International Journal of Psychosocial Rehabilitation, Vol. 24, Issue 02, 2020
ISSN: 1475-7192

The Effect Of Exercises In Developing Some Offensive And Defensive Skills By Using The Automatic Fencer Of The Fencing Weapon

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Abstract
The study aimed to identify on the effect Exercises using the automatic fencing device for some offensive and defensive skills in the sport of fencing, as the player needs these skills during the match because the defense is a prelude to the process of responding and attacking in various competitions, as well as accelerating the pace of play, and the study was based on the experimental method, as the researcher chose the method of the two control groups The study was conducted on a sample of (6) players from Diyala club teams (youth category), and after implementing the training program, the results of the tribal and remote tests were collected for the variables of the study under study. The researcher deliberately processed the results statistically using the statistical bag (spss). It was concluded that the exercises using the device had a positive impact on the development of some offensive and defensive skills of the study sample, and the study recommended Focusing on equipment and aids when developing training programs because of their positive impact on fencing players and their great importance during the match, and moving away from the traditional methods used in training.
Keywords*: exercises, offensive, defensive, skills, automatic fencer, weapon*

Introduction

The science of sports training and those in charge of it strive to raise the levels of trainees and players by following the best and easiest ways to bring them to the level that enables them to keep abreast of developments in this science and enable it to communicate with other sciences that want to gain the desired results by raising their levels, and supporting all Sports players with the necessary experience for that stage. The sport of fencing is one of those sports that coaches aspire to make at the required level of competitions and win matches, and attention to offensive and defensive skills is the essence of those interests, and the application of exercises using the auxiliary device saves effort, time and money to raise these levels and through the availability of modern technologies and appropriate training methods for the skills investigated.

The study assumes: There are statistically significant differences between the results of the pre- and post-test for the experimental group in the development of some offensive and defensive skills.

The study Problem: Offensive and defensive skills are the essence of the sport of fencing, on which this game is based, and working to increase the repetitions in the implementation of special exercises prepared for those skills and implemented on the device (automated fencer) enables the player to raise his skill level. And by observing the researcher as he is interested in the field of sports training for fencing, he noticed that most of the trainers did not pay enough attention to using the auxiliary devices in the training programs to develop some offensive and defensive skills, which negatively affected the level of play. Therefore, the researcher suggested special exercises to develop the skills under study .

Importance of the study: The importance of research lies in raising the skill level of young players in fencing, by preparing exercises to develop some offensive and defensive skills, and knowing the effect of exercises on their development for young people, using an automated device to develop these skills.

Study objectives: Preparing exercises for the automatic device to develop some offensive skills.

Preparing exercises for the robot to develop some defensive skills.

The human field: Diyala Club 's (6) fencing players

Time range: from 10-19-2019 to 10-12-2019

Spatial domain: Diyala Sports Club Fencing Hall.

Study Approach: The researcher used the experimental method, with the design of two equal groups with a pre- and post-test (experimental design with tight control) to suit its suitability and achieve the objectives of the study.

Community and sample: The research community was represented by the players of Diyala Youth Club with a shisha weapon, which numbered (25) players, and (6) players were randomly selected by lottery, and they were distributed into two groups (control and experimental), with (3) players for the control group and (3) players for the experimental group. .

Table (1) Statistical characterization of the data of the total research sample in the primary variables before the experiment n = 6

Primary variables	Kolmogorov -Smirnov Z	
	Z	Sig
(age (year	0.96	0.32
(length (cm	0.45	0.99
(mass (kg	0.57	0.90
(Number of years of practice (year	0.96	0.32

It is evident from Table (1) regarding the homogeneity of the data of the basic researchsample in the primary variables before the experiment, as the (Kolmogorov-Smirnov Z) coefficient reached between (0.45 to 0.96), and these values are not

significant. This confirms the homogeneity of the members of the basic research group in the primary variables before the experiment, and that the sample belongs to one community and they have close growth characteristics.

Tests used in the research:

The researcher conducted the following tests on the research sample so that we can apply the test with the correct motor paths and evaluate the tests by experts (Appendix 1) and with (10) degrees for each type of offensive and defensive skills: (Directional Attack Test, Simple Direct Attack Test, Definitive Attack Test, The sixth defense test, the fourth defense test, the eighth defense test).

First: A test that evaluates the attack with a blind gun:

Simple direct attack on the sixth defense zone:

The purpose of the test: To measure the performance of the direct attack skill on the sixth defense zone.

Test specifications: The tester stands a sufficient distance from the trainer in a position of readiness, and the armed arm is extended with a full stabbing movement by the person doing the test and at a rate of three attack attempts on the sixth defense area for the trainer who performs the appropriate defense for the type of attack.

Recording: The performance of the three attempts of the laboratory is evaluated by calculating a score out of (10) for each attempt.

Attack by changing direction:

The purpose of the test: To measure the performance of the attack skill by changing direction.

Test specifications: The laboratory stands a sufficient distance from the trainer in a standby position, and the armed arm is extended with a full stabbing movement on the sixth defense area, then changes to the fourth defense area after the defense is performed by the test person, with an average of three attack attempts to the laboratory with an attempt to escape from the defense.

Recording: The performance of the three attempts of the laboratory is evaluated by calculating a score out of (10) for each attempt.

Cut-off attack:

Purpose of the test: To measure the performance of the skill attack.

Test specifications: The tester stands a sufficient distance from the trainer in a standby position, and the armed arm is extended with a full stabbing movement by the person conducting the test and at a rate of three attempts to perform the definitive attack on the sixth defense area for the trainer who performs the appropriate defense for the type of attack.

Recording: The performance of the three attempts of the laboratory is evaluated by calculating a score out of (10) for each attempt.

Second: A defense assessment test with a blind gun:

Sixth Defensive Mode:

The purpose of the test: To measure the performance of the skill of the sixth defensive position .

Test specifications: The tester stands a sufficient distance from the coach in a position of readiness to be able to perform the sixth defense skill after the coach performs the attack on the sixth defense area with three attempts.
Scoring: The performance of the three attempts is evaluated. The laboratory B shall calculate the score out of (10) for each attempt.
Fourth defensive position:
The purpose of the test: To measure the performance of the fourth defensive position skill.
Test specifications: The tester stands a sufficient distance from the coach in a position of readiness to be able to perform the fourth defense skill after the coach performs the attack on the fourth defense area with three attempts.
Scoring: The performance of the three attempts is evaluated. The laboratory B shall calculate the score out of (10) for each attempt.
Eighth defensive position:
Purpose of the test: To measure the performance of the eighth defensive position skill.
Test specifications: The tester stands a sufficient distance from the coach in a position of readiness to be able to perform the eighth defense skill after the coach performs the attack on the eighth defense area with three attempts.
Scoring: The performance of the three attempts is evaluated. The laboratory B shall calculate the score out of (10) for each attempt.

Validity of tests:
The researcher found the validity of the content after the tests were presented to a group of experts and specialists (Appendix 1). They emphasized that these tests are honest in their content and the purpose for which they were set. In addition, the researcher used the subjective validity coefficient of the tests by extracting the square root of the reliability coefficient (Reliability coefficient) means the validity of the test.
Test stability:
The tests were applied to (3) young players who were outside the main research sample on 6/17/2019 , then the researcher repeated it after (five days), then the researcher found the correlation coefficient of the tests, as shown in Table (2) .

The table (2) Validity, reliability, and objectivity coefficients of the tests

the exams	honesty	constancy
Assessment test of the attack with a shutter weapon	**90 .0**	**91 .0**
Defense assessment test with a shutter weapon	**91 .0**	**3 0.9**

Sample parity in offensive and defensive skills:
The significance of the differences between the experimental and control groups in offensive skills before the experiment:

Table (3) significance of the differences between the experimental group and the control group in offensive skills before the experiment

Statistical Indications / Dimensions	Mann-Whitney U		
	and Tinny Man	Z	Sig
simple direct attack	4.50	0.00	1.00
Attack by changing direction	3.00	0.66	0.51
off attack-cut	2.00	1.29	0.20
Total Offensive Skills	3.50	0.44	0.66

Significant T at 0.05 = 2.78*

It is evident from Table (3) regarding the significance of the differences between the experimental group and the control group in the offensive skills before the experiment that there was parity between the two groups before the experiment in all offensive skills. And by processing the data using the non-parametric method (Mann-Whitney U) it reached between (2.00 to 4.50) and the value of (Z) ranged between (0.00 to 1.29) and these values not significant at the 0.05 level. This confirms the equality of the experimental and control groups in the level of offensive skills performance before the experiment.

Significance of the differences between the experimental and control groups in defensive skills before the experiment:

Table (4) significance of the differences between the experimental group and the control group in defensive skills before the experiment

Statistical Indications / Defensive skills	Mann-Whitney U		
	Man and Tinny	Z	Sig
Defensive mode VI	3.00	0.70	0.49
Fourth Defensive Mode	3.50	0.44	0.66
_ Eighth Defensive Mode	3.00	0.70	0.49
defensive Total sum of skills	4.00	0.22	0.83

Significant t at the level of 0.05 = 2.78 *

It is clear from Table (4) regarding the significance of the differences between the experimental group and the control group in defensive skills before the experiment that there were no significant differences between the two groups before the experiment through data processing using the non-parametric method (Mann-Whitney U) that reached between (3.00 to 4.00) as The value of (Z) was (0.22 to 0.70) and these values are Not significant at the 0.05 level. This definitely confirms the

equivalence of the experimental and control groups in the level of defensive skills performance before the experiment.

Table (5) significance of the differences between the experimental group and the control group in defensive skills before the experiment

nsStatistical Indicatio / Defensive skills	Mann-Whitney U		
	Man and Tinny	Z	Sig
Defensive mode VI	3.00	0.70	0.49
Fourth Defensive Mode	3.50	0.44	0.66
_ Eighth Defensive Mode	3.00	0.70	0.49
Total sum of defensive skills	4.00	0.22	0.83

2.78 = Significant t at the level of 0.05 *

It is clear from Table (5) regarding the significance of the differences between the experimental group and the control group in defensive skills before the experiment that there were no significant differences between the two groups before the experiment in all defensive skills by processing data using the non-parametric method (Mann-Whitney U) that amounted between 3.00 to 4.00. The value of (Z) was (0.22 to 0.70) and these values are not significant at the 0.05 level. This definitely confirms the equivalence of the experimental and control groups in the level of defensive skills performance before the experiment.

Results and discussion

The significance of the differences between the experimental and control groups in offensive skills and defensive skills after the experiment:

The significance of the differences between the experimental group and the control group in offensive skills:

Table (6) significance of the differences between the experimental group and the control group in offensive skills after the experiment

Statistical Indications / Dimensions	Mann-Whitney U		
	Man and Tinny	Z	Sig
simple direct attack	0.00	1.99	0.05
Attack by changing direction	0.00	1.99	0.05
off attack-cut	0.00	2.02	0.04
Total Offensive Skills	0.00	1.99	0.05

Significant T at 0.05 = 2.78*

It is evident from Table (6) regarding the significance of the differences between theexperimental group and the control group in the offensive skills after the experiment and the data processing using the non-parametric method (Mann-Whitney U) It ranged between (0.00) and the value of (Z) ranged between (1.99 to 2.02) and these values are significant at the 0.05 level. This confirms the superiority of the

experimental group over the control group in the level of offensive skills performance after the experiment. It is evident from Table (6) regarding the significance of the differences between the experimental group and the control group in offensive skills after the experiment that there were significant differences between the two groups after the experiment in all offensive skills by processing data using the non-parametric method (Mann-Whitney U), where the value of (Z) reached (1.99 to 2.02) and these values are significant at the 0.05 level. This definitely confirms that there are differences between the experimental and control groups in the level of offensive skills performance after the experiment. The researcher attributes these differences to the effectiveness of the impact of the proposed training program using the innovative device, in addition to the gradual training load and the accuracy of the selection and formation of exercises within the training units.

The significance of the differences between the experimental group and the control group in defensive skills:

Table (7) significance of the differences between the experimental group and the control group in defensive skills after the experiment

Statistical Indications / Defensive skills	Mann-Whitney U		
	Man and Tinny	**Z**	**Sig**
Defensive mode VI	**0.00**	**1.99**	**0.05**
Fourth Defensive Mode	**0.00**	**1.99**	**0.05**
_ Eighth Defensive Mode	**0.00**	**1.96**	**0.05**
Total sum of defensive skills	**0.00**	**1.96**	**0.05**

Significant T at 0.05 = 2.78*

It is evident from Table (7) regarding the significance of the differences between theexperimental group and the control group in defensive skills after the experiment and by processing the data using the non-parametric method (Mann-Whitney U) amounting to (0.00) and the value of (Z) between (1.96 to 1.99), and these values are significant at the 0.05 level. This confirms the superiority of the experimental group over the control group in the level of defensive skills performance after the experiment. This is due to the researcher that the use of the innovative device with the application of the proposed training program led to an improvement in the ability to sense the movements of the two legs of the research sample. This is consistent with the results of the study of Basmat Shams Al-Din (2003), Eid Saleh and Marib Kazem (2016), which indicated that the experimental group that used the innovative device with the application of the proposed training program had a positive effect on the results of the physical tests, used for the research measurements. Osama Abdel Rahman (2008) also indicates that the physical component is one of the pillars of training that depends on it in the development of fencers, and it is one of the most important foundations that share with motor skills in the formation of the fencer from

a physical point of view (Osama Abdel Rahman 2008, p. 23). The innovative device was considered to have an effective role in its use in the proposed training program, which led to attracting fencers, lack of boredom and excitement in its use, which led to the improvement of the physical abilities associated with the sense of distance for the movements of the two legs, and this led to the improvement and development of the accuracy of shooting the touch in straight, changing and cutting attacks, and this is consistent with the results of the study Osama Abdel Rahman (2006), Abbas Mohsen and Rabie Lafta (2017). These results proved that training using the innovative device has a positive and significant effect in improving the sense of distance for the movements of the feet and the accuracy of the touch of fencing, and that the innovative device is a means of measurement, and at the same time for training and development of physical and skill abilities in the sport of fencing. It also led to a correlation between the results of the physical and skill tests of the skill performance of the fencers, and they were unanimously agreed on the effective effect of regular training using the innovative device through the proposed training program, whether it had a direct or indirect effect on the transmission of the effect of training on the skill level.

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