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The effect of (TRX) exercises to develop attention concentration, agility and flexibility among futsal referees in Misan Governorat

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Abstract---Physical education is the link between the educational perspective and the scientific perspective, as educators classify it through education and the science of sports training and the research problem is the development of agility and flexibility through the application of special exercises to focus attention that have been carefully selected for the purpose of raising and developing the level of flexibility among football referees for halls, and the goal of identifying On the effect of TRX exercises to develop attention concentration, flexibility and agility among hall rulers in Misan Governorate, there is a preference for the experimental group of TRX exercises to develop attention, flexibility and agility among hall rulers in Misan Governorate. A group of futsal football referees from Misan Governorate, which numbered (14) and it was concluded that TRX exercises have a good effect in developing focus, agility and flexibility among the experimental group of futsal referees.

Keywords---Physical education, exercises, sports training.

Introduction and importance of the research

Physical education is the link between the educational perspective and the scientific perspective, as educators classify it through education, sports psychology and sports management, while scientists classify it through anatomy, physiology, sports medicine and biomechanics, as physical education occupied a

prominent position among different societies in the progress of civilization and became indicative. Over the progress and advancement of the scientific, intellectual and economic level of all societies, the training method of competition is one of the important aspects that have a positive and comprehensive impact on preparation and upbringing on advanced and modern scientific foundations. Mental operations have played an important role in the referees in many events and sports activities, including the game of football for the halls, and the focus of attention is one of these important processes that work on the success of the application of different destiny and also helps to develop quick solutions to the individual destiny of the referee, as many cases require quick solutions and focus. High attention. In order to develop appropriate solutions for the situations that occur in the match, it is necessary to focus on performance and accuracy in order to obtain a good position that helps in the performance of fate in an outstanding manner. As for the importance of the research, it lies in the fact that the fate of the basic referees in football for the halls has an important role in the process of the qualities of flexibility, agility and accuracy during the implementation of the motor duties of the referee during the match. And preparing them in a scientific way is important in developing what should be developed in terms of flexibility and agility for futsal referees, which in turn work on developing physical qualities. Hence the importance of research in finding modern methods and methods by giving TRX exercises to focus attention for the purpose of developing flexibility and agility for futsal referees, which would contribute to raising the level of referees for the better. After that, the excellence of referees in futsal football is the rapid pace in that the requirements of this game imposed on the referees inside the stadium a number of things that are closely related to speed.

Research Problem

Through the modest experience of researchers in futsal football and its practice of the game and its continuous follow-up in sports activities, they noticed that many referees lack accuracy in performing some measure of futsal football. The agility and flexibility of the futsal referees is slow and inaccurate, because the special exercises used are traditional and do not excite the player with enthusiasm and rush and make effort to master them. Therefore, the researchers tried to develop agility and flexibility by applying special exercises to focus attention that were carefully selected for the purpose of raising and developing the level of flexibility. Futsal football referees.

Research Objective

1. Develop exercises (TRX) to develop focus, flexibility and agility among the referees of the halls in the province of Maysan
2. Recognizing the effect of TRX exercises to develop focus, flexibility and agility among the referees of the halls in Misan governorate.

Force search

1. There is a positive effect of TRX exercises to develop focus, flexibility and agility among the referees of the halls in Misan governorate.
2. There is a preference for the experimental group of (TRX) exercises to develop focus, flexibility and agility among the referees of the halls in the province of Maysan

Research Areas

- The human field: a sample of futsal referees in Misan Governorate.
- Spatial domain: Olympic Stadium in Maysan
- Temporal scope: the period from (10/12/2021) to (1/5/2022)

Define the search terms

Exercises (TRX: (1))

Depth exercises use body weight against gravity to build strength, agility, compatibility and flexibility, and to develop muscular ability, agility and endurance, and they perform in the abdominal, back and pelvic muscles using a range of different exercises and can be used for all without discrimination in age or gender, and in a variety of ways.

Research methodology and field procedures

Research Methodology

The researchers adopted the empirical research method as it is compatible with solving the problem to be investigated and because it is one of the important means to reach reliable knowledge. The researchers used the design of the two equal experimental and control groups, as the experimental method is one of the “most effective means.” What about access to reliable knowledge (1)

Research Sample

It is the part that represents the original research community on which the researchers conduct the entirety of his work. A number of the research sample was chosen by the intentional method, and they are a group of Futsal Football Governors of Misan Governorate, numbering (14) referees and divided into two groups (controller) and (experimental) and by lottery by (7) judges for each group (and in order to return the differences to the experimental factor, the experimental and control groups must be completely equal in all circumstances except for the experimental variable that affects the experimental group) 1) It shows equivalence.

Table (1) It shows the statistical parameters (the arithmetic mean, standard deviation, the calculated t-value and the significance of the differences) between the experimental and control groups in the tribal tests

indication	probabi lity value	Calcula ted T value	control group		experimental group		measuri ng unit	Statistical coefficients
			±	s	±	s		Test name
not significant	0.744	0.335	1.155	6.919	1.345	7.143	Number	focus attention
not significant	0.676	0.429	1.011	12.336	1.176	12,084	the second	agility
not significant	0.454	0.775	0.981	4.857	0.690	5.143	cm	Flexibility

Degree of freedom (n-2) (14-2=12) and significance level (0.05)

Means of collecting information, devices and tools used in the research

Tools used in the research

(interview, observation, questionnaire, test)

The devices used in the research

1. A Dell Pentium (4) laptop computer.
2. Canon 2900 laser printer.
3. Stopwatch (6) of a type (Sony)
4. Plastic cones (20)
5. whistle.

Field research procedures

Specify the tests

The most important thing that researchers need is to choose or develop multiple tests to measure some variables that are related to the phenomenon to be measured. Accordingly, the researchers prepared a form to choose the appropriate tests for the measure under study. The form was presented to a group of specialists in futsal football, numbering (5) Supplement (1)) And (2), and after collecting and unpacking the forms, the tests that achieved an agreement percentage of (70%) and above were selected, and Table (2) illustrates this.

Table (2)Shows the percentages of experts selected for the tests under study

The ratio	Repetition	the exams	Variables
80	4	attention network	focus attention
20	1	Landon Rings Test	
100	5	Shuttle Bouncer	agility
20	1	Between the poles 20 meters	
80	4	Flexibility to bend the torso backward from prone	Flexibility
20	1	Abdominal elasticity	

Research tests used

Attention network test: (1)This test called the Grid concentration test is used to measure a player's ability to focus their attention.The duration of this test is only one minute, and the player is asked to put a dash (/) on the largest number of numbers that follow the specific number specified by the test taker.) on the number (18), then the number (19) and so on, and not trying to put a dash (/) on the number (19) first and then (18) again.This test can be used several times with changing the primary number specified for each subsequent time. It is also possible to change the numbers of the focus network and make multiple copies of them with changing the location of their numbers so that the tester does not get accustomed to memorizing and remembering the place of the numbers and taking into account that the numbers are all made up of two numbers such as (01) , (02), (23) and so on.. The test can also be conducted in many experimental

situations such as performance in front of colleagues or by adding some distracting variables.

Correction: Correction is done by counting the numbers that the athlete has correctly crossed out within the minute period specified for taking the test, and one point is given for each number that is correctly crossed out.

84	27	51	78	59	52	13	85	61	55
28	60	92	04	97	90	31	57	29	33
32	96	95	39	80	77	49	86	18	70
76	87	71	95	98	81	01	46	88	00
48	82	89	47	35	17	10	42	62	34
44	67	93	11	07	43	72	94	69	56
53	79	05	22	54	74	58	14	91	02
06	68	99	75	26	15	41	66	20	40
50	09	64	08	38	30	36	45	83	24
03	73	21	23	16	37	25	19	12	63

Figure (1) Attention network test

The second test: the shuttle run (rebound) test (4 x 9) m

- The objective of the test: to measure agility.
- Tools and supplies: stopwatch, chalk, whistle.
- Description of performance: two parallel lines are drawn with a distance between them (9 m), the starting line and the other line opposite it (as a game or ball is placed on this line), the tester stands behind the start, and when he hears the start signal, he runs at full speed to the opposite line to cross with both The feet and bring that game, then turn around to go back again to cross the starting line in the same manner, and so it is repeated twice, meaning that the tester travels a distance of (36) m back and forth.
- Recording: records for the laboratory the time that it has traveled in running the specified distance to the nearest fraction of a second.

The third test: the torso flexion test from the prone position

- Purpose of the test: To measure the back flexibility of the spine.
- Tools: measuring tape, divided in centimeters.
- Performance specifications: From the prone position, the hands are intertwined behind the head with the lower end fixed by a colleague. The laboratory slowly bends the torso back to the maximum extent he can and remains stable for two seconds. The distance is measured from the bottom of the chin to the ground level by means of a tape measure, so that the tape is perpendicular to the ground and in front of the tested head during the measurement, provided that the chest is touching the ground.

The conditions

1. Each laboratory has two attempts to score the best one.
2. The torso should be raised quietly and slowly to reach the maximum possible distance and hold for two seconds.
3. Any violation of the conditions will cancel the attempt.

Registration: The laboratory records the number indicating the distance from the ground to the bottom of the chin in centimeters, for the best attempt out of the two permitted trials.

Experimental Experiment

The reconnaissance experiment is considered (a practical training for researchers to find out the negatives and positives that they encounter during the test to avoid them), and the researchers conducted a reconnaissance experiment on 12/25/2020 on a sample of the (4) judges of Misan governorate football for lounges before conducting his research with the aim of choosing research methods and its tools.

Tribal Tests

The researchers conducted tribal tests before starting the training curriculum, which included the tests (attention focus test, flexibility and agility test for futsal referees) at exactly ten in the morning on 12/25/2020 in the Olympic Stadium hall.

Training Curriculum

The exercises were applied during the training units of the experimental group only and in the main section corresponding to 1/1/2022 at 4:00 pm in the Olympic Stadium hall. Then the researchers applied these exercises to his research sample, which is represented by the experimental group of (7) players, as this group applied the exercises for a period of (8) weeks and by three training units per week. The second, which has a number of (7) members, did not apply the special exercises, but rather worked according to the curriculum prepared by the team's referee manager, and was also subjected to two measurements, before and after in the same tests that the experimental group underwent. The researchers took into account the following observations when applying his own exercises: The special exercises were applied at the beginning of the main section of the training unit. The intensity of the exercises depended on the intensity of the training unit set by the team coach, and the number of training units amounted to (24) training units and the time taken was To give these exercises, it varied from one week to another, as the time of these exercises began to increase from the second week until the eighth week, as the total time of the exercises during (8) weeks (492 d) was under study and the table (3) shows that.

Table (3) shows the time of exercises in one training unit and in one week, and the total time of exercises within (8) weeks

Total time for special exercises within (10) weeks	VIII	seventh	VI	Fifth	the fourth	Third	Second	the first	weeks tenses
	31d	28d	25d	22d	19d	16d	13d	10d	Training time per unit
492d	93d	84d	75d	66d	57 dinars	48d	39 dinars	30d	Exercise time per week

Post-tests

The researchers conducted the post tests for his research sample (experimental and control group) on 1/3/2022 and he followed the same method he followed in the tribal tests, after completing the scheduled period of the experiment, which lasted 8 weeks. The researchers were keen to find all the conditions and requirements for the tribal tests when conducting Post-tests in terms of time, place and means of testing.

Statistical Means

In order to achieve the goal of the study, the researchers used the statistical package for social sciences (spss)

(Percentage law, arithmetic mean, standard deviation, median, t-test for correlated samples, t-test for uncorrelated samples, skew coefficient, t-test for two related means)

Presentation, analysis and discussion of the results

Presentation and analysis of test results Focusing attention to agility and flexibility for futsal football referees:

The researchers deliberately applied the tests to the main research sample of the two groups (experimental and control), which consisted of (7) judges for each group.

Presentation and analysis of the results of the pre and post tests for the experimental group:

After unpacking the data for the pre and post tests of the experimental group of researchers, and processing them statistically, it was shown as in Table (4)

Table (4) It shows the results of the pre and post tests for the experimental group

indication	Significance level	Calculated T value	Dimensional		tribal		measuring unit	Statistical coefficients
			±	s	±	s		Test name
D	0.00	5,461	0,899	10,857	1.345	7.143	Degree	focus attention
D	0.00	5,969	1,154	9,461	1.176	12,084	the second	agility
D	0.00	12,050	0,488	8,286	0.690	5.143	cm	Flexibility

The degree of freedom (n-1) (7-1 = 6), is statistically significant at the level of significance $\geq (0.05)$

By looking at Table (4), which shows the results of the pre- and post-test for the experimental group in the focus of attention, it is clear to us that the arithmetic mean of the pre-test reached (7.143) degrees, with a standard deviation of (1.345), while the arithmetic mean in the post-test reached (10,857) degrees, with a standard deviation of (0.899). When using the (T-Test) law for the interconnected samples, the calculated (T) value appeared (5,461) below the significance level (0.00), which indicates its significance at the significance level (0.05) and with a degree of freedom (6), and thus the difference is statistically significant and in favor of the post test. As for the agility test, the arithmetic mean of the pre-test results reached (12.084) degrees, with a standard deviation of (1.176), while the arithmetic mean in the post-test reached (9,461) degrees, and with a standard deviation of (1,154). When using the (T-Test) law for interconnected samples, the calculated (T) value (5,969) appeared below the significance level (0.00), which indicates its significance at the significance level (0.05) and with a degree of freedom (6), and thus the difference is statistically significant and in favor of the test dimensional. In the flexibility test, the arithmetic mean of the pre-test results reached (5.143) degrees, with a standard deviation of (0.690), while the arithmetic mean in the post-test reached (8,286) degrees, with a standard deviation of (0.488). When using the (T-Test) law for interconnected samples, the calculated (T) value appeared (12,050) below the significance level (0.00), which indicates its significance at the significance level (0.05) and with a degree of freedom (6), and thus the difference is statistically significant and in favor of the test dimensional.

Presentation and analysis of the results of the pre and post tests for the control group

After emptying the data for the pre and post tests of the control group of researchers, and processing them statistically, as shown in Table (5)

Table (5) It shows the results of the pre and post tests for the control group

indication	Significance level	Calculated T value	dimensional		tribal		measuring unit	Statistical coefficients
			±	s	±	s		Test name
D	0.01	3,785	0.791	6,067	1.155	6.919	Degree	focus attention
not significant	0.07	2,202	0,363	11,557	1.011	12.336	the second	agility
D	0.00	6,000	0,756	5,714	0.690	4.857	cm	Flexibility

The degree of freedom (n-1) ($1-7 = 6$), is statistically significant at the level of significance $\geq (0.05)$

By looking at Table (5), which shows the results of the pre and post test for the control group in the focus of attention, it becomes clear to us that the arithmetic mean of the pre-test reached (6.919) degrees, with a standard deviation of (1.155), while the arithmetic mean in the post-test reached (6,067) degrees , with a standard deviation of (0.791)When using the (T-Test) law for interconnected samples, the calculated (T) value appeared (3,785) below the significance level (0.01), which indicates its significance at the significance level (0.05) and with a degree of freedom (6), and thus the difference is statistically significant and in favor of the test dimensional.As for the agility test, the arithmetic mean of the pre-test results reached (12,336) degrees, with a standard deviation of (1.011), while the arithmetic mean in the post-test reached (11,557) degrees, with a standard deviation of (0.363)When using the (T-Test) law for interconnected samples, the calculated (T) value appeared (2,202) below the significance level (0.07), which indicates its significance at the significance level (0.05) and with a degree of freedom (6), and thus the difference is statistically significant and in favor of the test Dimensionally, only the high chuck is not significant.As for the flexibility test, the arithmetic mean of the pre-test results reached (4.857) degrees, with a standard deviation of (0.690), while the arithmetic mean in the post-test reached (5,714) degrees, with a standard deviation of (0.756)When using the (T-Test) law for interconnected samples, the calculated (T) value appeared (6000) below the significance level (0.00), which indicates its significance at the significance level (0.05) and with a degree of freedom (6), and thus the difference is statistically significant and in favor of the test dimensional.

Presentation and analysis of the results of the post-tests for the experimental and control groups:

Table (6) shows the post tests of the experimental and control groups

indication	Indication level	Calculated T value	control group		experimental group		measuring unit	Statistical coefficients
			$\pm$	s	$\pm$	s		Test name
D	0.00	4,159	0.791	6,067	0,899	10,857	Degree	focus attention
D	0.00	1,059	0,363	11,557	0,154	9.461	the second	agility
D	0.00	7,562	0,756	5,714	0.488	8.286	cm	Flexibility

The degree of freedom (n-2) ($2-14 = 12$), is statistically significant at the level of significance $\geq (0.05)$

Through the presentation of Table (6) the results of the post tests for the experimental and control groups, it is clear to us that the arithmetic mean of the attention focus network test for the experimental group reached (10,857) degrees, with a standard deviation of (0.899), while the arithmetic mean of the control group reached (6,067) degrees, with a deviation of normative (0.791)When using the (T-Test) law for uncorrelated samples, the calculated (T) value reached (4,159) below the significance level (0.00), which indicates its significance at the significance level (0.05) and with a degree of freedom (12), thus the difference is significant and in favor of Experimental group.In the agility test, the arithmetic

mean reached (9.461) degrees for the experimental group, with a standard deviation of (0.154), while the arithmetic mean of the control group reached (11,557) degrees, with a standard deviation of (0.363) When using the (T-Test) law for uncorrelated samples, the calculated (T) value reached (1,059) below the significance level (0.00), which indicates its significance at the significance level (0.05) and the degree of freedom (12), and thus the difference is significant and in favor of experimental group. In the flexibility test, the arithmetic mean reached (8.286) degrees for the experimental group, with a standard deviation of (0.488), while the arithmetic mean of the control group reached (5,714) degrees, with a standard deviation of (0.756) When using the (T-Test) law for uncorrelated samples, the calculated (T) value reached (7,562) below the significance level (0.00), which indicates its significance at the significance level (0.05) and the degree of freedom (12), thus the difference is significant and in favor of experimental group.

Discussing the results

After reviewing the results shown in Table (4), which shows the results of the experimental group in the pre and post measurements of the tests under study, and Table (5), which shows the results of the control group in the pre and post measurements of the same tests, as well as Table (6) which shows the results of the post tests for the two experimental groups. And the control group, it is clear to us that the experimental group had a better level of development than the control group, as evidenced by the results that we found in the aforementioned tables. The results of the experimental group whose members applied the TRX exercises. The reason for this improvement is mainly due to the flexibility of the abdominal muscles, the decrease in the curvature of the spine, the increase in the flexibility of the ligaments, the increase in muscle strength and the increase in the flexibility of the chest muscles, as well as to the nature of the proposed rehabilitation program used, which led to the development and flexibility of the abdominal muscles and some other muscles. The effect of exercise on the joints by stimulating the movement of the joint, the synovial capsules and the lining membranes is important for the secretion of fluids that are nutritious and softening for the movement of the cartilage, which makes the movement smooth and smooth in the joint and helps to increase the movement of the joint as well as helps to promote and improve the functional state of the circulatory and respiratory system and improve muscle tone and flexibility and increase The production of fluids secreted by the joint, and what reinforces this talk is to return to the results of the tables (4) (5) (6)

As (John, 1983) emphasized, "The athlete with deep focus is the one who has physical compatibility in controlling the stimuli and emotions that affect his being when concentrating, and he will be in control of the motor duty." (1) This was confirmed by (Ghazi, 2000) "Improving the player's mental and mental abilities increases his predictability, that is, the ability to judge to imagine future events during the match, and it also works to develop the referee's ability to implement all fate and duties and control the course of the game in a balanced manner during the match." (2)

Conclusions and recommendations

Conclusions

1. TRX exercises have a good effect on developing focus, agility and flexibility for the experimental group of futsal referees.
2. The preference of the experimental group in developing focus of attention, agility and flexibility of the experimental group of futsal referees.

Recommendations

1. Inclusion of TRX training within the training units of all other referees as well as other training categories.
2. The necessity for the trainers to rely on the quality of these trainings because they are one of the training methods that play an important role.
3. Paying attention to this segment in general and trying to integrate them into society more by sponsoring them and including them with the other rulers of all sports for development

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In the name of of Allah the Merciful
Annex (1) Nomination of exams by the experts
To

.....
.....

good greeting

The researchers (Mohammed Abdullah) intend to conduct a study entitled "The effect of (TRX) exercises to develop attention concentration, agility and flexibility among the rulers of the halls in Misan Governorate".In view of your scientific standing and proven competence..... Please go ahead How much to choose one test for each of the kinetic traits under study in the attached form in order for us to complete the research requirements Much appreciation and respect are accepted.

Researchers

Mohammed Abdullah

Note: Please put a tick (/) in front of the appropriate test.

the choice	the exams	the destiny
	attention network	focus attention
	Landon Rings Test	
		agility
	Between the pillars is repeated (20) meters	
	shoulder flexibility	Flexibility
	Abdominal flexibility	

Sample training units during the week

First training week

First training: 2022

The objective of the training unit: Develop the focus of attention, speed of performance, agility and agility among referees

Notes	total time	Rest between groups	totals	Rest between repetitions	exercise time	Repetiti on	inten sity	type of Marin	training units	the week
	1080sec	60sec	4	30seconds	30 seconds	4	%65	No. (6,3,1(	Saturday	the first
	680sec	60sec	4	15	10sec	5				
	990sec	60sec	3	30seconds	30 seconds	5				
	1180	70sec	2	40sec	40sec	7				
	1080sec	60sec	4	30seconds	30 seconds	4	%65	No.(5,2,4) exercises	Monday	
	680sec	60sec	4	15	10sec	5				
	990sec	60sec	3	30seconds	30 seconds	5				
	1180	70sec	2	40sec	40sec	7				
	1530	90 seconds	3	60sec 40	60sec 40	4	%75	(6,1,2) exercises	Wednesday	
	1320sec	60sec	2	sec	sec	8				
	393	45 seconds	3	20sec	20sec	4				