

2.3 Sample homogeneity:

Statistical methods were used by means of arithmetic mean, standard deviation and coefficient of difference for morphological measurements to know the reality of the difference or not, and Table (1) shows this and it was proven that the value of the coefficient of difference is less than 30 **%,** and the sources state that whenever the coefficient of difference is less than 30**%,** it means that the sample is homogeneous.

Table (1)

Shows the homogeneity of the research sample in age, height and weight using the coefficient of difference which shows values less than 30 %

Divergence coefficient	Standard deviation	Arithmetic mean	Unit of Measurement	Measurements and Variables	t
4.011 %	0.71	17.7	Year	Chronological age	1
1.92 %	1.29	67.18	kg	Mass	3
2.17 %	3.69	169.91	Poison	Length	4

2-4 Means and Tools Used:

✓ **Means of collecting information:**

⊙ Arab and foreign sources.⊙ Personal interviews.⊙ Experimentation.⊙ Testing and measurement.

✓ **Tools and Devices Used:**

⊙ Tape measure.⊙ Japanese-made whistle.⊙ Medical scale.Japanese-made ⊙CASIO handheld calculator.⊙ Irish-made Dell Ci7 laptop.

⊙6 DVDs .⊙ Legal Football Field ⊙ Legal Football (3)

⊙ Adhesive tape with a width of (5) cm and stationery.⊙ Casio electronic stopwatch .

2.5 Tests used in the research:

First: Maximum Transition Speed Test:

- The Enemy (30 AD) from a Moving Beginning: (Muhammad Shawqi Kishk and Amr Allah Al-Basati, 2000)

Objective of the test: to measure the (maximum) transition velocity.

Tools Used:

- A space area with a length of not less than (50 m) and a width of not less than (1.5 m)
- Stopwatch.
- The test area shall be defined by three lines, the first starting line, the second starting line at a distance of (20) from the first line, an end line at a distance of (30 m) from the second line and a distance of (50 m) from the first line.

Performance Method:

- The test begins with each lab taking a standby position behind the first line.
- At the signal, the laboratory performs a light run for a distance of (20 m) and when reaching the line of (30 m), a fast run is performed to the finish line as shown in Figure (1).

Test Instructions:

- The player is given two tries and scores the least of them in time
- The player performs the second attempt after all the testers have finished performing the test.
- . The enemy is done for each player separately without a competitor

Sign up:

The time is recorded from the second start line to the finish line (30 m).
The results of each attempt are scored to the nearest (1/10) of a second, and the results of the best attempt are calculated.

Second: Handling Skill Test: (Zuhair Qasim Al-Khashab et al., 1999).

- ✓ **Test Name:** Test of the Accuracy of Medium Handling of Three Circles Drawn on the Ground for a Distance of (20) Meters.
- ✓ **Purpose of the test:** Measure the average handling accuracy.
- ✓ **Necessary tools:** specific area for the test, (5) balls, tape measure, burke.
- ✓ **Procedures:** Three overlapping circles are drawn, their diameters respectively (2 m, 4 m, 6 m) and they are given degrees respectively (6, 4, 2) degrees, where the center of the circles is the point of distance between the starting line and the three circles, which is a distance of (20) m.
- ✓ **Registration: - The** player is given (5) consecutive attempts.
- − The number of points obtained by the player from the five attempts is calculated.
- − The highest score a player gets is 30 points.
- ✓ **General Guidelines:** - The attempt is considered a failure in case the ball falls out of the circles.

- In the event that the ball falls on the circle line, the following degree shall be given according to the sequence of the circles (1, 3, 5).

Third: Test the Skill of Suppression: (Zuhair Qasim Al-Khashab et al., 1999).

- ✓ **Test Name:** Stopping the Movement of the Ball (Quenching).
- ✓ **Purpose of the test:** Measure accuracy in stopping the ball and regaining control.

- ✓ **Necessary tools:** (5) legal footballs, tape measure, Burke.
- ✓ **Procedures:**
- Planning the test area .
- The player stands behind the designated test area.
- The coach stands with the ball on the throwing line that is (6) meters away from the test area, which is a square measuring (2x2) meters, and after giving the start signal, he throws the ball (high ball) to the player who advances from the starting line to the test area, trying to stop the ball with any part of the body, except the arms, and then return to the starting line and start again.
- The ball must be stopped behind the line and within the designated area of the test, with one foot inside the test area.
- If the coach makes a mistake in throwing the ball, the attempt is repeated and does not count (throwing the ball is done by moving the hands from the bottom up).
- ✓ **Registration** :
- It gives the player five consecutive attempts.
- It is granted (zero) for the failed (incorrect) attempt.
- Two marks are awarded for each correct attempt.
- The highest score a player gets is 10 points.
- ✓ **Directions:**
- The attempt is not considered valid in the following cases:
- If the player does not succeed in stopping the ball.
- If it passes any line in the test area by more than one foot.
- If he stops the ball illegally in football.

2-6 Exploratory Experiment :

The researcher conducted the exploratory experiment on Wednesday 11/12/2024 at nine o'clock in the morning in the military district stadium on a sample of (7) players of the Specialized Academy in Football who were (7) players from the research community and from outside the sample to apply the tests, and after a period of (7) days, the test was repeated with the same procedures in terms of time, place and purpose of this experiment Knowing the negative aspects and the variables that will face the work as well as to make sure of the following:

1- Finding the Scientific Foundations of Tests
2- Knowing the appropriate tools and devices to perform these tests.
3- Know the right time and place to conduct it.
4- Ensure the adequacy of the supporting staff.
5- Define the assistant staff in how these tests are applied.
6- Knowing the difficulties and problems facing the researcher in applying these tests before applying them in the main experiment.

2-8 Field Research Procedures:

2.8.1 Pre-tests for the research sample:

The researcher conducted the pre-tests of the research sample before starting the implementation of the training curriculum on Sunday, 22/12/2024 at nine in the morning (in the stadium of the military district), and all the members of the research sample (20) players attended, and the measurements (lengths, mass, and age) were identified, then the researcher and the assistant work teamConducting tests on the research sample

2.8.2 Suggested exercises

In order to obtain exercises with good effectiveness, it was necessary to review the modern sources and references in the science of sports training that would enrich the researcher with information that helps him develop special exercises, so the researcher prepared the exercises for the members of the research sample based on the scientific foundations of training and to 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 application of the exercises started on Tuesday 24/12/2024 until Tuesday and on 12/2/2025 for eight weeks with three training units per week (Sunday, Tuesday, Thursday)

And in what comesY Some explanations of the curriculum:

- Training Phase (Special Preparation Phase)
- The number of training units per week is (3) units.
- The total number of training units is (24) training units.
- Training days (Sunday, Tuesday, Thursday).
- Main section time (45-90) minutes.
- Type of training module in terms of time (short and medium).
- Use sub-maximum and maximum intensity.
- The training method (low-intensity interval and high intensity) was used.
- The average intensity of the research sample was extracted to standardize the intensity and start with a single starting line.
- The researcher used the principle of intensity gradation in an ascending manner (2-1).
- The researcher took into account the scientific foundations in the relationship between the components of the training load (intensity, size, and comfort)
- Breaks were determined on a work basis.

2.8.3 Post-tests for the research sample:

The post-test of the research sample was conducted on Friday, 14/2/2025 (in the military district stadium) after the completion of the period of applying the method, which took (8) weeks, and the researcher was keen to provide the same conditions as the pre-tests.

2.9 Statistical Methods:

The researcher used statistical methods that helped to process the results and test the research hypotheses through the use of the statistical package (IBM SPSS Statistics 24), which are:

- Mean of Arithmetic Standard Deviation Coefficient of Difference Coefficient Pearson Correlation Coefficient
- T)) test for threaded samples. Test . Favorable Ratio

3. Present, analyze and discuss the results

3-1 Presentation and analysis of the results of some basic skills of the pre and post tests of the research group:

Table (2)

Shows the values of arithmetic medians, standard deviations, and the calculated T-value of some basic skills for the pre- and post-tests of the research sample.

Basic Skills	Unit of Measurement	(Qibla)		(Next)		T calculated	Sig	Conclusion
		Going to	on	Going to	on			
Transitional Speed	Tha	5.09	0.34	4.10	0.31	0.86	0.000	Moral
Handling	Degree	13.20	3.32	21.70	6.58	3.6	0.000	Moral
Suppression	Degree	5.20	1.91	7.70	1.33	3.52	0.002	Moral

The values of the maximum transition velocity and the suppression and handling skills were extracted , and the results of the pre- and post-tests of the research sample appeared as shown in Table (2).

3.4 Discussion of the results

It is taken from Table (2) that there are significant differences in the results of some basic skills between the pre- and post-tests of the research group and in favor of the post-tests, and thus the imposition of a research is achieved.

The researcher attributes this development in the transitional speed to the proposed exercises used during the duration of the experiment and these scientifically selected exercises and their performance with intensity and volumes appropriate to the sample and the training period, so the continuation of training and the repetition of exercises in a correct scientific way had a clear role in the development of the transitional speed, as (Saad Mohsen 1996) emphasizes that "the opinions of experts, no matter how different the sources of their scientific and practical culture, the training program inevitably leads to development if it is built on a scientific basis in organizing the training process, gradualism, and observing individual differences." The use of proper and ideal repetitions and effective rest periods under the supervision of specialized trainers and with appropriate training conditions in terms of place, time and the tools used (Saad Mohsen Ismail, 1996)

The use of physical and skill exercises in a codified manner also leads to the development of players in their sports specialty, as it is stated (Marwan Abdul Majeed

& Mohammad Jassim Al-Yasiri, 2010) that "the goal of the sports training process is to reach the highest level of athletic achievement in the event or activity in which the player specializes.

The researcher attributes the development **of the skill of quenching** to the effect of the proposed exercises, as it emerges as the most used skill throughout the game, which requires accuracy and mastery in performance, and this is in line with what Hanafi Mahmoud pointed out: "Continuous training on the performance of any skill, clarifying the correct performance and correcting mistakes leads to its performance becoming automatic and accurate without thinking about its parts" **(Abou Ela Abdel Fattah & Mohamed Nasr El-Din Radwan, 1993).** The player can become an automaton in the technical performance of the skill when regularly training with the ball and repeating a lot of special specific exercises (Sabri Al-Adawi, 1997) and this is what the researcher sought to develop the skill of quenching through the proposed exercises prepared by the researcher in the physical aspect that led to the development of speed in the player, including the force imposed by the foot of the anchor in the performance of the suppression skill, which led to an increase in stability and control. When performing the suppression skill, where the balance was good, the performance of the suppression skill was better by increasing the force on the ground, this is what (Muwaffaq Asaad Mahmoud, 2009) confirmed: "The reliance of suppression on the ground in describing the skill performance of the skill, and the researcher believes the importance of the suppression skill for the players, and that the failure to receive the ball and control it leads to the loss of the ball, this is what Muwaffaq confirmed. The player's mastery of receiving and controlling the ball (Muwaffaq Asaad Mahmoud, 2009).

The researcher also attributes the development **of the handling skill** to the use of various exercises with different types of handling, which caused the development of the player's technique as a result of increasing his sense of the ball, and this is in line with what Al-Khashab pointed out: "It is necessary for the player to learn the different handling style in order to be able to serve his team, and the mastery of the handling is due to the technical aspect of the player (Zuhair Al-Khashab et al., 1999).

The application of the proposed exercises , which contain two axes, namely the physical aspect and the skill aspect, and the performance of the metered exercises prepared by the researcher in terms of (intensity, size, rest) led to the improvement and development of the first axis and the repetitions of the performance led to the development and development of the second axis (long handling) led to the improvement and development of the accuracy of handling, as handling is considered the basis of team play, and when the team can perform the handlings correctly and accurately, it can pass the opponent, this is confirmed by Abdullah Hussain Al-Lami. The main element in moving the ball towards the opposing team's goal as soon as possible is through different handling, which is characterized by the match, and nothing serves the team more than controlled and good handling" (Abdullah Hussain Al-Lami, 2010).

On this basis, leg strength during performance is the main criterion for the development and improvement of skill performance from a physical point of view, which is reflected on the skill performance, the repetition of the proposed exercises has had a prominent role in the development and development of handling in its many

forms, which is characterized by a high degree of accuracy, and therefore the repetition of the exercise leads to harmony and compatibility between leg strength and the accuracy of the skill for the players, as the handling is used with the soles of the foot and is one of the most used handling and preferably used to the player in a vacuum. And act quickly and appropriately.

4 Conclusions and recommendations

4.1 Conclusions

Based on the findings of the research, and the accompanying statistical treatments, discussion and extrapolation within the limits and nature of the research sample, the researcher was able to reach the following conclusions:

1- The proposed exercises prepared by the researcher contributed to the development of the maximum transition speed of young football players.
2- The proposed exercises prepared by the researcher contributed to the development of the suppression and handling skills of young football players.
3- The exercises proposed with this ripple of stress, volumes and rests worked to develop the transitional speed and handling and suppression skills in football.

5-2. Recommendations:

1- Adopting the proposed exercises in the training curricula for age groups, especially for (youth) players aged (16-18) years.
2- Conducting similar studies in physical abilities and special skills that were not addressed in the study.
3- Conduct similar studies for other age groups and other training methods related to the development of special skills and find out the results of these studies.

Sources

- Abou Ela Abdel Fattah and Muhammad Nasr El-Din Radwan: The Physiology of Physical Fitness, 1st Edition, Dar Al-Fikr Al-Arabi, Cairo, 1993.
- Osama Kamel Rateb: Psychological Skills Training Applications in the Field of Sports, 1st Edition, Helwan University, Dar Al-Fikr Al-Arabi, 20.
- Raysan Khraibet Majeed: Encyclopedia of Measurements and Tests in Physical and Sport Education, Volume 1, University of Basra, Higher Education Press, 1989.
- Zuhair Qasim Al-Khashab and others: Football , 2nd Edition, Mosul, Dar Al-Kutub for Printing and Publishing, 1999.
- Saad Mohsen Ismail: The Effect of Training Methods for Developing the Explosive Power of the Legs and Arms on the Accuracy of Long Shot by Jumping High in Handball, Ph.D. Thesis, University of Baghdad, Faculty of Physical Education, 1996
- Salam Jabbar Sahib: The Effect of a Proposed Training Curriculum on the Development of Speed Distinctive Strength and Performance of Shooting Skill in Football, Master's Thesis, Faculty of Physical Education, University of Babylon, 2000 .
- Sabri Al-Adawi: Attention Deficit Hyperactivity Disorder in Football Players and its Effect on Different Physical Loads, Research Published in Al-Arabi Sports Magazine, Helwan University, 1997.

- Abdullah Hussein Al-Lami: Sports Training , Najaf, Dar Al-Diaa for Printing and Design, 2010.
- Essam Abdel Khaleq: Sport Training , Egypt, Dar Al-Ma'arif , 1992 .
- Marwan Abdul Majeed Ibrahim and Muhammad Jassim Al-Yasiri: Modern Trends in the Science of Sport Training, 1st Edition, Amman, Al-Warraq Publishing and Distribution, 2010 .
- Muwafaq Asaad Mahmoud: Learning and Basic Skills in Football , Amman, Dar Degla, 2009,

Appendix (1) shows the special exercises

Exercise Explained	Workout Code	Exercise Name	t
From the approach position, the player will travel the specified distance at full speed.	A1	25 m	1.
From the approach position, the player will travel the specified distance at full speed.	A2	20 meters	2.
From a standing position, the player alternates on a ground ladder of (10 m) and quickly	A3	Exchanging Feet on the Ladder	3.
From a standing position, the player runs with the ball from indicator number (1) to indicator number (2) and so on to indicator (8) where the distance between the indicator and another is (3) meters and the markers are in the form of a zakzaki after which the player aims at the goal	A4	Zakzaky running with the ball and aiming at the goal	4.
From the approach position, the player starts the specified distance at a maximum speed of 40 meters and then runs backwards 20 meters	A5	60 meters	5.
From the standing position, the player starts the ball in a zakzak manner between the signs for a distance of (20 meters), as the distance between one indicator and another (50 cm) after which the player passes the ball to the other player who is away from a distance of (10 meters), where the type of passing is in the soles of the foot.	A6	Zakzaky running with the ball and passing	6.
From a standing position, the player receives the ball with the outside face of the goal goal by the coach, then the player runs to pass through the indicator that is a distance of (2 meters) and then passes the ball to the colleague who is a distance of (10 meters)	B1	Receiving & Passing	7.
From a standing position, the player jumps forward for a distance of (6 meters)	B2	Jumping horizontally with both feet	8.
From the standing position, the player runs from the first indicator (1) a distance of (100 meters) straight to the second indicator and from indicator number (2) (50 meters) to indicator number (3) lateral	B3	Running 150 meters	9.
Running between (4) indicators where the distance between one indicator and another (50 meters) is in the shape of a square	B4	Running 200 meters	10.

Appendix (2) shows a sample of the training curriculum

First				The week	Develop special transitional speed and speed power for both legs			Objective
First			Training Module		70.87 min		Main Section Time	
70 %				Hardship	Thursday - 24/1/2019			History
Total Workout Time	Total Breaks Between Groups	Total breaks between repetitions	Working Time	Comfort between groups	Rest between repetitions	Size		Workout Code	t
						Totals	Repetition		
10.60 KD	240 S	300 S	6.01 S	60 S	25 S	4 X 4		A1	1
10.46 KD	240 S	300 S	5.51 s	60 S	25 S	4 X 4		A2	2
10.96 KD	240 S	300 S	7.37 seconds	60 S	25 S	4 X 4		A3	3
13.72 KD	240 S	300 S	17.72 seconds	60 S	25 S	4 X 4		A4	4