

## **The effect of a program by using the intensive and distributed manners on the motor memory and improve some skill in the fencing sport**

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### **The introduction and the research problem:**

The fencing sport is characterized currently by the continuous progress in all physical and technical aspects. Since its existence and after each global or Olympic championship, we find something innovative in the shape and the methods of the performance, whether regarding the planning or the skill aspect as well as the remarkable development in the progress of the physical level in and the materials of the game rules.

The teaching methods used by the teacher are considered one of the most important practical educational aspects with the aim of reaching the best results with a group of teachers with the least effort to ensure the continuity of learning and to acquire the knowledge, physical and motor aspects for achieving the teaching and educational goals (3:20).

The main principal which defines the learning process through the distributed method and the intensive method is the rest times between one exercise and another or between the repetitions of each extensive exercise in which the rest periods are reduced or cancelled (16:91).

Both **Essam Metwali (2012)** and **Mohsen Ismail (2014)** mentioned that teaching is not limited to one manner or way, since there are various ways and methods to improve and develop the educational process including, but not limited to, the concentrated teaching (9:22) (9:75)(51:21).

Abu Al Naga Ezz Al Dien (2001) mentions that the concentrated teaching means the training for concentrated continuous periods for a certain time in order to teach a skill (4:9).

Both of **Nahgham Hatem (2001)** and **Schmidt**

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(2000) mentioned that distributing the time on practicing the learning exercises is considered as one of the important and basic factors that help in the accuracy of learning to perform the skills by using the intensive training which is performed by the learner continuously with a short time of rest during performing the required skill. This means that the learner performs the skill training in a limited time with increasing the number of the training attempts (22:215) (27: 413-416).

As for the distributed training, it is a consecutive series of training and rest in which the time of training is equal to the time of rest or more, for example, if the time of training is (30) seconds, the time of rest will be (30) seconds or more (16:29).

**Abu Al Ngga Ezz Al Dien** (2001) indicates that the distributed training is the training in which the intervals between the training attempts are equal or more than the time taken for fulfilling each attempt. This means that the distributed training includes enough rest times between the repetitions (4:21).

The motor memory is considered as one of the mental processes which are responsible for storing the motor models, keeping and restoring them. The visual imagination may help in remembering the consequence of the motor models in a whole. The motor memory makes it is possible to the body to organize the movements easily and rapidly. The deep feeling with the movement is considered as an important part of the sensitive background for each type of the movement types. If the teachers suffer from some problems in the motor memory, they may face some problems in teaching and learning the skills. Gary Dean defines the motor memory as "the ability to remember a consecutive series of motions and acts" (21:74).

Through the researcher reading to the scientific references and researches she found out that there are some manners which were used in teaching the basic skills in the fencing sport. The researcher sees that each educational methodology must be measured by an educational manner that relates to the requirements of the skills to be

learned with a little time and effort to get the best results. For example, the curriculum of the third grade in the fencing sport includes "the counter attack and the resumed attacks". These skills need to more repetitions to reach the excellence and they don't need to long times to be learned, since the student of the third grade has the main base of the skills for the fencing sport. Thus, the researcher has designed an educational program with using the intensive and the distributed manner since it is proper to the requirements of the curriculum of the third grade in order to upgrade and improve the level of the students with putting in mind that the shortness of the term period leads to reducing the opportunity of performing more repetitions to reach the excellence and stability. It is a system that doesn't achieve the ideal performance in learning the skills and the mechanism with the proper technical performance, this in its turn, affect negatively on the skillful level of the students. The researcher noted this through her teaching to the students and she also noted that the students don't keep their skillful

memory because of the lecture's time (once a week), since the motor memory is considered one of the important mental abilities that affects the progress of the educational process and the performance development. Accordingly, the researcher called for thinking about using the intensive and the distributed manners inside the educational unit in order to recognize its effect on the skillful level and the level of the motor memory for the students.

#### **The aim of the research:**

– This research aims to design an educational program with using the intensive and the distributed manner and Recognition the effect it on the motor memory and improve some skill of the students at the third grade in the fencing sport.

#### **Research hypotheses**

1- There are significant differences between tribal and dimensional measurements first experimental group used the distributor method in motor skills and some memory variables for the students of the third year in the sport of fencing in favor of telemetric level

2- There are significant differences between the measurements and the tribal posteriori second experimental group that used intensive method in motor skills and some memory variables for the students of the third year in the sport of fencing in favor of telemetric level

3- There are significant differences between the tribal and the dimensional measurements of the control group used the traditional method in motor skills and some memory variables for the students of the third year in the sport of fencing in favor of telemetric level

4- There are significant differences in the dimensional measurements between the first two groups (intensive method) and experimental II (distributor) in the kinetic memory level and the level of performance skills among students third year in the sport of fencing

#### **The plan and the procedures of the research:**

#### **The methodology of the research:**

The researcher has used the experimental methodology through designing three groups, two experimental

groups and one control group with the pre and after measurement for the nature of the research.

- The first experimental group used the concentrated education with the manner of the intensive training.
- The second experimental group which used the concentrated education through the manner if the distributed training.
- The control group used the followed education with the order manner.

#### **The sample of the research**

The sample was chosen with the random intentionally way from the students of the third grade at the faculty of physical education for girls in Cairo during the second term of the school year 2014\ 2015. The sample was chosen from the sections dedicated to the researcher who teaches these sections according to the curriculum. The sample included (36) female students, 12 students for each group after removing the players at the clubs and the injured students who don't attend the application, in addition to (20) students from the society of the research and outside the main sample and for calculating the

scientific coefficients of the tests (the truth- the stability) and the exploratory experiment.

**A- The skillful tests:**

- 1- The test of speediness and the accuracy of stretching the armed arm.
- 2- The test of speediness and the accuracy of the extroverting movement.
- 3- The test of progress speediness.
- 4- The test of the fallback speediness.
- 5- The test of extending the arm on the overlapping circles.

**B- The test of the skillful performance of the skillful movement**

The level of the skillful performance of the counter attack was calculated (the stop beat- the time beat) and the level of the resumed attack ( the complement- the readiness- the repetition) in the fencing sport by dividing the degree for each skill separately according to its stages, so the degree of the performance consists of (3) points for each skill (the counter attack- the resumed attack).

**C- The test of the motor memory:**

After reading the studies and the researches that addressed

the measurement of the motor memory in the sports activities, the researcher has designed the test of the motor memory, annex (5), it is a certain skill in the fencing sport alongside a defined number of the skills with a certain consequence. The researcher has shown them to some experts specialized in the fencing sport and psychology, whose names are mentioned annex number (1), for defining the number of the skills proper for the test and the way of calculating the final degree of the test. The number of the skills was amended according to the experts' opinions, so the test is found in its final form, annex (6).

The test consists of (8) skills, one (1) degree is given for the correct technical performance of each skill and one (1) degree is also given for the consequence of the skills, so the final degree of the motor memory test is (16) degrees.

**The educational methodology:**

The sample is subject to an educational curriculum by using the concentrated education through the manners of the intensive training and the distributed training. The

units of this curriculum have depended on the skill of the counter attack and the resumed attack in the fencing sport. So, the manner of the intensive training was applied to the first experimental group and the manner of the distributed manner was applied to the second experimental group. The aspects that relate to execution of the methodology was fixed except the manner used for each group.

### **The way of applying the educational unit:**

In the light of the exploratory experiment, the repetitions of the trainings for each skill were put in each educational unit for developing the skill during applying the educational unit.

As for the way of executing each manner, it was through the following way:

#### **1- The group of the intensive training manner:**

in this manner, each student performs (5-8) attempts for the (stop beat- the time beat) inside

the counter attack and (the complement- the restoring- the repetition) inside the resumed attack continuously without any rest between each repetition. After finishing her work, the student takes a rest with a time mean about (30) seconds, then, she begins the other performance (from 5-8) attempts.

#### **2- The group of the distributed training:**

During this manner, each two students work together. The first student performs the skill of the counter attack- the resumed attack once and waits, then, the second student performs the same training. The time during which the first student waits is considered as the rest time for her, after that, the first student performs the training for the second time, and so on till the two students finish the number of attempts.

#### **Showing and discussing the results of the research**

**First: showing the results of the research:**

**Table (1)**  
**The significance of differences and the percentage of change**  
**between the two pre and after measurements of the first**  
**experimental group (the intensive) in the variables of the research**  
**(N= 12)**

The variable	Unit of measuring	Pre measurement		After measurement		Mean of difference	Deviation of difference	T value	The significance	Percentage of change
		The mean	S.D	The mean	S.D					
The counter attack	Degree	1.11	0.15	2.05	0.21	0.94	0.84	3.98	Significant	84.60%
The resumed attack	Degree	1.18	0.21	2.07	0.25	0.89	0.21	3.87	Significant	75.42%
The motor memory	Degree	8.88	0.98	14.85	0.17	5.97	0.11	3.47	Significant	67.22%

\* The table value of (T) at the level of significance (0.05)= 1.821

Table (1) shows that there are differences with a statistical significance between the means of the pre and after measurements in the level of the counter attack and the

resumed attack of the students at the first experimental group (the intensive manner), since the table value of (T) was bigger than its calculated value at the significance level (0.05).

**Table 2**  
**The significance of differences and the percentage of change**  
**between the two pre and after measurements of the second**  
**experimental group (the distributed) in the variables of the**  
**research (N= 12)**

The variable	Unit of measuring	Pre measurement		After measurement		Mean of difference	Deviation of difference	T value	The significance	Percentage of change
		The mean	S.D	The mean	S.D					
The counter attack	Degree	1.18	0.14	1.75	0.14	0.57	0.35	2.84	Significant	48.30%
The resumed attack	Degree	1.13	0.11	1.82	0.18	0.69	0.84	2.62	Significant	61.06%
The motor memory	Degree	8.97	0.65	11.98	0.32	3.01	0.44	2.55	Significant	33.55%

\* The table value of (T) at the level of significance (0.05)= 1.821

Table (2) shows that there are differences with a statistical significance between the means of the pre and after measurements in the level of the counter attack and the

resumed attack of the students at the second experimental group (the distributed manner), since the table value of (T) was bigger than its calculated value at the significance level (0.05).

**Table (3)**

**The significance of differences and the percentage of change between the two pre and after measurements of the control group in the variables of the research (N= 12)**

The variable	Unit of measuring	Pre measurement		After measurement		Mean of difference	Deviation of difference	T value	The significance	Percentage of change
		M	S.D	M	S.D					
The counter attack	Degree	1.11	0.18	1.34	0.12	0.23	0.12	2.44	Significant	20.72%
The resumed attack	Degree	1.15	0.16	1.55	0.20	0.40	0.44	2.18	Significant	34.78%
The motor memory	Degree	8.91	0.74	10.88	0.63	1.97	0.32	2.43	Significant	22.10%

\* The table value of (T) at the level of significance (0.05)= 1.821

Table (3) shows that there are differences with a statistical significance between the means of the pre and after measurements in the level of the counter attack and the

resumed attack of the students at the control group, since the table value of (T) was bigger than its calculated value at the significance level (0.05).

**Table (4)**

**Analyzing the variety among the three groups in the pre and after measurements for the variables of the research N1= N2= N3= 12**

Sr.	The variable	Source of variation	Total of squares	Degrees of freedom	Mean of squares	Calculated value of (F)	Percentage of change
1	The counter attack	Within the groups	11.55	2	3.85	9.85	Significant
		Among the groups	5.85	34	1.95		Significant

**Follow Table (4)**  
**Analyzing the variety among the three groups in the pre and after measurements for the variables of the research N1= N2= N3= 12**

Sr.	The variable	Source of variation	Total of squares	Degrees of freedom	Mean of squares	Calculated value of (F)	Percentage of change
2	The resumed attack	Within the groups	11.52	2	3.84	6.74	Significant
		Among the groups	5.73	34	1.91		Significant
3	The motor memory	Within the groups	46.56	2	15.52	7.81	Significant
		Among the groups	137.55	34	45.85		Significant

Table (4) shows that there are differences with statistical significance among and within the three groups in the variables of the skillful performance and the motor memory.

**Table (5)**  
**The significance of differences between the three groups of the research by using Sheefeh's method( N1= N2= N3= 12)**

Sr.	The variables	The group	The mean	(intensive) T1	Distributed T2	control	The significance	
1	The counter attack	Intensive	2.05		2.58	4.87	0.014	Sig
		Distributed	1.75	--		4.65	0.0032	Sig
		Traditional	1.34	--	2.88		0.0085	Sig
2	The resumed attack	Intensive	2.07		2.98	4.69	0.024	Sig
		Distributed	1.82	--		4.61	0.0325	Sig
		Traditional	1.55	--	2.98		0.0025	Sig
3	The motor memory	Intensive	14.85		2.97	3.88	0.047	Sig
		Distributed	11.98	--		3.64	0.014	Sig
		Traditional	10.88	--	2.87		0.017	Sig

**The significance is ≤ 0.05**  
 Table (5) shows that there are differences with statistical significance between the three groups (the first experimental

group (intensive)- the second experimental group (distributed)- the control group (the followed) and the results were as follow:

**There are differences with a statistical significance between:**

- The first experimental group and the second experimental group for the interest of the first group in all variables.
- The first experimental group and the control group for the interest of the first group in all variables.
- There are differences with no statistical significance between the second experimental group and the control group in all variables.

**Discussing the results**

Table (1) shows that there are differences with a statistical significance between the means of the pre and after measurements in the level of the counter attack and the resumed attack of the students at the first experimental group (the intensive manner), since the table value of (T) was bigger than its calculated value at the significance level (0.05). The researcher attributes this improvement to the proposed

program of the intensive learning.

The researcher sees that these trainings (intensive) has a positive effect in developing the skillful performance of the skills, and this helped in showing a clear progress in the performance level for the three groups but with different rates. This indicates that the used trainings with the three manners were proper to the sample's level. This also was indicated by Layth Gassem (2010) (14) that the natural phenomenon of the learning process must witness a development in the learning as long as the teacher follows the sound steps of learning and teaching inside the training and educational units (14: 102).

The researcher attributes this result that the experimental group (the intensive manner) has learned according to the exercises prepared by the researcher. Since the regular training or learning can lead to positive results and making changes in the educational process. This means that the exercises have led to the progress of performance. Moreover, using the intensive manner of training makes the opportunity for learning and

being excellent in a certain skill by the continuous repetitions and exploiting the time of the educational unit, which in its turn will led to the progress and development of the students' level.

**Raafat Abdel Hady** (2009) (23) indicates to the affectivity of the skillful level as result of the intensive manner. A study conducted by Ameer Mohammed Ameer (2011) (6) indicates that using the proper feedback during correcting the learner's mistakes and the ideal usage of the available tools led to improving the level clearly. Moreover, the clarity of the goal and its harmony with the level of the students has improved the performance level.

**Ameer Mohammed Ameer** (2011) (6) also emphasizes that the clarity and defining the goals in behavioral forms relate to the skillful performance will make them meaningful (5:22). This study is in accordance with the results of the study conducted by Rashad Yousef (2008) (25) which indicated that the intensive manner makes it is available to the learner to conduct the actual performance of the skills with consecutive repetitions and

correcting the mistakes by the researcher and this leads to developing the correct motor path of skill through the educational program of the field skills. Thus, the manner of the intensive training is very important for being excellent in learning the basic skills of the game.

Rasha Nageh (2015) sees that the intensive training is the manner which is used continuously by the learner for fixing the required skill with giving very short time for rest. This means that the learner performs the training in a defined time with increasing the number of attempts (24:215).

The researcher attributes the importance of the intensive training that is intervened by little time for rest or sometimes without rest. This increases time learning, since Rashad Tarek (2008) indicates that the intensive learning means the existence of repetitions with a short time of rest or without rest (25:34).

**Schmidt** (2000) (23) emphasizes that the teachers and trainers must encourage the trainees to perform the most possible number of trials of training (27: 206).

Thus, the first hypothesis of the study is achieved which indicates to the effect of the intensive manner on the level of the motor memory and some skillful variables of the students of the third grade in the fencing sport.

Table (2) shows that there are differences with a statistical significance between the means of the pre and after measurements in the level of the counter attack and the resumed attack of the students at the second experimental group (the distributed manner), since the table value of (T) was bigger than its calculated value at the significance level (0.05). the researcher attributes this improvement to the proposed program of using the distributed learning.

This was assured by the study conducted by Ma'azen Abdel Hady (2003) (16) which indicated that distributing the lesson aims on the educational unit and allowing with rest periods for the feedback in manner of education which is called the manner of the distributed education. The results of the study conducted by Loway Hussine (2000) (15) indicated to the excellence of the concentrated education by

using one skill about the followed program, since the concentrated education increases the opportunity for understanding what is included in this one skill with achieving the excellence and stability of the performance. This is also agrees with the results of the study conducted by Ameera Mohammed Ameer (2011) (6) which indicated that the brain ability to understand one skill in one hour is better than its ability to understand three different skills in the same time.

Ra'fat Abdel Hady (2009) (23) indicated that during the distributed training, there are rest periods among the trainings, so, if the rest periods are very long, then, the students may forget a lot of things they have learned and this makes the learner begin to the learn the things again.

Thus, the second hypothesis is achieved which indicates that there are differences with a statistical significance between the pre and after measurements of the second experimental group which used the intensive manner in the level of the motor memory and some skillful variables for the

interest of the after measurement.

Table (3) shows that there are differences with a statistical significance between the means of the pre and after measurements in the level of the counter attack and the resumed attack of the students at the control group, since the table value of (T) was bigger than its calculated value at the significance level (0.05). The researcher attributes this result to the regular attendance of the research sample to the scientific lectures.

The researcher sees that this result may result from the gradual exercises, from the easy to the difficult and from the simple to the compound. The researcher also has corrected the mistakes immediately on their occurrence. Moreover, the repetition of performing the skill by the students will also lead to learning the skill properly and this affects positively on the efficiency of the skillful performance. In addition, the group learning will motivate the students towards the competition for showing the excellence of each student and this makes them

performing the skills as best as possible.

This agrees to the results of the study conducted by Ameera Mohammed Ameer (2011) (6) and Ra'fat Abdel Hady (2009) whose results revealed that the traditional manner which depends on the verbal explanation and performing the practical model has lead to understanding the motor skills and learning them positively.

This also agrees with the results of the study conducted by Rasha Nageh Ali (2015) (24) which indicated that using the traditional manner which depends on the instruction manner has affected positively on the level of the physical performance and the skillful performance of the teachers.

Accordingly, the third hypothesis is achieved which stipulates that there are differences with statistical significance between the pre and after measurements of the control group which used the traditional manner in the level of the motor memory and some skillful variables of the third grade, the differences were for the interest of the after measurement.

Table (4) shows that their differences with a statistical

significance between the pre and after measurements of the three groups separately for the interest of the after measurement in the skills of the counter attack, the resumed attack and the level of the motor memory in the fencing sword.

The same tables also show that there are differences with statistical differences between the pre and after measurement of the two experimental groups in the level of the skillful performance and the motor memory for the interest of the after measurement. The rate of change for the first group ranged from 33.55 to 61.06. As for the control group, the rate of change ranged from 20.72 to 34.78.

The researcher attributes these differences to the effects of the used trainings (the manner of the extensive training- the manner of the distributed training- the manner of the followed order), since these trainings have an affective effect on developing the skillful development of the skills of the research for the research sample. This helped in showing an obvious development in the performance level of the three

groups but with different rates. This indicates that the used trainings with the three manners were proper to the level of the sample and they were executed in proper and regular way.

This was indicated by **Rasha Nageh (2015)** who indicated that it is naturally to the learning process to be developed as long as the teacher follows the basic sound steps of teaching and learning inside the training and educational units (24:102).

The researcher agrees with Rola Meqdar Abied (2010) that the learner learns the most of the scientific concepts through the study which depends on using certain manner which ease the learning process, accordingly, there will be an interaction between the teacher and the student, and this in its turn, will reflect the teacher's behaviors on the student's ones. The responsible for the scientific process helps the students, through his knowledge and potentialities, to upgrade their scientific interests in regular way towards performing the required tasks. The curriculum also plays an important role in organizing the scientific

material gradually and this helps in learning the required material (26:41).

The researcher also attributes the excellence in the after measurements in the three groups (the intensive- the distributed- the followed) that students studied the educational units according to the curriculum organized the faculty under the supervision of the researcher, since the three groups of the research studied the three skills of the research and this led to a remarkable development in the skillful performance and the level of the motor memory. Moreover, the learning by using the three manners helped the students to reach the defined goal.

**Loway Shaker (2000)** indicates that the training is a set of sports movements that are repeated in a defined and organized way which aims to acquiring the correct motor performance (15:5).

**Ma'azen Abdel Hady (2003)** also mentioned that the time in which the teacher gives the instructions to the learners is considered as a part of the training, and the learner must be excellent in the required performance through

imagining the performance which will come through the feedback in order to be fixed and stable in the memory till reaching the skillful performance (16: 67, 68).

This study agrees to the results of the study conducted by **Layth Ibrahim (2010) (14), Ma'azen Abdel Hady (2003) (16) and Nagham Hatem (2000) (22)** which indicated that the extensive and the distributed training have a positive effect on developing the skillful performance of the research sample.

These two manners developed the level of the motor memory, and the researcher interprets this by indicating that the proper performing of the skill has led to improving the level of the motor memory in the performance which is related to many factors such as the education, training and the experience. These factors lead to the harmony in the skillful performance, thus, the fourth hypothesis is achieved which indicates that there are differences with statistical significance in the after measurements between the first group (the extensive manner) and the second experimental group (the distributed manner)

regarding the level of the skillful performance and the motor memory of the students at the third grade in the fencing sport.

Table (5) of analyzing the variation among the three groups shows that there are differences with a statistical significance among and within the three groups in all variables. It also shows the results of significance regarding these differences according to Shefeet's way in table (6) which shows that there are differences with a statistical significance in the level of the skillful performance and the psychological dimension (the motor memory) for the interest of the first experimental group which was developed according to the manner of the extensive training. Then, it was followed by the second experimental group which was developed according to the manner of the distributed training, then the control group which was developed according to the followed methodology.

The researcher attributes these results that both the experimental groups have learned according to the

trainings prepared by the researcher, since the regular training or learning may lead to positive results and making changes in the scientific process. This means that the trainings have led to the performance development, moreover, using the concentrated teaching with the manner of the extensive training makes it possible to concentrate on the learning with excellence and skillful way, which in its turn, will lead to the development of the students' level.

**Abu Al Naga Ahmed (2011)** (4) indicates to the effectiveness of the skillful level according to the concentrated manner. He also indicated that using the proper feedback during correcting the learner's mistakes and ideal usage of the available tools have led to rapid and obvious development. Moreover, the clearness of the goal and its harmony with the level of the students has improved the level of performance.

**Gamal Al Qassem (2000)** emphasizes that the clarity of goals and defining them in a behavioral images of the skillful performance will make them meaningful (177:10).

The results of this study also agree to the results of other studies which indicated that the extensive manner creates the opportunity to the learner for the actual performance of the skill through consequent repetitions.

Moreover, correcting the mistakes by the researcher will develop the correct motor path of the skill through the educational program of the extensive and the distributed attack, since the extensive training is very important in learning the skills of the game.

The researcher attributes the importance of the extensive training, which includes some rest periods or without any rest, that it will increase the periods of the learning process, since the extensive training means that there are repetitions without rest or with a short time for rest as it was emphasized by Schmit (2000) (29).

It is the duty of teachers and trainers to encourage the learners on performing the largest possible number of trials (28:206)

Schmidt also (1999) indicates that the exercise is a motor performance or duty that is performed repeatedly for

learning an acquired skill (27:172).

This comes in accordance with the results of the studies conducted by both **Layth Ibrahim (2010) (14)**, **Maa'azen Abdel Hady (2003) (16)** and **Nagham Hamed (2000) (22)** which indicated that the manner of the extensive training affects positively on the skillful performance.

Table (5) of analyzing the variation shows the differences between the after measurements and the significance of the differences among the groups for the interest of the control group which used the followed manner (the command manner).

The manner used in this study is the one in which the teacher is the only person who makes the decisions and the student must only obey his commands. This means that the role of the student is according to the purpose or the model presented by the teacher, accordingly, all decisions, regarding the position or the time of beginning the training is made by the researcher. Moreover, the creative aspect is decided

by the teacher with no relation to the student (18:141).

Accordingly, the fourth hypothesis, which stipulates that there are differences with statistical significance in the after measurements between the first experimental group (the extensive manner) and the second experimental group (the distributed manner) in the level of the motor memory and the level of the skillful performance of the students in the fencing sport, is achieved.

#### **The conclusions:**

1- Using the concentrated education with the manners of (extensive- the distributed) training and the followed manner has affected positively on the level of the skillful performance of the resumed and counter attack.

2- Using the concentrated teaching with the manner of (the extensive- the distributed) training has affected positively on the variable of the motor memory.

3- There are differences with a statistical significance between the pre and after measurements of the research groups regarding the excellence in learning the skills of the counter and resumed

attack for the interest of the after measurements.

4- There are differences with a statistical significance among the three groups in the after measurements for the interest of the extensive training.

#### **The recommendations:**

1- Emphasizing on using the manner of the extensive training in learning the skill of the counter and resumed attack.

2- Paying attention to the principal of increasing the repetitive trials for increasing the speed of learning the fencing skills.

3- Using explaining means during the teaching process plays an important role in the learning process.

4- Using the feedback during the learning is very useful in correcting the errors and improving the level of the motor memory.

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