International Journal of Yogic, Human Movement and Sports Sciences 2023: 8(2): 471-478



ISSN: 2456-4419 Impact Factor: (RJIF): 5.18 Yoga 2023; 8(2): 471-478 © 2023 Yoga www.theyogicjournal.com Received: 09-11-2023 Accepted: 04-12-2023

Dr. Wisam Jalil Sabea

Assistant Professor, Department of Physical Education and Sports Sciences, College of Basic Education, University of Diyala, Iraq

Dr. Mustafa Mahdi Edan

Lecturer, Department of Physical Education and Sports Sciences, College of Basic Education, University of Diyala, Iraq

The impact of similar to playing exercises on development reaction speed for football goalkeepers

Dr. Wisam Jalil Sabea and Dr. Mustafa Mahdi Edan

DOI: https://doi.org/10.22271/yogic.2023.v8.i2g.1505

Abstract

The objective of this article is to determine the influence of playing-like workouts on the response time of football goalkeepers. The experimental technique was utilized by the researchers, who designed the experimental and control groups to meet the nature of the research and its aims. The researchers purposefully selected the research sample, the young goalkeepers enrolled in the football academy in Al-Khalis numbered (10) during the fiscal year (2023-2024). The goalkeepers that participated in the experiment were not included. The number of observations for each corner on which the goalie executed the maneuver was used by the researcher, and each of the four corners of the goal accomplished (2) movements per player, and the number of tries was (16), which is the number used by the researchers to extract the research data. Following the completion of the tests, suitable statistical procedures were employed to get the findings, which were then presented, examined, and debated. The two researchers came to the most crucial conclusion: playing-like activities have a demonstrable influence on developing the response speed of young goalkeepers in football. The most essential advice are to do more study to uncover different activities to help football goalkeepers improve other abilities.

Keywords: Football goalkeepers, playing exercises, football

Introduction

Human life in general has witnessed a clear and noticeable development in its various fields, and this development came with the efforts of scientists and specialists, by following the correct scientific methods for this, and among those fields is the field of sports, as the development taking place in sports and its various types, and achieving Achievements in various sporting events did not come out of nowhere, but rather came through great effort and continuous scientific research, in order to raise the status of sport as high as other fields in public life, and by following sound scientific foundations, great sporting gains were achieved, reducing effort, time and costs, and achieving The training process reaches a good degree of sophistication.

Among the sports games is football, which, like most games, has general physical qualities and abilities, as well as specific physical qualities and abilities. Football has had a wide and large share of development and interest from researchers and specialists in the field of football training science because of its strength and speed in physical performance and the skilled.

The performance of the goalkeeper in football is characterized by strength and speed, and one of the types of this speed is reaction speed, as it requires coaches and specialists to develop the characteristic of reaction speed during the training seasons, and this only comes through the use of modern training methods in developing reaction speed in a way that is appropriate. With the kinetic performance and performance position of the football goalkeeper, the speed of the reaction is represented by a stimulus as an indication of the ball's path, as well as the use of force to move the goalkeeper with his body parts to block the path of the ball as it is heading quickly towards his goal, which requires that the process of intercepting the ball be completed in the shortest possible time, which can be achieved. It distinguishes one goalkeeper from another as one of the requirements for good goalkeeping.

Corresponding Author: Dr. Wisam Jalil Sabea

Assistant Professor, Department of Physical Education and Sports Sciences, College of Basic Education, University of Diyala, Iraq The importance of the research lies in using exercises similar to playing in developing the reaction of young goalkeepers in football.

Research problem

Since the researchers are football players, they noticed that there are cases in matches in which the direction of the ball is changed by touching the ball by the defending or attacking player, which puts the goalkeeper in a position that requires him to have good reaction speed in order to block the balls, so the researchers decided to prepare similar exercises. To play in developing reaction speed for young football goalkeepers.

Research objective

- Preparing exercises similar to playing in developing reaction speed for young football goalkeepers.
- Identifying the effect of exercises similar to playing in developing reaction speed for young goalkeepers in football

Research hypotheses

- There are statistically significant differences between the pre- and post-tests in the reaction speed test for football goalkeepers for the experimental and control groups, in favor of the post-test.
- There are statistically significant differences between the post-tests in the reaction speed test for football goalkeepers for the experimental and control groups, in favor of the experimental group.

Research fields

 Human field: Young goalkeepers at the Football Academy in Al-Al-Khalis City.

Time field: (1/4/2023) to (1/8/2023)

• Spatial field: Al-Al-Khalis Sports Club Stadium.

Research Methodology

Used the experimental method

Community and sample research

The sample chose deliberate manner, namely the goalkeepers registered in the Football Academy in the city of Al-Khalis, who numbered (10) for the year (2023-2024), with (4) goalkeepers for each group. The goalkeepers on whom the exploratory experiment was conducted, numbering (4) were excluded. 2) Goalkeeper. The researchers relied on the number of observations of each corner through which the goalkeeper performs the movement, and this is what was mentioned by (Mohammed Jassim Al-Yasiri: 2011: 35) [7] "In the field of scientific research, the statistical population is usually viewed as a theoretical concept that is practically incapable of being limited and defined. That is, it is the ability to obtain measurements that include all of its components due to its large size. Now it becomes necessary to define its features clearly and accurately and according to some principles and procedures. These procedures are the selection of a group of observations, objects, or individuals that bear the same characteristics and characteristics as all the vocabulary concerned with the statistical population". Each of the four corners of the goal achieved (2) moves per player, and the number of attempts was (8), which is the number that the researcher adopted in extracting the results of the research.

Homogenization of the sample

The researchers conducted a homogenization process on the research sample in the variables (mass - age - Length - training age) in order to control the variables that may affect the results, as shown in Table (1).

Table 1: Shows the homogeneity of the sample in the variables (mass - length - age - training age)

No.	Variables	Measuring unit	Mean	Std. Deviations	Median	Skewness
1	Mass	Kg	66.50	5.879	67	0.990-
2	Length	Cm	173.12	5.409	171.50	0.251
3	Age	Year	17.37	0.744	17.50	0.824-
4	Training age	Year	3.87	0.640	4	0.068

From Table (1) it was shown that the values of the Skewness coefficient were respectively (-0.990) (0.251) (-0.824) (0.068) and that all of these values are limited to (± 1) (Muhammad Sabry Omar and *et al.*: 2018: 176) [12] The properties of the curve The normal "has one value (the area under the curve equals one) and two sides extending to infinity as they

approach the horizontal axis but never meet it."

Sample equivalence

The researchers conducted an equivalence process between the experimental and control groups to test reaction speed in football, as shown in Table (2).

Table 2: Shows the equivalence of the sample in the reaction speed test

Variables	Groups	Measuring unit	Number of views of the sample	Mean	Std. Deviations	T value calculated	Level Sig	Type Sig
Reaction speed is at the top right	Experimental group	Second	8	1.583	0.077	0.124	0.903	non sig
Reaction speed is at the top right	Control group	Second	8	1.587	0.036	0.124	0.903	non sig
Describe amond is at the top left	Experimental group	Second	8	1.516	0.059	0.202	0.393 0.700	
Reaction speed is at the top left	Control group	Second	8	1.528	0.067	0.393	0.700	non sig
Describer aread lawser right	Experimental group	Second	8	1.581	0.064	0.851	0.400	
Reaction speed lower right	Control group	Second	8	1.606	0.052	0.831	0.409	non sig
Reaction speed is lower left	Experimental group	Second	8	1.561	0.065	1.347	1.347 0.199	non sia
Reaction speed is lower left	Control group	Second	8	1.520	0.057	1.34/	0.199	non sig

From Table (2), it was found that the significance of the differences is not significant. This indicates that the two groups are equivalent in the reaction speed test for football goalkeepers.

Methods and tools: Arabic sources, observation, tests and measurement, measuring tape, electronic scale, test registration form, football number (10), football field, manual stopwatch, legal goal, whistle, electronic calculator, TOSHIBA laptop calculator.

Search procedures

Research tests

- Reaction speed test for football goalkeepers
- **Test name:** Reaction speed of football goalkeepers.
- Purpose of the test: To measure the reaction speed of football goalkeepers.
- **Description of the test:** The tester (goalkeeper) stands in the middle of the football goal and in a ready position. His gaze is directed towards the lighting panel, which is placed on the penalty kick point at a distance of (11) metres. When the light stimulus for the relevant corner appears, the goalkeeper jumps towards one of the balls. Installed in the four upper and lower corners of the goal,
- which are indicated on the lighting panel, and when the goalkeeper touches the ball, the recorded time will be interrupted from the moment the visual stimulus appears through a device installed on the goal crossbar through which the electrical cycle for the device's operation is interrupted.
- **Test instructions:** Each tester is given (10) attempts, distributed randomly on the four corners of the goal (top right top left bottom right bottom left).
- **Recording method:** The time obtained by each tester is recorded for each of the four corners of the goal. As for the corner that gets three attempts, the best two attempts are chosen. As shown in picture (1).



Fig 1: Explains how to perform a reaction speed test

Exploratory experiments

- The first exploratory experiment: The researchers conducted the exploratory experiment on (April 3, 2023), on Monday, on (2) goalkeepers who were among the research sample on the field of Al-Al-Khalis Sports Club stadium, as the aim of the experiment was to identify the method of performing a speed test. The reaction of football goalkeepers is accurate and good, knowledge of the time the test takes, as well as the assistant work team obtaining sufficient information about the method of performing the test and knowledge of the obstacles that the researchers may face.
- The second exploratory experiment: The second exploratory experiment was conducted on (April 8, 2023) on Saturday and at the Al-Al-Khalis Sports Club stadium on (2) goalkeepers who were among the research sample, in order to learn about the method of performing exercises similar to playing in developing reaction speed. Action for goalkeepers in football. The coach and the assistant staff learn how to perform the exercises and know the time of each exercise.

Pre-tests

Pre-tests were conducted on the research sample on Monday, April 19, 2023, at 4 p.m. at Al-Al-Khalis Sports Club stadium. The researchers sought to establish the conditions related to the test in terms of time, place, tools used, the

method by which the test is implemented, and the supporting work team. In order to control all conditions as much as possible and provide the same conditions when conducting the post-test

Main experience

The main experiment was implemented on (22/4/2023) until (21/6/2023) using exercises similar to playing in developing the reaction speed of young goalkeepers in football, which were prepared by the researchers and amounted to (16) exercises, and the number of training units reached (24) units, at a rate of three training units per week (Saturday, Monday, Wednesday), as the duration of applying the exercises in the main section was between (40-50) minutes at an intensity of 80% to 100%, and in the repetitive training method, and the duration of the training units was (8) weeks.

Post-tests

The post-test was conducted on the research sample after completing the exercises on Saturday, June 24, 2023, at 4 p.m., at the Al-Al-Khalis Sports Club stadium. The researchers, with the help of the assistant work team, tried to provide the same conditions in which the pre-test was conducted in order to obtain highly reliable results.

Statistical methods: Use the (SPSS).

Reaction speed is lower left

0.022

Results and Discussion

Presentation of the results of the test (pre-post) for testing the reaction speed of the experimental group

No.	Variables	N	Magazzina zwit	Mean		Std. Deviations	
110.	variables	1	Measuring unit	Pre	Post	Pre	Post
1	Reaction speed is at the top right	8	Second	1.583	1.268	0.077	0.030
2	Reaction speed is at the top left	8	Second	1.516	1.295	0.059	0.026
3	Reaction speed lower right	8	Second	1.581	1.288	0.064	0.027

Second

Table 3: Shows the results between the tests (pre-post) for the experimental group

Table 4: Shows the statistical parameters and the calculated and tabulated T-value for the pre- and post-tests of the reaction speed test for the experimental group.

8

No.	Variables	Measuring	Difference between	Difference between	T value	Level	Type
110.	variables	unit	arithmetic mean	standard deviations	calculated	Sig	Sig
1	Reaction speed is at the top right	Second	0.315	0.091	9.754	0.000	Sig
2	Reaction speed is at the top left	Second	0.221	0.052	11.922	0.000	Sig
3	Reaction speed lower right	Second	0.292	0.057	14.512	0.000	Sig
4	Reaction speed is lower left	Second	0.326	0.072	12.764	0.000	Sig

Significant when error rate < (0.05)

Through Table (4), which shows the differences in the arithmetic means, the calculated (t) value, and the percentage of error between the test (pre-post) for testing reaction speed and instantaneous strength for the experimental group, this table showed that all values of the percentage of error between the two measurements (pre-post) were Its value is less than the significance level (0.05), which means that all the calculated t-values have a significant value between the two measurements (pre-post) and therefore there are differences between the pre- and post-test measurements in favor of the post-test.

As for the discussion of the results of the experimental group, it appears from Table (4) that there are significant variances in the reaction speed test. The investigators attribute the goal for these significant differences between the results of the test (pre-post) and in favor of the post-test of the reaction speed test to the effectiveness of using exercises similar to the game that he used. The researchers conducted it over a period of two months and applied it to the research sample, as its effect was clear on the results of the experimental group, as it had specific objectives. The exercises were graduated from easy to difficult, and the performance time was chosen from the shortest to the longest, as it was appropriate to the sample and the goal for which it was developed. The use of exercises various differences helped in the emergence of significant differences between the pre- and post-tests, and in favor of the post-test, as the tools used in training work to develop the goalkeepers' reactions by increasing their sensory and kinetic awareness, and this is what was confirmed. (Bilal Khalaf Al-Sakrana: 2011: 194) [2] "The devices and tools work to develop the trainees' skills and diversify their sources of knowledge. The tools contribute to increasing the player's cognitive knowledge, increase his attention and mental perception, and also contribute to increasing the player's ability to receive positive reactions." The use of these exercises by the experimental group in the main section of the training unit, which was in a new way through the use of different and varied exercises, helped in eliminating the boredom that prevailed among the goalkeepers as a result of their use of traditional and usual exercises, in addition to the use of the repetitive training method, had a great and clear impact in developing Search variables this is what was confirmed by (Abu Al-Ela Ahmed Abdel Fattah: 1997: 196) [1] "Various exercises are used to develop speed, including

special exercises to develop reaction." During training, the researchers used the tools repeatedly and with appropriate rest periods, that is, the repeated appearance of stimuli and the response to these stimuli. This is what was mentioned by (Muhammad Hassan Allawi and Abu Al-Ala: 2000: 89) ^[9] "The basic principle for developing a kinetic reaction is the repetition of performance, that is, the repetition of the appearance of a stimulus and the response to that stimulus, where the reaction time is shortened, taking into account training on it without separating it from the nature of the basic movement or sports skill."

1.561

1.235

0.065

The researchers believe that the gradual progression in the components of the training load throughout the training period, which amounts to (8) weeks at a rate of (3) units per week, contributed significantly to raising the efficiency of the players, and thus there was a clear and significant impact on the results of the members of the research sample, and this was confirmed by (Muhammad Reda Ibrahim Al-Madamkha: 2008: 88) [10] "All constituents of the exercise load must rise in amount to the general enhancement realized by the athlete. That is, the higher the level of development of the athlete, the greater the need to rise the components of the training load." Using a variety of different body positions while applying exercises and repeating these positions has helped goalkeepers to respond quickly when stimuli appear and to make appropriate decisions at the appropriate time, and this is what was confirmed by (Muwafaq Asaad Al-Hiti: 2010: 47) [13] that "The goalkeeper has a quick reaction that enables him to solve difficult and sudden situations that require him to respond quickly and develop the appropriate solution." The use of exercises has helped to develop kinetic flow among goalkeepers by reducing the time of performing the movement and thus obtaining appropriate instantaneous strength to reach the desired point, and this is what was confirmed by (Frank Abdul Karim Al-Fadhli and Ihab Dakhel Hussein, 2019: 184) [5]. "The goalkeeper possesses the momentum during the approach until the foot touches the ground (the foot's fulcrum), that is, he possesses an initial momentum and the amount of final momentum that he possesses during the pushing phase. This means that we rely on the law of instantaneous momentum derived from Newton's second law to monitor the change in momentum, which reflects the presence of high fluidity of Its absence is as follows (force push = change in momentum). If the value of momentum is negative and large, this is an indication of the weakness of the moment in time in which the goalkeeper performs the push during the rise. The use of diversity in performing exercises by changing body positions quickly and suddenly and using various horizontal and vertical jumps led to the emergence of a development in instantaneous strength,

which is considered one of the basic factors that help goalkeepers in stopping balls, and this was confirmed by (Zaki Muhammad Darwish, 1998: 54) [3] That "Various jumping exercises play a large and effective role in developing the level of explosive ability of the players' leg muscles."

Presentation of the results of the test (pre-post) of the reaction speed test for the control group

Table 5: Shows the arithmetic means and standard deviations between the test (pre-post) and the control group

No.	Variables		Magazzina	Me	ean	Std. Deviations	
110.	variables	14	Measuring unit	Pre	Post	Pre	Post
1	Reaction speed is at the top right	8	Second	1.587	1.373	0.036	0.045
2	Reaction speed is at the top left	8	Second	1.528	1.375	0.067	0.051
3	Reaction speed lower right	8	Second	1.606	1.401	0.052	0.034
4	Reaction speed is lower left	8	Second	1.520	1.365	0.057	0.045

Table 6: Shows the statistical parameters and the calculated and tabulated T-value for the pre- and post-tests of the reaction speed test for the control group.

No.	Variables	Measuring unit	Difference between mean	Difference between standard deviations	T value calculated	Level Sig	Type Sig
1	Reaction speed is at the top right	Second	0.213	0.045	13.335	0.000	Sig
2	Reaction speed is at the top left	Second	0.153	0.075	5.783	0.001	Sig
3	Reaction speed lower right	Second	0.205	0.069	8.369	0.000	Sig
4	Reaction speed is lower left	Second	0.155	0.042	10.252	0.000	Sig

Significant when error rate < (0.05)

Through Table (6), which shows the differences in the arithmetic means, the calculated (t) value, and the error percentage between the test (pre-post) and the reaction speed test for the control group, this table showed that all values of the error percentage between the two measurements (pre-post) were less. From the level of significance (0.05), which means that all the calculated (t) values have a significant value between the two measurements (pre-post), and therefore there are differences between the pre- and post-measurements, in favor of the post-test.

As for the discussion of the results of the control group, it appears from Table (6) that there are significant differences in the reaction speed test. The researchers attribute the reason for these significant differences between the results of the test

(pre-post) and in favor of the post-test to the effectiveness of using the curriculum that the trainer used, as the curriculum that he prepared The coach was prepared in a sound scientific manner, taking into account the level of the goalkeepers, their abilities, and their abilities, through the process of choosing the appropriate and correct method in dealing with the goalkeepers. Graduation from easy to difficult was used in applying the curriculum, and this is what was confirmed by (Muhammad Subhi Hassanein: 1995: 267) [11]. "It is noted that reaching exemplary performance with a small percentage of errors comes through effective and appropriate training, as the learner reaches fast and accurate performance, and this is one of the signs of mastery of learning and reaching the automatic stage in performance."

Presentation the results of the test (post-post) of the reaction speed test for the experimental and control groups

Table 7: Shows the statistical parameters, the calculated T-value, and the error percentage for the post-tests of the reaction speed test for the experimental and control groups.

Variables	Groups	Measuring unit	Number of views of the sample	Mean	Std. Deviations	T value calculated	Level Sig	Type Sig
Reaction speed is at the	Experimental group	Second	8	1.268	0.030	5.387	0.000	Cia
top right	Control group	Second	8	1.373	0.045	3.367	0.000	Sig
Reaction speed is at the	Experimental group	Second	8	1.295	0.026	3.881	0.002	Cia
top left	Control group	Second	8	1.375	0.051	3.001	0.002	Sig
Reaction speed lower	Experimental group	Second	8	1.288	0.027	7.226	0.000	Cia
right	Control group	Second	8	1.401	0.034	7.220	0.000	Sig
Reaction speed is lower	Experimental group	Second	8	1.235	0.022	7.211	0.000	Cia
left	Control group	Second	8	1.365	0.045	7.211	0.000	Sig

Significant when error rate < (0.05)

Through Table (7), which shows the differences in the arithmetic means, the calculated (t) value, and the percentage of error between the test (post-post) for the reaction speed test for the experimental and control groups, this table showed that the value of the percentage of error between the two measurements (post-post) was less. The level of significance is (0.05), which means that the calculated (t) value has a significant value between the two measurements, and

therefore there are differences between the two measurements and in favor of the experimental group. As for the discussion of the results, it appears from Table (7) that there are significant differences in the reaction speed test. The researchers attribute the reason for these significant differences between the test results and in favor of the experimental group to the effectiveness of using exercises similar to playing in developing reaction speed by the

experimental group, which was developed according to Sound scientific foundations were appropriate to the abilities and characteristics of goalkeepers, and a gradual progression was used in applying exercises from easy to difficult, controlling repetitions and rest periods, as mentioned (Saad Moneim Al-Sheikhly: 2002: 63) [4] "The exercise method aims to train and materialise the level of the athlete who is revealed to exercise programs to scientific techniques, and these effects come as a result of a commitment to the basic principles of training science, and one of those principles is the rule of gradual training, and the rule that does the exercise load with the abilities and ability of the athlete," the use of Regular exercises helped to develop the level of goalkeepers by creating physiological changes for the players and thus increasing the physical level, and this is what was confirmed by (Muhammad Hassan Allawi and Abu Al-Ala Ahmed: 1984: 22) [8] "However, the training load is the main means of inducing physiological effects on the body, which improves responses, and then adapts the body's systems and raises the level. Therefore, it is considered one of the most important factors for the success of the training program and thus improving the level." The use of various exercises that expose goalkeepers to new situations helped develop attention, and the result of continuous repetitions of these various situations helped develop reaction speed among goalkeepers. This is what was confirmed by (Kamel Taha Al-Weis: 1984: 153) [6]. "Achieving a quick reaction requires developing attention, then quickly shifting this attention to another variable," and this is what he mentioned (Wajih Mahjoub: 2002: 193) [14] "In the first repetitions, kinetic expectation is weak due to the lack of information in kinetic memory, but practice and repetition in diverse and new situations lead to an improvement in the use of selective attention to stimuli in the environment." Using these exercises in regular repetitions helped the goalkeepers develop the level of physical abilities in general and thus increased the distance with which the goalkeeper jumped, i.e. increasing the flight distance and in a shorter time, which had a positive impact on the momentum, and this is what was mentioned (Sarih Abdel Karim, 2010: 105). "The height of the jump is the result of the distance that the athlete jumps in the air (i.e. the height of his center of gravity). It also plays an essential role in giving an indication of the momentum generated by the working muscles, and increasing the distance of the body's flight constitutes one of the measures that indicate the development of instantaneous strength." Based on the above, it was found that training using tools during reaction speed training reduced a large percentage of kinetic response time in the post-test for the experimental group that used the exercises.

Conclusions and Recommendations

Appendix (1) Shows the exercises used

Exercises No. Notes The exercise begins with the goalkeeper standing in the middle of the goal, a defending player standing in front of him and 1 10 meters away, and an attacking player 15 meters away. The attacking player shoots towards the goal towards the defending player in order to change the direction of the ball heading towards the goal with any part of his body. The exercise begins with the goalkeeper standing on the right side of the goal, a defensive player standing on the right side, 2 10 meters away, and an attacking player, 15 meters away. The attacking player shoots towards the goal towards the defending player in order to narrow the angle of view of the ball heading towards the goal. The exercise begins with the goalkeeper standing on the left side of the goal, a defensive player standing on the left side, 10 3 meters away, and an attacking player, 15 meters away. The attacking player shoots towards the goal towards the defending player in order to narrow the angle of view of the ball heading towards the goal. The exercise begins with the goalkeeper standing in the middle of the goal, a defending player standing in front of him and 4 5 meters away, and an attacking player 10 meters away. The attacking player shoots towards the goal towards the defending player in order to change the direction of the ball heading towards the goal with any part of his body. The exercise begins with the goalkeeper standing on the right side of the goal, a defensive player standing on the right side,

Conclusion

Through the results presented and obtained by the researchers, they concluded that exercises similar to playing have an effect in developing the reaction speed of young goalkeepers in football. Based on the results of the research, the researchers recommend the need to pay attention to using exercises similar to playing in developing reaction speed for young football goalkeepers by coaches, and conducting other similar research by finding other exercises to develop the rest of the physical and skill qualities of football goalkeepers.

References

- 1. Fattah AAAA. Sports training, physiological foundations, 1st edition: Cairo, Dar Al-Fikr Al-Arabi; c1997.
- 2. Sakrana BKA. Modern trends in training: Amman, Dar Al-Maysara for Eagle and Distribution; c2011.
- 3. Darwish ZM. Plyometric training, its development, its concept, and its use with young people: Cairo, Dar Al-Fikr Al-Arabi; c1998.
- 4. Al-Sheikhly SM. The effect of using a proposed training curriculum on the results of the Cooper test for football referees, (Journal of the College of Physical Education, University of Baghdad; c2002, 13(1).
- 5. Al-Fadhli FAK, Hussein ID. Applied Kinesiology (Physiology), 1st edition: Baghdad, Al-Faisal Library for Printing and Publishing; c2019.
- 6. Al-Weis KT. Sports psychology in physical education: Baghdad, Baghdad University Press; c1984.
- 7. Al-Yasiri MJ. Principles of Educational Statistics: Najaf, Dar Al-Diyaa for Printing, Publishing and Design; c2011.
- 8. Allawi MH, Ahmed AAA. Physiology of Sports Training: (Cairo, Dar Al-Fikr Al-Arabi; c1984.
- 9. Allawi MH, Abu Al-Ala. Physiology of sports training. 2nd edition: Cairo, Dar Al-Fikr Al-Arabi; c2000.
- Al-Madamkha MRI. Field application of theories and methods of sports training, 1st edition. Baghdad: Al-Fadhli Office; c2008.
- 11. Hassanein MS. Evaluation and measurement in physical education and sports, vol. 1, 3rd edition Cairo, Dar Al-Fikr Al-Arabi; c1995.
- 12. Omar MS, *et al.* Statistical applications in physical education and sports: Alexandria, Free Printing House; c2018.
- 13. Mahmoud MA. Integrated preparation for the goalkeeper: Damascus, Dar Al-Arab for Studies, Publishing and Translation; c2010.
- 14. Mahjoub W. Learning, teaching, and kinetic programs: Amman, Dar Al-Fikr; c2002.

	5 meters away, and an attacking player, 10 meters away. The attacking player shoots towards the goal towards the	
	defending player in order to narrow the angle of view of the ball heading towards the goal.	
6	The exercise begins with the goalkeeper standing on the left side of the goal, a defensive player standing on the left side, 5 meters away, and an attacking player, 10 meters away. The attacking player shoots towards the goal towards the defending player in order to narrow the angle of view of the ball heading towards the goal.	
7	The exercise begins with the goalkeeper standing in the middle of the goal, two defending players stand in front of the goal at a distance of 10 meters, and two attacking players at a distance of 15 meters. The two attackers play the ball together and score towards the goal, and the defenders change the direction of the ball heading towards the goalkeeper.	
8	The exercise begins with the goalkeeper standing on the right flank of the objective, two supporting players standing on the right side of the goal at a distance of 10 meters, and two attacking players at a distance of 15 meters. The two attackers play the ball with each other and shoot towards the goal, and the defenders narrow the goalkeeper's vision.	
9	The exercise begins with the goalkeeper standing on the left side of the goal, two defending players standing on the left side of the goal, at a distance of 10 meters, and two attacking players at a distance of 15 meters. The two attackers play the ball with each other and shoot towards the goal, and the defenders narrow the vision of the goalkeeper.	
10	The exercise begins with the goalkeeper standing in the middle of the goal, two defending players stand in front of the goal at a distance of 5 meters, and two attacking players at a distance of 10 meters. The two attackers play the ball together and score towards the goal, and the defenders change the direction of the ball heading towards the goalkeeper.	
11	The exercise begins with the goalkeeper standup on the right side of the goal, two defending players standing on the right side of the goal, at a distance of 5 metres, and two attacking players at a distance of 10 metres. The two attackers play the ball with each other and shoot towards the goal, and the defenders narrow the vision of the goalkeeper.	
12	The exercise begins with the goalkeeper standing on the left side of the goal, two defending players standing on the left side of the goal at a distance of 5 meters, and two attacking players at a distance of 10 meters. The two attackers play the ball with each other and shoot towards the goal, and the defenders narrow the goalkeeper's vision.	
13	The exercise begins with the goalkeeper standing in the middle of the goal, a defending player standing in front of the goal and at a distance of 5 meters, small cones are placed on the ground, and an attacking player is 10 meters away. The attacker shoots towards the goal so that the direction of the ball heading towards the goal is either changed, by the defender or by the cones placed. On the ground	
14	The exercise begins with the goalkeeper standing in the middle of the goal, a defending player standing in front of the goal at a distance of 5 metres, balls are placed randomly on the ground, and an attacking player is 10 meters away. The attacker shoots towards the goal so that the direction of the ball heading towards the goal is changed, either by the defender or by the balls. Placed on the ground	