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Dr. Ali Hasan Fleh
College of Physical Education and Sports Sciences, University of Misan, Iraq

Correspondence
Dr. Ali Hasan Fleh
College of Physical Education and Sports Sciences, University of Misan, Iraq

The application of resistance training using the ropes (TRX) in developing the types of strength and their impact on the accuracy of scoring from stability and movement for deaf and dumb football players for the halls

Dr. Ali Hasan Fleh

Abstract
The study aims to identify the application of resistance training using the (TRX) ropes in developing the types of strength and their impact on the accuracy of scoring from stability and movement for deaf and dumb football players for the halls. player, and then processing the statistical data, and the results indicated that the exercises prepared by the researcher according to the TRX training method had a positive effect in developing the explosive ability and speed characteristic of deaf and dumb players in futsal football. And the movement depends in its physical requirements on strength distinguished by speed and explosive ability, and one of the most important recommendations is to use TRX-style exercises to develop strength distinguished by speed as a physical requirement for deaf and dumb players in futsal football to score from stability and movement.

Keywords: Resistance training, TRX, football, deaf and dumb

Introduction
One of the most important things that must be focused on during the process of training the deaf and dumb football players is to raise the level of the special physical requirements of the players, which is the main pillar through which the player can perform good skill during the match, and this process of upgrading can only be done through finding methods The most developed training for those special physical requirements, and that the process of determining the best training method can only be done through experience and reaching the fact that this method works to develop those special physical abilities and the accuracy of scoring from stability and movement in a large positive way. They need explosive ability and speed characteristic as basic physical requirements in the implementation of their various skills, including the accuracy of scoring from stability and movement, and this is due to the nature of those skills that require strong, quick and sudden movement of two men during the duration of the match.(TRX), which uses body weight instead of other tools used in strength training in order to gain muscle and mobilize the largest number of muscle fibers during muscle work, so from the above lies the importance of research in raising the level of strength types for deaf and dumb hall football players through the process of experimenting with the use of exercises in a manner training (TRX) And to show the extent of its impact on the types of strength and scoring of stability and movement of deaf and dumb halls football players and what is reflected in the impact of this development on the skill performance of scoring.

Research Problem
The fact that the game of futsal for the deaf and dumb is characterized by skills with multiple and sudden situations depends on strength and speed mainly as well as a coherent technical performance characterized by high accuracy, so coaches must develop all the physical and skill requirements that achieve that skill performance at a high level, especially scoring only from movement or stability, And that the development of special physical requirements is not achieved by paying attention to the skill side only, as some coaches perform such a form of training that makes the player suffer from a lack of his own physical abilities through which he can maintain a high level of technical performance of the skill throughout the match, and on the other hand.

The selection of some training methods that do not match the physical and skill needs of the deaf and dumb halls football game is also due to the same deficiency of the player, and for this the researcher decided to stand on such a problem and solve it by using the method (TRX) to develop strength for speed and explosive ability and its impact on developing the skill performance of scoring from movement and stability for deaf and dumb players in futsal.

Research Objectives

1. Prepare exercises according to the style (TRX) to develop the explosive ability and speed characteristic of the experimental group.
2. Recognize the effect of exercises in a style (TRX) in developing the explosive ability and speed characteristic of the experimental group.
3. To identify the impact of developing explosive ability and speed-distinguishing power on the accuracy of the scoring performance of stability and movement for deaf and mute football players for the halls of the experimental group.
4. Recognizing the differences in the dimensional tests of explosive ability and strength characteristic of speed and accuracy of scoring performance from stability and movement for deaf and dumb players in football for the halls between the control and experimental groups.

Research hypotheses

1. There is a positive effect of exercise style (TRX) in developing the explosive ability and speed characteristic of the experimental group.
2. There is a positive effect for the development of the explosive ability and strength characterized by speed in the accuracy of the performance of scoring from movement and stability in deaf and dumb football for the halls of the experimental group.
3. There are significant differences between the post tests of explosive ability and strength characteristic of speed and accuracy of scoring from stability and movement for deaf and mute football players for the halls of the control and experimental groups and in favor of the experimental group.

Research Areas

Spatial domain: Martyr Wissam Oreibi Olympic Hall in Maysan Governorate.

Time range: 9/11/2015 to 28/5/2016.

Human field: Maysan governorate football players for the deaf and dumb halls.

Research methodology and field procedures

Research Methodology

Use the researcher experimental approach in a manner the experimental and control groups, because it is commensurate with the nature of the procedures of the study and the fact that empirical research is characterized by exact control of the studied variables so that happens in some intentional change and controls the other variables, it is the approach to the only research that shows the relationship between the impact and the reason accurately" (Muhammad, 1999) [10].

Research Sample

The research sample was chosen by the intentional method that "is chosen freely on the basis that it achieves the purposes of the study carried out by the researcher" (Thouqan, 1988). The research community is represented by the Maysan governorate players for the deaf and dumb, who numbered (24) players and were distributed into two control and experimental groups through a simple random lottery to be (10) players in each group.

Means of collecting information, equipment used and research tools

Means of collecting information and equipment used

1. Arab and foreign sources.
2. Personal interviews with experts and specialists.
3. Self-observation by the researcher.
4. Data dump forms.
5. A football field for the halls.
6. ropes (belts)TRX)
7. High speed cameras.
8. Futsal - Banners
9. divided goals

Research Tools

Tests and measurements.

Field research procedures

Research Tests

1. Testing the explosive ability of the muscles of the legs: the wide jump test from stability (Mohammed, 2001) [8].
2. Speed test for the legs: bend and extend the knees for 20 seconds (from a standing position). (Dyson, 1971) [2].
3. Scoring skill test of persistence. (Mazen, 2013) [6]
4. Scoring skill test of movement. (Mazen, 2013) [6]

The exploratory experience

In order to obtain results and information subject to scientific foundations and to benefit from them when conducting the main experiment, and on this basis, the researcher conducted an exploratory experiment 1-2/12/2015 on players from within the sample numbered (4) players.

Tribal tests

The researcher conducted tribal tests on the research sample on 4-5/12/2015, where the first day was to test the accuracy of scoring from stability and movement, and the second day was to test the explosive ability and strength characteristic of speed, for the experimental and control groups.

Homogeneity and parity between the two research groups

"The groups under study are completely equal in all their circumstances, except for the experimental variable that affects the experimental group" (Thouqan, 1988).

For this, the researcher proceeded to homogeneity and equality of the experimental and control groups by obtaining the values of the tribal tests, and the homogeneity was done with the research variables.

The main experience

The main experiment was implemented during the special preparation stage, as the main experiment started on

12/12/2015 and lasted (10) weeks with (24) training units. (TRX) by three training units per week on Saturdays, Mondays and Wednesdays, which is the training of the sample during these days to develop strength, and exercises were applied (TRX) on the walls of the closed hall for each player in the group in order to legalize the intensity of training (repetitions), which most sources state that it reaches (30-45%) of the athlete's maximum strength, which is what the researcher has adopted, including rest (2d) and (3d) between Every exercise and another, as well as between exercises, and the experimental group applied (4) exercises during one unit, and with regard to the second control group, they applied during Saturday, Monday and Wednesday the usual exercises prepared by the trainer to develop strength.

Post-tests

After the completion of the main experiment, the post-tests were applied in a similar way to the tribal tests that were previously applied, in order to find out the level reached by the players with the search variables, on February 23-24/2016.

Statistical means

1. Arithmetic mean
2. Standard deviation
3. Skew modulus
4. Law t for cross-linked samples
5. Law t for independent samples

Presentation, analysis and discussion of the results

Presenting the results of the pre and post tests for the control and experimental groups in the research variables, their analysis and discussion.

Presenting the results of the pre and posttests of the control group in the research variables, their analysis and discussion.

Table 1: It shows the means, standard deviations, and the value of (t) Calculated and the level of significance and significance of the differences between the pre and posttests of the control group in the research variables

The exams variables search	measuring unit	Tribal		after me		Values T calculated	Indication level	The significance of the differences
		s	p	s	p			
Explosive force	meter	1.98	1.22	2.16	1.45	3.47	0.02	moral
speed power	number	14	1.56	17	1.66	3.77	0.04	moral
Scoring from persistence	Degree	4	1.12	9	1.33	3.12	0.03	moral
Scoring from the movement	Degree	3	1.16	8	1.41	3.44	0.01	moral

Significant at a degree of freedom (9) and a significant level of significance less or equal to) 0.05).

By looking at Table No. (1), we notice a clear development through the differences between the arithmetic means of the pre and post tests for all variables and in favor of the post tests, as well (t) calculated for symmetric samples, whose significance levels for all variables were less than (0.05), I It means that the differences are significant in favor of the post-tests. The researcher attributes the significant differences that occurred between the tribal and remote tests of the control group and in favor of the posttest and for all variables, to the effectiveness of the explosive strength exercises and the speed characteristic of speed in the vocabulary of the training curriculum prepared by the coach, which is subject to the foundations and principles of sports training in developing those abilities for deaf and dumb players in halls football.

Presenting the results of the pre and posttests of the experimental group in the research variables, their analysis and discussion.

Table 2: It shows the means, standard deviations, and the value of (t) calculated, the level of error and the significance of the differences between the two tests, the pre and posttests of the experimental group in the research variables

The exams variables search	measuring unit	Tribal		after me		Values t calculated	Indication level	The significance of the differences
		s	p	s	p			
Explosive ability of the legs	meter	1.97	1.02	2.38	1.44	2.77	0.01	moral
The speed characteristic of the legs	number	13	1.50	25	1.08	4.20	0.03	moral
Scoring from persistence	Degree	4	1.06	14	1.63	2.99	0.01	moral
Scoring from the movement	Degree	4	1.27	13	1.58	3.65	0.02	moral

Significant at a degree of freedom (9) and a significant level of significance less or equal to (0.05)

By looking at Table No. (2) we see a remarkable development through the differences between the arithmetic means of the pre and post tests for all research variables and in favor of the post tests, as well (t) calculated for symmetrical samples, whose significance levels for all variables were less than (0.05), which means that the differences are significant in favor of the post-tests, and accordingly, the assumptions of the first and second researchers have been achieved.

The researcher attributes the significant differences between the pre and posttests of the experimental group in favor of the posttest and of all variables to the effect of exercises (TRX) prepared by the researcher and applied by the experimental group, as well as to rationing the training load for these exercises in terms of intensity, size and comfort according to the scientific bases, and this is confirmed by (Walid Yahya Muhammad 2002) [14] also "when he pointed out that the use of well-designed programs and implemented in a way that leads to the development of training physical disease, and this is one of the reasons for excellence in the sports field" (Walid, 2002) [14].

The significant differences in the explosive ability tests are attributed by the researcher to the method (TRX) Which helped to develop the capacity of the explosive through what it takes this technique training to force directives nervous to fulfill the requirements of the exercises used and characterized by the nature of the performance of an

accelerating, which is reflected to stimulate the largest number within muscles working key, which reflected positively on the amount of the production example of the explosive, as Indicates (Tudor O. Bompa) When developing the explosive ability, this will positively develop the strength and speed of the muscular contraction of the player, through the use of means to produce a large force against a small resistance in an explosive manner, which are called ballistic exercises. (Tudor, 2005) [13].

With regard to the development of strength tests characterized by speed, the researcher also sees that the reason for this development is due to the correct rationing of the resistances, which represent the weight of the body that were used in the style exercises (TRX) Which had a significant impact on increasing the amount of force characterized by speed as a result of muscle adaptation and development due to the body weight of the players, which is an ideal resistance to the players' abilities when performing exercises)TRX), which led to an increase in the ability of the nervous and muscular systems, and this is in agreement with (Sareeh Abdel Karim 2003) [4], where he says, "muscle fibers have the ability to produce great force by changing the type of resistance, and so the number of working motor units will increase and their ability to produce Energy" (Frank, 2003) [4].

As for the development in the scoring tests of stability and movement, the reason is due to the effect of developing the explosive ability and speed characteristic of the players, as these two abilities are considered among the basic requirements for these two skills, so their development positively affects the accuracy of the performance of the scoring from stability and movement, as Elaine Wadih confirms (1995) that the development of special physical abilities enables the athlete to perform the technical skill in the best possible way (Allen, 1990, as these exercises contribute to improving neuromuscular work, which leads to increased compatibility and ability to perform the skill in the right time, and then an increase in the accuracy of striking towards the desired goal, and changes occur in the neuromuscular work that facilitate and enhance the achievement of motor skills that are characterized by speed and strength (Silva, 2000) [12]. Presenting the results of the two post-tests of the control and experimental groups in the research variables, their analysis and discussion.

Table 3: It shows the means, standard deviations, and the value of (t) calculated, the level of error and the significance of the differences between the two post-tests for the control and experimental groups in the research variables

The exams variables search	measuring unit	officer		experimental		Values t calculated	Indication level	The significance of the differences
		s	p	s	p			
Explosive ability of the legs	meter	2.16	1.45	2.38	1.44	3.32	0.02	moral
The speed characteristic of the legs	number	17	1.66	25	1.08	4.33	0.02	moral
Scoring from persistence	Degree	9	1.33	14	1.63	4.22	0.02	moral
Scoring from the movement	Degree	8	1.41	13	1.58	3.27	0.03	moral

Significant at a degree of freedom (18) and a significant level of significance less or equal to (0.05).

By noting Table No. (3), we see that there is a clear development and difference in all research variables between the two post tests for the experimental and control groups and in favor of the experimental as well as (t) calculated for the independent samples, whose significance levels were less than (0.05), which means that the differences are significant, and thus what the researcher assumed for those variables in the third hypothesis of the research is achieved.

We also find a noticeable positive development for the rest of the research variables and in favor of the experimental group, through the differences between the values of the arithmetic means of the post-tests, as well as the values of the law of (T) calculated for the independent samples, whose significance levels were less than (0.05), which means that the differences are significant and in favor of the experimental group, and thus what the researcher assumed for those variables in the third hypothesis of the research has been achieved.

The researcher attributes the moral differences between the speed-distinguished strength tests, which came in favor of the experimental group members. The researcher attributes them to the effect of (TRX) In the development of distinctive power as quickly and which have influence in the development of that capacity more than any other method, attributed the researcher 's why in winning the distinctive power of evolution to exercise body weights applied by the group members of the experimental, as these exercises have worked to develop distinctive power as quickly and therefore It affected the results of the tests of strength and speed clearly in the experimental group. TRX) Activates the movement of the athlete and trains the muscle to work quickly by pushing the muscle fibers to the speed of contraction, which is more beneficial for the athlete's performance because most sports movements are explosive, unlike traditional training with weights, which focuses on muscle size more than the speed of muscle contraction, and then muscle fiber contraction is slow. (Name, 2009) [5].

As for the moral differences between the stability and movement scoring tests, which came in favor of the experimental group, the researcher attributes it to the impact of developing the force characterized by speed and explosive power, which was positively reflected on the performance of scoring from stability and movement, as the skillful performance of scoring from stability and movement requires strength characterized by speed as a prerequisite To perform those skills, "The development of skills must be accompanied by the process of developing the elements of physical fitness, as the training processes must be considered to develop the elements of physical fitness and the development of skills as two parts of one process" (Mona, 1989).

Conclusions

1. The exercises prepared by the researcher according to a training method (TRX) positively affected the development of the explosive ability and speed characteristic of deaf and dumb players in futsal football.
2. The development of the explosive role model and the power characteristic of speed had a positive impact on

the performance of scoring from stability and movement
3. That exercises (TRX) has a positive effect on the development of force characterized by speed greater than its effect on the development of explosive ability.
4. The performance of deaf and mute players in futsal football to score from stability and movement depends in his physical requirements on strength characterized by speed and explosive ability.

Recommendations

1. Use style exercises (TRX) to develop the strength distinguished by speed as a physical requirement for deaf and dumb players in futsal football to score from stability and movement.
2. The need to develop the physical requirements for the performance of the various skills of deaf and dumb players in futsal football, as this is reflected positively on the skill performance.
3. Apply empirical research to develop the sports training process and reach the best used methods to raise the level of deaf and dumb players in football for physical and skill halls.

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