



The Effect of Instantaneous Strength Training in the High-Intensity Repetitive Method to Develop Some Physical Abilities and the Accuracy of Stabbing with Direct Direct Attack

Isam mansoor Mohin alhameed

isam.alhameed@utq.edu.iq

Thi Qar University College of Physical Education and Sport Sciences

ABSTRACT

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Keywords:

*Instantaneous strength training ,
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that The importance of research in Shares Research in enriching the scientific library on the effect of instantaneous strength exercises in the high-intensity repetitive method on the development of physical abilities and the accuracy of the direct straight attack stabbing, and opens up prospects for similar studies in other sports, and was **Research Problem** that The dueling game needs to be Player It has a great role and a positive participant in acquiring the skills of this distinctive game, which enjoys high popularity and a lot of interest in it, as it is one of the individual games in which the player's skill capabilities are highlighted through the consistency of the skill parts and a performance that reflects high fluidity and a dazzling aesthetic that attracts the attention of the public and its followers, and because most of its skills, whether defensive or offensive, need a quantity of Physical and Skill Abilities , it has become necessary to pay attention to the capabilities Physical which is a basic requirement to reflect high effectiveness in the performance of these skills ‘ Therefore, the researcher decided to study this real problem and identify solutions that may be appropriate through the use of instantaneous strength exercises in the repetitive, high-intensity method to develop some physical abilities and the accuracy of the stab with a direct direct attack But **Goals Research** Preparation of instantaneous strength exercises in the high-intensity repetitive method to develop some physical abilities and the accuracy of the direct straight attack stabbing, and identifying the statistical differences between the pre- and post-tests of physical abilities The accuracy of the direct direct attack, and the researcher used **Curriculum** Experimental Style One Group To suit the nature of the problem ‘ **It was determined Research Community** In a deliberate way and they are illusion Fencing Class Players Youth affiliated to the Ministry of Youth and Sports in Dhi Qar Governorate Sports Season (2025-2026), which are (6) players ‘ They were selected as a research sample and represent a percentage of (100%) of the community Original, and one of the most important **Conclusions** that Exercises Instantaneous power in the high-intensity repetitive method It has had an impact on the development of Physical abilities of fencing players.

1. Introduction to the research:

1-1 Introduction and Importance of the Research:

The scientific progress that the world is witnessing at the moment is one of the main reasons for the progress and advancement of human life through programmed and studied scientific planning, which contributes to achieving human goals, as this progress included all areas of life, including the sports field, and practical studies and researches related to the training process have helped the trainer to develop his knowledge of the variables that can affect the success of the training process and thus achieve the best sports achievements. Progress and development is still one of the main reasons for the progress that exceeded perceptions in all areas of life, including the sports field, and we see now that this progress and development witnessed in sports came according to scientific foundations and theories with which some countries were able to reach athletes to abilities and limits that were unattainable in the recent past, as the development we are witnessing today is only the result of the creativity of human minds from coaches, experts, scientists and professors, and also the development included the use of many devices. Modern scientific means and tools that help improve motor performance, thus contributing to determining the success of the training process and be an indicator of what the athlete's mechanism has reached.

The sport of fencing is one of the sports that requires high accuracy in skill performance, and quick interaction with the opponent, as the success of the player depends greatly on his physical ability, and the skill that includes a series of consecutive offensive movements, is considered one of the basic skills in the fencing weapon, and requires the swordsman to be able to adapt to the conditions of competition, control distances, and coordinate movement and concentration.

Physical abilities in fencing are an important and essential factor to raise the level of skill and physical performance, as physical abilities aim to develop certain physical elements that play a prominent role in the player's mastery of offensive and defensive skills, and fencing as one of the team sports activities is considered one of the technical sports that contains a large number of motor skills that need a large number of physical capabilities and abilities to be done in a good manner and proper performance.

From the above, the importance of the research lies in the contribution of Research in the enrichment of the scientific library on the effect of instantaneous strength training in the high-intensity repetitive style on the development of physical abilities and the accuracy of the direct straight attack stabbing, and opens up prospects for similar studies in other sports.

1-2 Research Problem:

Fencing is one of the games that originated and spread during the recent decades, and this was accompanied by the development of its various offensive and defensive skills, and due to the splendor of this sport, it has witnessed wide leaps and entered within the programs of the faculties of physical education and sports sciences in Iraq, so the fencing game needs the player to have a great role and a positive participant in acquiring the skills of this distinctive game, which has a high popularity and a lot of interest in it as it is one of the individual games that stand out. It has the player's skill capabilities through the consistency of the skill parts and a performance that reflects a high fluidity and a dazzling aesthetic that attracts the attention of the audience and followers, and because most of its skills, whether defensive or offensive, need a degree of physical and skill abilities, it has become necessary

to pay attention to physical abilities, which is a basic requirement to reflect high effectiveness in the performance of those skills.

Therefore, the researcher decided to study this real problem and identify solutions that may be appropriate through the use of instantaneous strength exercises in the repetitive, high-intensity method to develop some physical abilities and the accuracy of the stab with a direct direct attack

1.3 Research Objectives

- 1- Prepare instantaneous strength training in the high-intensity repetitive method to develop some physical abilities and the accuracy of the direct direct attack stabbing.
- 2- Identifying the statistical differences between the pre- and post-tests of physical abilities and the accuracy of the direct direct attack stabbing.

1-4 Forcing Research

- 1- There are significant statistical differences between the pre- and post-tests of the research group and in favor of the post-tests.

1-5 Research Areas:

1.5.1 Human Field: Fencing players (Youth) of the Ministry of Youth and Sports in Dhi Qar Governorate for the sports season (2022-5-2026).

1-5-2 Temporal Domain : 10/9/2025 to 20/1/2026

1.5.3 Spatial Domain : The closed hall of the Nasiriyah Model Forum .

2. Research Methodology and Field Procedures:

2-1 Research Methodology:

The researcher used the experimental method in the one-group method to suit the nature of the problem.

2-2 Research Population and Sample:

The research population was determined by the deliberate method, which are the youth fencing players affiliated to the Ministry of Youth and Sports in Dhi Qar Governorate for the sports season (2025-2026), which are (6) players, and they were selected as the research sample and represent (100%) of the original population.

1- 2-3 Sample homogeneity:

To verify the homogeneity of the sample, the researcher performed some measures to control the variables, although the selected sample is from a similar age stage, and the coefficient of difference was used to know the reality of the difference or not, and Table (1) shows this.

Table (1) shows the homogeneity of the research sample

Divergence coefficient	Standard deviation	Arithmetic mean	Unit of Measurement	Physical Measurements	t
10.52%	1.81	17.19	Year	Age	1
1.99%	1.38	69.23	kg	Mass	2
1.80%	3.07	170.11	Poison	Length	3

2-4 Means, Devices and Tools Used:

✓ Means of collecting information:

- The length measuring tape is metric.

- Medical scale.
- HP CORE i5 LAPTOP CALCULATOR .
- (4) Duel suits.
- 40 shish weapons.
- Canon camera (2).
- Vision Examination Panel Type Final great (1).

✓ **Research Methods:**

- Arab and foreign sources.
- Personal interviews.
- Tests and measurements used in the research.

2-5 Tests used in the research:

First Test: Test of Pushing a Medical Ball Above the Head Weighing 3 Kg Forward

Purpose of the test: Measure the explosive force of the muscles of the arms.(1)

And the shoulder that works to throw the disc.

Tools : Suitable place to throw, measuring tape , 3kg medical ball Drop Space Area

Performance Description: The tester takes a standing position facing the throwing position and holds the ball with both hands, then bends the knees and swings the hands with the medical ball and throws it forward for the farthest distance.

Scoring Calculation: The measurement is made from the inner edge of the starting line (the player's side) to the nearest trace left by the ball when it touches the ground from the side of this line, by means of a metal measuring tape and the measurement is made to the nearest two centimeters. Three attempts are given to calculate the best of the achievement in terms of achievement.

The second test: the test of the long jump from the stability position: ⁽¹⁾

Purpose of the test: Measurement of the explosive power of the legs.

- Necessary tools: A suitable place for measuring the jump with a width of (1.5) m and a length of (3.5) m, in which it should be level, measuring tape, colored pieces of chalk.

Performance Description: The tester stands behind the starting line with his feet slightly apart and parallel so that the metatarsal touches the starting line from the outside, the tester swings the arms backwards with his knees bent and leans forward slightly, then jumps forward as far as possible by extending the knees and pushing the feet with the arms weighted forward.

Calculation of grades: The measurement is from the starting line to the last part of the body that touches the ground.

Number of attempts: Only two and count the best.

Third Test - Speed Characteristic Force Test for Arms ⁽¹⁾:

Test the flexion and extension of the arms of the fixed inclined support in 10 seconds

(1) Ali Salloum Al-Hakim: Tests, Measurement and Statistics in the Field of Mathematics, Al-Taif Printing, Ministry of Higher Education and Scientific Research, University of Al-Qadisiyah, 2004, p. 91.

(3) Baf Senior: Coaching Handbook – UNYS, Athletics Coach, vol.27, no.1, 1999.

Objective of the test: Measure the force characterized by speed of the muscles of the arms.

Test Instruments :- Stopwatch

Test Description: The lab places the knees on the floor to help with the anchor and carry the weight of the body instead of the toes, and you bend the arms and land the body until the chest touches the floor, then the lab spreads the arms to return to the starting position, and the lab continues to repeat the previous performance within 10 seconds and without stopping.

Registration: The correct iterations of the laboratory are recorded within (10) seconds.

Fourth Test - Speed Characteristic Force of Half Bear Legs (Half Squat (10 Second) (2).

Purpose of the test: Measuring the force characterized by speed of the legs.

Necessary tools: electronic clock, registration form, assistant and training barrier with a height of 40 cm.

Performance Description: The tester stands in front of the barrier when he hears the start. He bends his legs, touches the barrier with his hands, and gets up quickly at 10s.

Calculation of Scores: Calculates the number of times the legs bend and fold in 10s time.

Fifth Test Accuracy of Appeal (3)

Test Name : Accuracy of the Stabbing Movement

Purpose of the test : To measure the accuracy of directing the attack from the stabbing movement.

Tools:

Performance Description: The player stands in front of the indicator in a standby position with the gun in his hand and has the weapon that is connected to the electricity behind the aforementioned line, the player starts performing the stab directly in the direction of the target (the circles in the bra), the tester gives ten attempts within fifteen seconds.

2.6 Exploratory experiment

The researcher conducted an exploratory experiment on Friday, 26 / 9/ 2025 at four o'clock in the afternoon on the sample, where the exploratory experiment is used to avoid the shortcomings while determining the place, time and duration of the experiment.

The aim of the exploratory experiment was:

- 2- Prepare and guide the assistant team according to the research objectives.
- 3- Configure the necessary devices and tools.
- 4- Recognize the time needed for the test.
- 5- Extracting the scientific foundations of the test

2-7 Scientific Foundations of the Test:

1- Test Validity:

Leila El-Sayed Farhat: *Measurement and Testing in Physical Education*, 4th Edition, Cairo, Al-Kitab Center for Publishing, ² 2007, p. 221.

Raysan Khraibet Muhammad: *Encyclopedia of Measurements and Tests in Physical and Sport Education*, ³ University of Basra, Higher Education Press, 1998 , p. 34.

The researcher presented the tests to experts and specialists in the field of training, fencing and motor learning through personal interviews and their agreement on the validity of the tests as shown in Table (2).

Table (2) shows the percentage of the validity of the research tests

Percentage	Number of Consensus Opinions	Number of Experts	Exam Name	t
100%	9	9	Explosive power of the arms	1
88.88%	8	9	The explosive power of the two legs	2
100%	9	9	Powerful Arms Speed	3
88.88%	8	9	Leg speed power	4
100%	9	9	The accuracy of the stabbing with a straight attack	5

2- Test Stability:

The researcher was used to calculate the stability coefficient (test and retest method) with a time interval between the first and second tests (7) days and The retest method is one of the simplest and is characterized by the interval of coherence because the error associated with the measurement is always more pronounced when there is an interval between the two tests from one day to more." ⁽⁴⁾, the researcher extracted the stability coefficient through the correlation coefficient (Pearson) between the results of the first test and the results of the second test, and extracted the significance of the correlation. have high morale because the value of $(sig) \geq (0.05)$ as shown in Table (3)

3- Objectivity:

The researcher found the objectivity coefficient of the tests under research by finding the simple correlation coefficient (Pearson) between the results of the two referees in the first application conducted during the exploratory experiment, and the correlation coefficients were high, which indicates the objectivity of the tests used in the research, and Table (3) shows this.

Table (3) Builds the stability coefficient forthe research tests

Sig	Objectivity Factor	sig	Stability Coefficient	Testing	t
0.000	0.92	0.000	0.90	Explosive power of the arms	1
0.000	0.90	0.000	0.89	The explosive power of the two legs	2
0.000	0.93	0.000	0.91	Powerful Arms Speed	3
0.000	0.91	0.000	0.90	Leg speed power	4
0.000	0.92	0.000	0.98	The accuracy of the stabbing with a straight attack	5

The correlation coefficient is significant at the significance level of > (0.05)

2-8 Field Research Procedures:

2.8.1 Pre-tests for the research sample:

The researcher conducted the pre-tests before starting the application of the exercises suggested by the researcher on Friday, 3/10/2025 at four in the afternoon, and all the members of the research sample (6) players attended and the results were extracted.

2.8.2 Instantaneous strength training in high-intensity repetitive mode

In order to obtain exercises with good effectiveness, it was necessary to read the modern sources and references in the science of sports training that would enrich the researcher with information that helps him develop the suggested exercises, so the researcher prepared the exercises for the members of the research sample in preparation a document in preparing it on the scientific foundations of training and to some scientific sources and references, as well as the opinions of some specialists in the field of sports training science and fencing.

The application of the exercises started on Sunday on 5/10/2025 until Sunday and on 30/11/2025 for eight weeks with three training units per week (Sunday, Tuesday, and Thursday), and the research sample was supervised by the researcher and the assistant work team.

And in what comesY Some special clarifications Instantaneous strength training in the high-intensity repetitive method:

- The exercises should be appropriate for the sample level.
- Gradual sequence of exercises in terms of difficulty.
- Use competitive exercises.
- Exercises should achieve the maximum possible purpose.
- The duration of the exercises is two months.
- The training stage that fits the curriculum (special preparation stage)
- The number of training units per week is (3) units.
- The total number of training units is (24) training units.
- Training days (Sunday, Tuesday, Thursday).
- Use of maximum and sub-maximum intensity.

2.8.3 Post-tests for the research sample:

The post-test of the research sample was conducted on Tuesday 2/12/2025 after the completion of the exercise period, and the researcher was keen to provide the conditions of the pre-test and its procedures for the research tests.

2.9 Statistical Methods:

- Arithmetic mean.
- Standard deviation.
- Divergence coefficient.
- Pearson correlation coefficient .
- T)) test for threaded samples.
- Favorable Percentage.

3. Present, analyze and discuss the results:

3-1 Presentation and analysis of the results of the pre- and post-tests of the sample

Table (4) shows the values of arithmetic medians, standard deviations, and the value of (T) calculated for the pre- and post-tests of the sample

Conclusion	Sig	T calculated	(Next)		(Qibla)		Unit of Measurement	Physical Abilities
			on	Going to	on	Going to		
Moral	0.000	5.23	0.56	8.81	0.31	6.88	meter	Explosive power of the arms
Moral	0.000	3.03	0.23	1.33	1.18	1.22	meter	The explosive power of the two legs
Moral	0.000	6.66	1.41	12.09	0.89	10.75	Repetition	Powerful Arms Speed
Moral	0.000	8.95	1.70	11.32	1.14	9.87	Repetition	Leg speed power
Moral	0.000	7.95	1.04	10.05	1.92	7.54	Repeat/s	The accuracy of the stabbing with a straight attack

*Significant at the significance level of \geq (0.05)

Table (4) shows the arithmetic media, standard deviations and the value of (t) calculated between the results of the pre- and post-tests, as the results presented in the table showed that the value of the significance level in all values was (0.000), which is less than the value of the significance level (0.05), which indicates that there are significant differences between the pre- and post-tests of the sample.

3-2 Discussion of the Results:

Through Table (4), it appeared that there is a significant difference in the results of the post-tests of the research group, which the researcher attributes to the instantaneous strength exercises in the repetitive high-intensity method, and through our observation of the arithmetic media, the explosive power and speed of the legs and arms for the pre- and post-tests, we find that there are significant differences between the two tests and in favor of the post-test, the researcher attributes the reason for the significance of the differences shown by the results of the post-tests for a sample. Research in physical abilities to strength exercises with medium intensity and quick responses in the high-intensity repetition method that allows players to concentrate and stay in the tension weekly and then go up or down to change the tension and volumes, as well as focusing on the strength training to be suitable for the player's movement, physical abilities and physical characteristics, in addition to this The method achieves an improvement in the level of muscular strength of the muscles working in performance for all tests, which indicates the development of the competence of the sample members who were trained in this method when

repeating the performance more than once, provided that the training tends to build special physical abilities related to the future specialization of the player and uses exercises of a special preparation nature according to the characteristics and requirements of each game, and coaches must pay attention to the correct skill performance during the implementation of strength exercises and the use of appropriate weights and appropriate doses that can It reflects positive effects in the development process. ⁽⁵⁾

The researcher also attributes the reason for the significant differences shown by the results of the post-tests of the research sample in the explosive power, to the effective effect of the instantaneous force exercises in the repetitive high-intensity method that the researcher used for the research sample applied by that group that the researcher deliberately during the preparation of these exercises in a way that serves the training objectives that were developed in order to develop them (such as the study variables), such as taking into account the principles of training and the correct rationing of the components of the training load that suit the research sample and the shape that simulates This is confirmed by (Talha Hossam El-Din et al.) "to the need to diversify in the use of exercises or the style of their performance, as one of the most common training errors among coaches is the neglect of the process of change in training excitement, such as the change in the number of repetitions, the number of sets, or through the intensity of the load used. or in the speed of exercise performance and breaks ⁽⁶⁾

The researcher also attributes the reason for the development of the strength characterized by speed to the effect of successive training loads with high intensity included in the training curriculum, which contributed to the development of the two tests of strength characterized by speed, relying on the method of linkage in the development of muscular strength and speed recipe, and this is in line with what Hara pointed out : "The development of strength characterized by speed is done in two basic ways, the first is by developing the muscular strength of different parts of the body and the second is by increasing the speed of muscle contraction." "The association between strength and motor speed in the muscle is one of the requirements for performance at high levels(2). Also, this development in the strength of the muscles of the arms and legs came as a result of the exercises to develop the characteristic strength at a speed that proved its positive effect through the results obtained by the researcher, as the more the strength of the muscles of the arms and legs, the more he will be able to control the movements he performs during performance without a technical defect that causes him to fail in the attempt and lose it, and it is known that the characteristic of strength characterized by speed does not develop spontaneously or spontaneity, but through regular training, and this is confirmed by Mohamed Othman, quoting (Hat), "The process of raising the level of strength characterized by speed requires working with weights and using body weight."⁷

4. Conclusions and recommendations

4-1 Conclusions:

Mutasem Gotouk: *The Trainer's Guide to Training*, Syrian Arab Republic, Central Office of Training Centers, 1995, p. 12.5

Talha Hossam El-Din et al.: *The Scientific Encyclopedia of Athlete Training – Strength – Ability – Endurance – Flexibility*, 2001, p. 52.6

(4) Amira Al-Baroudi, *A Proposed Approach for the Development of Physical Fitness Elements*, Master's Thesis, Faculty of Physical Education, for Girls in Giza, Helwan University, 1992, p. 135.

(3) Hara, translated by Abd Ali Latif: *Sport Training*, Baghdad University Press, 1979, p. 69.

Muhammad Othman: *Encyclopedia of Athletics*, 1st Edition, Kuwait, Dar Al-Ilm, 1990, p. 113.7

- 1- Instantaneous strength training in the high-intensity repetitive method has had an impact on the development of the physical abilities of fencing players.
- 2- Instantaneous strength training in the high-intensity repetitive method had an effect on improving the accuracy of the direct direct attack stabbing
- 3- Instantaneous strength training in the high-intensity repetitive method with this ripple in pregnancy has led to the appearance of this amount of development in physical abilities and the accuracy of the stab.

4.2 Recommendations:

- 1- The use of instantaneous strength exercises in a repetitive, high-intensity method that works to develop physical abilities and the accuracy of the stabbing.
- 2- Conducting similar studies in other skills that were not addressed in the study.
- 3- Conducting similar studies for other age groups and other training methods related to the development of offensive or defensive skills in the game of fencing and knowing the results of these studies.
- 4- Paying attention to conducting tests and measurements periodically.

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Appendices

Exercise time: 32.61 minutes the first week

Training intensity : 80% training unit (1)

Objective: Develop the explosive power of the arms and stabbing accuracy

Rest time between stations	Workout time	Rest between sessions	Number of Courses	Workout Code	t
60 S	15,18s	4 D	5	A.	1
	9.51s			B.	2
	30 S			C.	3
	10.07 s			D.	4
	9.02 s			E.	5
	30 S			F.	6
	10.41s			G.	7