

The effect training program in using repetitive training of force explosive armrests to enhance the boxing players' straight punch:

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ملخص الدراسة :

تهدف الدراسة إلى معرفة أثر استخدام التدريب التكراري للقوة الانفجارية للذراعين في تحسين اللكمة المستقيمة للاعب الملاكمة ،دراسة ميدانية للنادي الرياضي لهواة الملاكمة ينشط ملاكموه في البطولة الولائية والوطنية وهذا من اجل ابراز أثر البرنامج التدريبي المقترح في تحسين اداء الملاكمين اثناء اجراء البطولات الوطنية والدولية ،حيث تهدف هذه الدراسة الى تحسين اللكمة المستقيمة لدى الملاكم باعتبارها اهم المهارات الحركية لدى الملاكم.

Study Summary:

The study aims at finding out the effect of the use of repetitive training on the explosive force of the arms in improving the straight punch for boxing players. A field study of the boxing club for beginners that is active in the states and national championships. Taking into consideration the nature of the subject, the researcher adopted the experimental method which is suitable for such types of subjects. The study aims at showing the effects of the suggested practical program in improving the performance of boxing players in national and international championships. Thus, enhancing the straight punch of boxers because it is considered as the most important skill for them.

Introduction and problematic study:

Boxing has known since its emergence as a game of remarkable development, that game gained the hearts of people and became one of their daily concerns. It moved from self-defense as a hobby without any laws to a more organized phase as a profession people made huge efforts and apply modern scientific methods in line with its development. They organized courses and tournaments, global, regional and continental, moving from local practice to international one to include the entire world. It became a popular sports and its influence appeared in all fields of life.

In Algeria, institutes, universities and even boxing clubs are trying to push this sport as it represents the youth's concerns, it has become more and more important to them day by day, so that the players are being trained in regular and professional manners. This training is the stage through which to

improve the quantity and quality of abilities and develop it according to organized physical, mental and psychological standards. Furthermore, we must include science to reach the highest levels and to achieve the best results following the best training methods ,

All agreed that the team and its progress depends to a great extent on the good control of the technical movements and basic skills of the sports and this control is only if there is a good preparation of the physical side, which includes basic physical qualities such as endurance, speed, strength, flexibility, physical abilities such as distinctive and explosive powers. One of the basic skills of boxing is the skill of punches. Due to the importance of this skill, we have worked on collecting training modules to develop them.

From this point of view, the study attempts to reflect the effect of using repetitive training of the explosive force of the arms in enhancing the boxing players' straight punch.

Through all of the above problematic study were as follows:

- What is the effect of using repetitive training of the explosive force of the arms in improving the straight punch among boxers from 15 years to 19 years?

The following sub-questions are subdivided:

A - Are there any statistically significant differences between pre and post tests of the explosive force of the arms in improving the straight punch in the repetitive training method for the experimental group?

B. Are there any statistically significant differences between pre and post tests of the explosive force of the arms in improving the straight punch in the repetitive training method for the control group?

C. Are there statistically significant differences in the pre and posttest of force explosive armrests to improve repetitive training straight punch between the control group and the experimental one?

1. Hypotheses of the study:

I. General Hypothesis:

The repetitive training has a positive effect on the arms' explosive force to improve the straight punch of boxers from 15 to 19 years.

II. Sub-assumptions:

A. There are statistically significant differences between the pre and post tests of the arms' explosive force in improving the straight punch in the experimental group.

B. There are no statistically significant differences between the pre and post tests of the arms' explosive force in improving the straight punch in the control group.

C. There are statistically significant differences between the pre and post tests of the arms' explosive force in improving the straight punch between the experimental and control groups for the experimental group.

2. The importance of the study:

- The importance of the study is to elevate the athlete from a lower level to a higher one. This helps to provide the sports teams with some elements which lead to winning and realizing positive results. The subject of the study tackles a problem in the field of boxing training in our country. Moreover, in the Arab world and the African continent as a whole. And it gives us a small picture of this skill's training process.
- Explain the importance of the arms' explosive power of improving the boxing players' straight punch.
- Demonstrate the importance of repetitive training for trainers.

3. Objectives of the study:

The objectives of this study can be summarized in:

Through our treatment of the subject and our perception of the nature of the problem, we decided to define the objectives of the study as follows:

- ✓ Explain the importance of the arms' explosive force on the performance of straight punch in boxing players from 15 to 19 years.
- ✓ The impact of the repetitive training method on the arms' explosive force was recognized in improving the straight punching of boxers aged 15 to 19 years.
- ✓ Enriching the educational aspect of the Institute in boxing sports, which is considered as a global sport and is completely neglected by us and there are not many studies about it in our institute.

5. Definition of concepts and terminology:

A. Repetitive Training:

- **Source trail.**

Providing students with scientific and practical studies that lead to raising their skill level in performance.

○ **Terminology:**

This method is characterized by double repetition of a part of the work for a short period, with some rest, a volleyball player relax as much as he wants before the second return in order to regain the ability to work, this method is used above all during individual training to improve athletic performance.

○ **Procedural:**

Is a way to increase the intensity of the training method's performance. It may reach the maximum intensity, then decrease in size, and also increase the long positive comfort and aims to develop both the maximum muscle strength and speed. The strength characteristic of speed contributes in raising the efficiency of energy production of anaerobic system and affects the nervous system because the performance is at maximum intensity which causes fatigue.

B. Straight punch:

○ **Terminology:**

Is the most common punches used on the ring. It is one of the easiest, most accurate and effective punches. The player use this type of punches from long distances.

○ **Procedural:**

These punches are the most used in a straight line, they are characterized by opening gaps, the boot for other quantities, the ease of learning, mastery and performance, do not disturb the balance of boxers and it is difficult to escape them.

C. Boxing:

○ Boxing is a sport activity that is characterized by speed and sudden change of the various punching conditions that require the boxer to have a high level of motor performance. The latter is characterized by high intensity, accuracy, speed and ability to assess the appropriate strength of these situations with fatigue resistance, and punching so that the player of innovation and initiation in applying the methods of drafting the necessary accuracy and timing.

○ **Procedural:**

Is a kind of sports activities that are characterized by the combat skills of punching and camouflage, an old sport practiced by man for self-defense until it became a recognized sport in the world, characterized by a high degree of fitness, strength, speed and agility, interspersed with dynamic skills (defensive, offensive) Is also known by mastery and accuracy.

6. Previous studies:

First Study:

Abdul Basset Jameel (1993), Zaguazig University, Egypt, on his study: "Proposed Training Program for Advanced Punching Groups for Boxers". The aim of the training program was to identify the impact of the training program on the advanced punching groups in the beginners of boxing as well as the differences among novice boxers in the level of skill performance. The researcher relied on the experimental method and used a sample of 32 boxers and found that there is an improvement in the post measurement compared with the pre one in the experimental group during the time of punching sets.

The second study:

ArafaArafastudy (1997) Mansoura University, Egypt.

"The impact of a training program on physical fitness on some of the basic skills of emerging boxers."

1/ Overall Objective:

Develop a training program for special physical preparation and identify its impact on developing some of the basic skills of emerging boxers.

2/ Questions:

A) Are there statistically significant differences between the mean scores of the pre and post measures of the experimental group at the level of special physical training, basic skills and performance effectiveness?

B) Are there statistically significant differences between the average scores of the pre and post measures of the control group at the level of special physical preparation, basic skills and performance effectiveness ?.

C) Are there any differences in the rates of improvement between the experimental and control groups at the level of physical fitness and the basic skills of effective performance?.

3/ Methodology:

The researcher follows an experimental approach that suits his subject.

4/ Study Sample:

-The researcher used 32 boxers for his subject.

5/ Proposals and conclusions reached:

A) The proposed training program has a positive impact, through the development of fitness components on some of the basic skills, is in progress.

B) Paying attention to increasing the period of teaching basic skills of boxers.

C) Applying the proposed training program for the development of basic motor skills, which is based on beginner boxers from 12-14 years in clubs, youth centers and all sports bodies to obtain the desired results.

D) Performing similar studies and scientific research on different samples (youth males and females).

Third study :

SalehRadhi Amish 1999:

"The impact of training methods on the development of explosive power of the muscles of the lower limbs and their relationship with precision scoring and hitting the ball to the farthest distance."

1/ Problem:

The problem of research is that the training of the explosive force is done randomly and without knowledge of the different methods of development and the absence of a study in the field of football looking at this area and the extent of the impact of muscles' explosive power of the lower limbs in hitting the ball to the furthest distance and accuracy of remote scoring. The researcher looked for appropriate solutions.

2/ Research Objectives:

The study aimed to:

- Knowledge about the impact of different training methods in the development of muscles' explosive power of the lower limbs.
- Knowing which training methods to develop the muscles' explosive power of the lower limbs.
- Knowledge of the evolution of muscles' explosive power of the lower limbs in developing the skill level and accuracy of remote scoring.
- Knowledge of the development of muscles' explosive power of the lower limbs in developing the skill level of hitting the ball to the furthest distance.

3/ Conclusions:

The researcher reached the following conclusions:

- 1 - There were significant differences of statistical significance between the results of the remote tests of the three groups of research and in favor of the training group mixed method in the test of muscles 'explosive force of the lower limbs.
- 2 - There is a statistically significant correlation between the results of the exploratory force tests of the lower limb muscles and the skill of remote tracking accuracy and the three training groups.

Fourth Study:

- The study of Mohammed Abdullah (2000) Mansoura University, Egypt:
"Some vocal groups have improved for boxers to develop skillful performance."

Overall Objective:

- Learn about the impact of the training program on some punching groups of young boxers.
- Identify the relationship between the punching group under test and develop the skillful performance of the emerging boxers.

Methodology:

The researcher followed the experimental approach to the specifications of this approach to study the subject.

Study Sample:

In this study, the researcher needed 30 boxers to carry out the proposed training program.

Suggestions and conclusions reached:

- A) Improve the performance of the groups in the training group.
- B) Improve the performance of emerging boxers in the specific punching groups under test has helped to improve the efficiency of boxers skills in competition.

7. Analysis and discussion of previous studies:

The previous studies are both a basic and a strong support for the researcher. Therefore, they help him in the process of his research from the beginning to the end. The previous studies dealt with the theoretical aspect through the knowledge that they contain. The systematic aspect of research helps determining the dimensions of the problem and collecting methods, data and information, and how to analyze and interpret the results. Most of the studies have agreed on applying the empirical approach because it is compatible with this type of studies.

The first study focused on a proposed training program for the design of advanced punching groups of boxers. The researcher concluded that there is an improvement for the post-measurement over the pre one in the experimental group in the time of punching groups.

The second study focused on the impact of a special physical training program on some of the basic skills of emerging boxers, and concluded that the proposed training program had a positive impact through the development of physical fitness components on some of the basic skills under study and progress as well as the interest in increasing the teaching period of boxers' basic skills. In addition to the application of the proposed training program for the

development of basic motor skills, including the beginners boxers from 12-14 years in clubs, youth centers and all sports institutes to get the desired results. Moreover, carrying out similar studies and scientific research on different samples (youth males and females).

The third study is the effect of training methods on the development of muscles' explosive force of the lower limbs and their relationship to accuracy scoring and hitting the ball to the furthest distance. The researcher used the experimental method to suit his research. The problem of research was that the training of the explosive force type is done randomly and without knowledge of the different methods of development and the absence of studies in the field of football looking at this field and the effect of the muscles' explosive force of lower limbs, the distance and accuracy of the remote scoring. The researcher saw the development of appropriate solutions and found that there were significant differences of statistical significance between the results of the remote tests of the three groups of research and for the benefit of the training mixed group method in the test of muscles' explosive force of the lower limbs .Also, a statistically significant correlation between the results of the exploratory force tests of the lower limb muscles and the skill of remote tracking accuracy and the three training groups.

For the fourth study, which dealt with the improvement of some of the beginner boxers for enhancing the skillful performance, it was able to achieve the performance's improvement of the groups in the training group.

As for the fifth study, the impact of the proposed training program (physical - skillful) on the development appeared in some physical attributes and the effectiveness of the skillful performance of boxers.

The sixth study, which was the study of the impact of training modules proposed to develop the strength of the arms on the effectiveness of handball goal-scoring (shouting), the researcher found that there are significant differences and a significant improvement in favor of the experimental group. Arms strength plays an important role in determining the effectiveness of shouting towards goal .The need to introduce trainers in national and international squares so as to benefit from the modern training methods and keep up with scientific sports development.

In addition to that, the seventh study, which was about the effect of special exercises in the teaching of straight punches and their relationship to the outcome of beginner boxers' results. It has reached the point that the focus on the defensive exercises and linking them with the punching counter against the

boxer as well as increasing the number of repetitions and diversification in performance led to the construction of general mobility programs for performance on the performance of the boxer.

Regarding the eighth study, which focused on knowing the effect of repetitive training of the explosive force of handball players, the researcher concluded that the results of the experimental group of post-tests after the application of the pilot program improved and were better than the control group which did not depend on the training program.

The ninth study was about the effect of special exercises in the method of intensive integration in learning the skill of straight punching, where the researcher used the experimental method and found that the exercises have a positive impact in learning the basic skills of second phase students of Physical Education Faculty .Emphasizing on the correct performance while applying the punching skills which to an increase in the number of correct punches and correct performance

From all what comes above, the samples of the previous studies ranged from 16 to 32 and in their studies they used the experimental method which seemed suitable for their subjects and they followed the appropriate statistical methods for this. They are the tests for how to collect information and statistical transactions from "Student", "Pearson", "Arithmetic mean" and statistical packages (spss).

Employment of previous studies and linking them to the current study:

The difference between the previous studies and the current one, which represents the effect of the use of repetitive training of the arms' explosive force in improving the straight punch of boxers, is that the first study came about a proposed training program for designing advanced punching groups of boxers, while the second study was about the impact of a training program for physical preparation. Furthermore, the third study was about the effect of training methods on the development of the muscles' explosive force of the lower limbs and their relationship between the accuracy of scoring and hitting the ball to the furthest distance. The fifth study focused on the impact of a proposed physical-skillful training program on the development of some physical characteristics and the effectiveness of the skillful performance of male boxer. The sixth study dealt with the impact of training modules. Moreover, the seventh study dealt with the effect of special skill exercises in the teaching of straight punches and their relationship with the results of beginning boxers' fight. The eighth study was aimed at the impact of the repetitive training of

the explosive force of handball players. Finally, the ninth study focused on the effect of special exercises on the method of intensive integration in learning the skill of straight punches.

Points of similarity between the previous studies and the current one are summarized in that, all studies try to understand and determine the effectiveness of explosive power in training and how to improve the punching situation of boxers and the extent of their use during the negotiations and ways to develop them to raise the level of skill before going into the compromises.

In this research we proceed in terms of the previous studies, and from this we focused in this study on what did not focus on the previous studies and therefore our research complemented in dealing with the explosive force of the arms and the extent of improving straight punches through repetitive training with a focus on enhancing the level before and during the defeats.

8. Study Methodology:

Due to the nature of the subject, the researcher adopted the experimental method.

9. Areas of Research:

1 - Spatial field: We have conducted these tests on the team Olympic M'sila in the multi-sports hall BourezgAbd El Hamid / M'sila and The sports club for beginners "Martyr Rouabhi" in HammamDalaa "

2 - Time domain: After determining the subject of the study by the department, we began working in this study at the beginning of November 2014 and it was bibliographical, while the tests of the groups (witness and experimental) was:

- Pre tests January 27, 2016.
- Post tests 05 April 2016

A practical training program has been conducted for 03 months, 02 sessions per a week .the main training was about explosive force of arms.

The force of the training was from 70% to 95% in a period of time between 03 seconds and 02 minutes. Repetitions were from 1 until 30.

Number of sessions: 24 practical sessions.

The sample used "look at graph 01"

10.Data collection tools:

The step we have taken in our studies is to develop means to help distribute the aspects of research, namely, gathering information from various sources and references, in order to understand the theoretical aspect.

Our research also depends on the battery of physical tests to measure the strength of the arms and technique to measure the effectiveness of punching conducted on the samples (control and experimental) in the form of pre-test

and post-post and the use of training modules in the form of exercises contribute to the development of the strength of the arms subject to the experimental group in question.

A / Observation and experimentation: where we made observations of the phenomenon and this formulation of hypotheses and then we conducted the experiment in order to verify its validity.

B /Tests used:

First test.

Second test.

Third test.

Fourth test.

Fifth test.

They are based on the following items:

- Show tests.
- Purpose of the test.
- Performance Method.
- the rules.
- Registration.

11. Survey Study:

The preliminary study included a series of steps summarized below:

- Preview of the club (hall) in order to review the training process.
- Identify the practicing players.
- Adjust the tests for the strength of the arms and the punching skill and effectiveness.
- Contact the club coach to provide the means to perform these tests.

The aim of the exploratory study was as follows:

- Identify the obstacles and problems that can face us during the basic study.
- Identify the accuracy and transparency of tests.
- The best way to conduct tests.
- Choosing the appropriate methods to explain the stages of the tests, and dealing with the various statistical equations used for the calculation, so as to facilitate the method of work in the basic study.

1 - Spatial and temporal domain:

A. Spatial domain:

We conducted these tests on the sports club of the boxing amateurs "Rouabhi" of Hammam Dala province / M'sila, so we randomly selected 20% of the original sample for the survey experiment.

B. Time domain:

After the study was determined by the administration, the study started in early November 2015. This was done in the bibliography. The tests were conducted on January 10th, 2016 and were repeated on January 26th 2016.

12. Psychometric properties of the instrument:

Table (01): shows the results obtained in the sample surveys.

Tests	Stability of tests	Honesty of tests	Subjectivity of tests
Test of hitting on a punching bag for 30 seconds.	0.97	0.98	1
Test of hitting on the punching bag for 1 minute.	0.97	0.98	1
Test of repetition on the straight punching skill during a round of 20 minutes	0.97	0.98	1
Slope test	0.99	0.99	1
Medical Ball Pushing Test	0.99	0.99	1

13. Presentation, analysis, discussion and interpretation of results:

Table (01): The results of the pre-test and post-test of the control group in the test of hitting on the punching bag for 30 seconds.

	The statics medium	Deviation standard	T. calculated	T. tabular	significance at the level of 0.05
Pre test	19	2.16	- 1.73	3.18	Results not statistically significant
Post test	20.5	1.29			

Table (02): Shows the results of pre and post tests for the experimental group in examining the hitting on a punching bag for 30 seconds.

	The statics medium	Deviation standard	T. calculated	T. tabular	significance at the level of 0.05
Pre test	19.5	1.29	5.42	3.18	Results not statistically significant
Post test	24.75	2.95			

Table (03):The results of the post-test for the experimental and the control groups are shown in the test on a punching bag for 30 seconds.

	The statics medium	Deviation standard	T. calculated	T. tabular	significance at the level of 0.05
The experimental group	24.75	2.95	3.96	3.18	Results not statistically significant
The control group	20.5	1.29			

Table (01): From the comparison of the results we can notice that, the statics average of the test sample for the pre-test in the 30-second punching test was 19 and the deviation standard was 2.16. As the table shows, the statics medium

of the post-test was 20.5 while the deviation standard was 1.29 and the T. calculated at the significance level 0.05 was found to be equal to 1.73. In comparison to the T. tabular of 3.18, the T. calculated is less than the T. tabular. This means that the results are not statistically significant. This difference explains why there is no improvement between pre and post tests of the two samples (experimental and witness groups) in the hitting on the punching bag for 30 seconds.

In Table (02), the comparison of the results showed that the statics medium of the 30 second punch test for the pre-test of the experimental sample was 19.5 and the standard deviation was 1.29. As shown in the same table, Was equal to 24.75 and the deviation standard was 2.95. Taking into consideration the E. calculated at the level of 0.05, we found that it was equal to 5.42. Compared to the E. tabular, which is equal to 3.18, the E. calculated is greater than the E. tabular. It means that there are statistically significant differences. this explains the existence of improvement between the pre and post tests for the experimental group in the hitting on the punching bag for 30 seconds.

Table (03), shows that the statics medium of the experimental sample for the post-test in the 30-second punch was 24.75 and the deviation standard was 2.95. We found from the same table that the statics medium of the post test equals 20.5 and the deviation standard was 1.29. taking into consideration the E. calculated at the significance level of 0.05 we found it to be 3.96. In comparison to the E. tabular which was 3.18, we deduced that the E. calculated is greater than the E. tabular. This means that there are statistically significant Differences in the post test result of the two samples (experimental and witness) in hitting the punching bag for 30 seconds for the experimental group.

14. Conclusions:

This study is only a simple attempt confined to the available possibilities. However, we would like to give a starting point for further research in this field, which is particularly missing in boxing. The results of this study showed the importance of straight punching skill. We can give some conclusions and suggestions that can be used by coaches, sports officials of clubs and boxing teams.

1. The use of repetitive training of the arms explosive force has a statistically significant effect on improving the straight punch of the boxing players in favour of the post tests for the experimental group, while there were no significant differences in the remaining tests of the witness group.

2 - There were statistically significant differences in the tests between the experimental and witness groups in favor of the experimental group using repetitive training of the arms explosive force, which confirmed the idea and validity of the exercises included in the trainer's training memoires.

3. There is a clear and significant effect between the arms explosive force o and the effectiveness of the straight punch skill of the research group (experimental group).

4 - The development of skill performance through the combined exercises leads to enhancing both, the level of skill and physical level. In addition to economy in the effort made through the results of the research obtained by statistical indications at the level of physical training (explosive power) and training skills (straight punch), both have positive relationship.


15.Suggestions:

- ✓ We wish to give great importance to both the skill of straight punch and the beginner boxers, which is the basic stage to consolidate skills, achievements and experiences.
- ✓ Also give much importance to sports practice and physical activity in a teenager's life.
- ✓ We hope to devote theoretical classes to teaching and explaining the stages in which the skill of the straight punch is developed. Moreover, clarifying that the sports of boxing is a noble sport despite its toughness and even give a simple theoretical aspect about the courses that are programmed at the level of the Institute of Science and Technology for physical and sports activities.
- ✓ It would be great if trainers in get in national and international formations to benefit from modern training and keep up with the sports development in scientific ways.
- ✓ We suggest to introduce some audiovisual means (video, camera, ...etc.) so that boxers would have an idea about how to train on the skill of straight punch.
- ✓ We also suggest relying on baseband configuration and continuity policies in order to create a rising new generation.
- ✓ We propose to provide the players with the various available means of practice, gears, accessories and all the possibilities so that to develop their abilities.
- ✓ Consider the huge youth energy that the country is rich of and exploit it in various sports, by discovering and encouraging individual sports not just collective ones.

Last but not least, we hope that the level of sports in general and particularly boxing in Algeria will return to the level it used to be in order to raise the national colors in the various international sports events.

<p>Session: one Day:</p> <p>Place: Martyr Rouabhi / Hammam Dalaa</p> <p>Boxing Club for Beginners</p> <p>Coach :</p> <p>Means: siren, chronograph, punchingbags, training gloves, boxing ring, mouthguard, headprotector, boxingpad .</p> <p>Length: 1 Hr and 30 Mins.</p> <p>General Objective: To develop musclessabilities and muscle functioning and joint.</p>
<p>General Objective: To develop muscle and muscle functioning and joint.</p>

Stages		Objectives	Exarcices	Durati on	Training diagram
The preparatio n stage	Takin g hand stage	Psychologica l preparation	-Calling. -Explain the method of work. -Training objective.	05 Mins.	
	Startin g	Respiratory and circulatory heating	-Runingaround the playground, do top and bottomheaters. - Rotate the arms in the form of a circleforward and thenbackward. - Running with the knees raised then lifting the thigh to the outside and then to the inside ... etc.	15 Mins	
The basic stages		Training the development of muscles and muscle functioning and participation.	Exercise 01: The boxer holdseach hand with a boxing pad and performs the motorskills on the boxing ring. - Performdifferentpunchings kills. Exercise 02: From the basic boxing position, the boxer stands in front of the suspending pouch, then moves around a punching bag with different straight and curved punches while keeping the stand.	10 min 15 mins 07 mins	

		<p>Exercise 03: Cancer Walk: Inverted sloping, walking on the feet and hands to the back (repetition 4 times, rest time 30 sec).</p> <p>Exercise 04: Worm Walk: Move the feet forward slowly in the direction of the hands with the knees straight (repetition 5 times, rest time 30 sec).</p> <p>Exercise 05: sloping and full flexion (repetition 6 times, rest time 30 sec).</p> <p>Exercise 06: In the boxing ring, boxers do the real match on the basis of competition while listening to the coach's instructions and diversifying punches</p>	<p>07 Mins</p> <p>06Mins</p> <p>10 Mins</p>	<p>Integrate dexercises.</p> 
The final stage	Return to normal	Light walkaround the hall. Muscle extension	10 Mins	

List of references :

- ❖ Abd El Hamid Ahmad: "Boxing", publishing house of the Egyptian universities, Cairo, Egypt 1973.
- ❖ Messaad Ali Mahmoud: "The entrance to the science of sports training", house of printing, publishing and distribution, Mansoura, Egypt, 2000.
- ❖ Abd El Basset Djamel: "Developing the physical preparation for beginner boxers", PhD thesis, Faculty of Physical Education for Boys, Zagazig University, Egypt, 1997.
- ❖ Said DjamelAbd El Fattah Al-Ashqar: "The Effect of Developing Motor Skills on the Effectiveness of Skill Performance for Boxers", PhD Thesis, Faculty of Physical Education, Department of Sports Training, Mansoura University, Egypt, 2010.
- ❖ Kamal EddineAbdErrahmanDarouish and others., "Measurement, Evaluation and Analysis of Handball Match", First Book , center for Publishing, Helouan University, Cairo, Egypt, 2002.
- ❖ Mohammad Hassan Allaoui, Mohamed Nasr EddineRadouane: "Scientific research in the field of sports" ,Arab Thought House, 1987.