Mental training using NLP to develop the level of achievement of first-class players in the sport of boxing

Ahmed Abdel Hamid Ali Zahran

Lecturer, Department of Theories and Applications of Fights and Water Sports, Faculty of Physical Education, University of Sadat City

First: the problem of research and its importance

Mental training has become one of the strategies of training technology, which receives great attention from many specialists in this field because of its positive and effective role in developing the level of motor performance, especially after mental and psychological skills have become very important in improving the level of performance and agree both Martens Martens andUnestal The training of some mental skills such as muscle relaxation and mental, stress regulation, mental perception, concentration of attention, self-confidence and other mental and psychological skills must go hand in hand with training on the elements of physical fitness and motor skills through long-term preparation and that the omission of such a dimension reduces the chances of reachinghigh sports levels. (5 : 20)

Mental training is located as one of the dimensions of cognitive training, as it plays an important role in learning and acquiring skills, as well as it represents one of the main parts in preparing the player to enter the competitions, as it includes the perception of movement and the sequence of skills, situations, goals and all dimensions of the competition from referees, stadium, tools and devices. (39 : 2)

Sports scientists also see the need to integrate mental training programs into general sports training programs, where bothUnestal (1985) and Nideffer (1996) agree that mental skills training should go hand in hand with training on the elements of physical fitness and motor skills through long-term preparation and that the omission of such a dimension reduces the chances of reaching high sports levels, as stated by "Mohammed Al-Arabi" (2001) that the development of integration between mind and body is the way towards Discover our true abilities and for this to happen the player must have the desire to spend time to train the mind just like the body . (39 : 2)

The results of the studies of Abdel Ali Al-Jasmani quoted by Bura, M (1982) (20), "Magda Ismail and Mohamed El-Arabi" (1982) (25), Nadia Abdel Qader (1987) (51), "Gross C" Growos, G (1992) (60), "Jalila Hassan" (1993) (13), "Ayman Abdel Rahman" (1994) (11) "Singer et al" (1994) (84), "Mohamed Anbar" (1996) (35) "Najla Fathy" (1997) (52), which was conducted in various fields on the effectiveness of the role of mental training in upgrading the level of performance and the importance of integration and integration between the structural and mental aspects to achieve the best achievements.

Osama Kamel Rateb (1995) quotingOrlick confirms the importance of integration between the training of mental skills and daily physical and technical exercise as he sees that mental training has a close link to excellence in sports, this has become fashionable to allocate programs for training psychological skills go hand in hand with the training of motor skills and the development of physical abilities. (5 : 33)

This has pointed out many researchers to the importance of the use of relaxation exercises before visualization, as this leads to facilitate the process of controlling perception, and that accompanying relaxation of perception is more effective than the use of each skill alone as through relaxation enables the individual to direct his attention to the work done by any in the case of attention relaxed attention adds MohammedandDr. Annan quoting "Cox" Cox (1994) that the anxious mind cannot exist in a relaxed body as it is difficult for an individual to be nervous or nervous if part of his body is completely relaxed, in the sense that nervousness and muscle tension and involuntary organs can only be reduced if the skeletal muscles become in a relaxed state (38: 315)

Relaxation training is of particular importance within the programs of high-level players and it has become common for the programs of these players to include a special program to teach and develop the athlete's ability to relax (8: 345)

Many athletes who fail to achieve the best levels of their performance are noted because of the nervous tension and anxiety that accompanies participation in important competitions, which leads to the contraction of all muscles of the body instead of contracting in the muscles of the legacy in the performance of skills only, and the ability of the athlete to relax and keep calm nerves is a very important ability that enables to maintain the optimal level of Nasal excitation (4: 277)

Mohammed Al-Arabi Chamoun (1996) adds that relaxation is the common denominator in all mental training programs and the basic entrance to mental perception and concentration of attention and is usually emphasized on the accessto the level of this skill before entering into any of the other dimensions of mental training, and the extent of mastery of this skill depends on the success and effectiveness of mental training (28: 169)

Mohammed Hassan Allawi (1997) points out that mental visualization is a psychological skill or mental skill that can be learned and acquired in what is known as mental training, mental exercise or mental practice in order to improve and develop the player's performance of motor skills and game plans as a means of psychological preparation for sports competitions or as a method of psychological mobilization for the player (34: 299).

This is not limited to mental perception of previous experiences, but the mind can form new perceptions that have not happened before, when developing a strategy for an upcoming match with a competitor who has not previously played with him, the player usually begins to form several points in the mind, and imagines how to respond to these situations because the human being also has the ability to create mental perceptions of upcoming situations (28: 218)

As both Atef Nimr Khalifa, Mohammed Hamed Shaddad (2000) that mental perception is of great importance, whether this visual-auditory perception or kinesthetic sense as well as the ability to control mental perception, we find that visual and auditory perception play an important role in the players of fights in competitions (18: 7)

Aboulela Abdel Fattah (1997) asserts that training processes improve the strength of neural processes and increase their rates, and that the active mental perception of the performance of certain skills accompanies mental activity by strengthening the nerve pathways of the signals sent from the nervous system to the working muscles. (1: 160 – 166)

Mohamed Lotfi and Wajia Shamandi (1995) point out that the regular mental training of the player in individual fights works to develop and organize many psychologicalfunctionssuch as perception and attention (39: 3).

Attention is currently one of the important topics in psychology and is seen as a complex and diverse field, and this statement is confirmed by "Parasurman" Parasurman (1984) that research in attention includes multiple fields, including cognitive psychology, physiological psychology, developmental psychology and others (28: 254)

Attention is one of the vital dimensions affecting performance in the sports field, although research is still in its early stages, but there are not a few interested in the mechanism of attention under the conditions of competition, but the appropriate framework has not been developed to study the impact of attention on the development of performance, whether in training or competition.

The opinions of some scientists agree that the occurrence of high sports achievements is associated with the presence of the player in the optimal psychological energy area, and it has been found that the most important characteristic is that attention has been directed entirely to the performance of the skill. In this regard, Ndefer points out that attention is a skill that can be learned and developed through training and continuous effort, as the fate of a match is often decided through small mistakes that can often be attributed to a loss of attention concentration. (28 : 258)

Martins believes that prioritizing attention and how to shift attention to competitive requirements, and the degree of intensity or concentration of attention are necessary skills for optimal performance. The importance is also due to the fact that when developing the skill of attention to a high degree of control voluntarily, it is possible to reach the states of alternate consciousness, called the experience of flow in attention, which was found to be positively affected by mathematical achievement.

The sport of boxing is one of the most important Olympic games that Egypt is interested in during this stage because of the achievement at the global and Olympic level by winning three Olympic medals in the Athens 2004 Olympics, in addition to theconsecutivevictories, the last of which was Egypt's achievement of 9 medals in the Arab Championship held in Tunisia in February 2007

Despite the large number of researches and the multiplicity of theTT, they agreed on the importance of accompanying mental training for physical training to achieve a high level of performance in various sports activities, and despite the reference of Cox (1994) that attention should be paid to the ratio of physical training to mental training 75% physical training to 25% mental training leads to better performance (59: 47)

However, the researcher found through the currency of boxing training that mental training programs do not take space, size and sufficient attention in training programs, especially at the level of club teams, which does not allow the player to learn mental training and get used to it and acquire his skills and thus not to benefit from the return ofit in achieving the desired results.

Therefore, the researcher found conducting this study in the field of specialization to shed light on the importance of mental training through the results of research in the results of the actual performance of boxers, hoping that this study will serve as a clear guidance for the coach and the player to pay attention to the side of mental training in its various aspects.

Especially since the sport of boxing depends in some of its components on the so-called imaginative punching Shadow Boxing, which depends mainly on perception to a large degree and not just firing punches or unleashing feet for unstudied movements, if so, this part has lost its importance, but if these moves and punches are based on the basis of perception and feedback, the goal of this part has been achieved in the training unit.

Scientific importance of research:

- The research is a scientific survey wave to find out the most important mental skills that are related to achievement in the sport of boxing.

- Activating the role of mental training in helping the coach to reach the maximum use ofthe player's mental abilities in addition to the structure, skill and tactical abilities during the competitions.

Applied importance of research:

- The proposed training program may contribute to the development of mental skills under research (relaxation
- perception - concentration of attention) in the level of achievement of boxers.
- The results of this study may contribute to activating the role of psychological preparation programs during training and competitions.

Second, the objectives of the research:

1- Designing a mental training program using (relaxation - visualization- attention focus)

2- Identify the effectiveness of the proposed program in developing mental skills (relaxation - perception - concentration of attention).

3- Identify the impact of the proposed program on the achievement of boxers.

4- Identify the improvement rates of the variables under research (relaxation - perception - concentration of attention - level of achievement).

Third : Research Hypotheses

5- There are statistically significant differences between the pre- and post-measurement of the experimental group under research in basic mental skills (relaxation - perception - concentration of attention)

6- There are statistically significant differences between the pre- and post-measurement of the experimental group under research in the level of achievement in the sport of boxing in favor of the post-measurement.

Fourth : Search Terms

1- التدريب العقلي Mental training

It is a sequential training system and includes strategies that use mental skills and employ them in the development of performance at different sports levels and the development of public health. (39 : 6)

The NLP is a science that discovers the inner world of man and his potential and provides us with tools and skills by which we can identify the human personality and the way of thinking, behavior, performance, value and obstacles that stand in the way of creativity and superiority, as well as providing us with tools and ways in which the required positive change can be brought about in human thinking, behavior, feeling and ability to achieve his goals. (39 :68)

1- Research Methodology:

The researcher used the experimental method using one group by pre- and post-measurement for its suitability to the nature and procedures of the research.

2- Research sample:

25 players were chosen in a deliberate manner from boxing players in the first division so that the training age is not less than five years from the governorates of Menoufia for three clubs (Sadat Youth Center - Engineers Club - Al-Salam Club) and three players were excluded for lack of regularity in training.

3- Data collection tools and means:

The tools that suit the nature of this research have been identified through reviewing previous research and studies, and these tools have been divided into the following:

1- Psychometrics:

1- **Intelligence test for Ahmed Zaki Saleh:**

This test aims to measure the ability to perceive similarities and differences between subjects or objects. Annex No. (2).

2- **Relaxation Ability Scale:**

Originally developed by "Frank Vital" Frank Vital 1971 entitled "Your Ability To Relaxation", and prepared his Arabic image "Mohammed Hassan Allawi", "Ahmed Al-Swaifi" 1981 and consists of the scale of 15 phrases provide the opportunity for the laboratory to express his ability to relax muscular and mental voluntary through verbal responses to the phrases of the scale and this scale is valid for both sexes and for all ages. Annex No. (3).

3- Mental perception scale in the sports field:

Prepared by "Mohammed Al-Arabi Chamoun", "Magda Ismail" (1996) entitled "Mental perception in the sports field" and aims to identify the degree to which the player can use the senses during mental perception, and has included two sports situations:

أ- Individual practice

(b) Performance in competition.

This is done through the dimensions of mental perception, which are:

1- Visual visualization
2- Auditory visualization
3- Kinesthetic perception (kinesthetic perception)
4- Emotional perception (perception of the emotional state associated with performance)
5- Visualization control .

Each situation is responded to according to a five-dimensional estimation scale in the first five statements:

1- Lack of visualization
2- The presence of an unclear image.
3- Having a medium resolution image
4- Having a clear picture
5- Having a crystal clear picture. Attachments (4)

4- **Attention concentration test:**

Originally developed by "Dorothy Harris" Dorothy, H to measure the concentration of attention and prepared his Arabic image "Mohammed Larbi Chamoun" (1996) This test consists of a set of numbers starting from zero to ninety-nine inside the boxes presented to the laboratory for one minute and asked to follow these numbers in order of the number that is determined by him by ticking this box, and the number of squares reached at the end of the minute is calculated, taking into account that the number that has been determined consists of Two numbers, and this test is characterized by the fact that it can be presented several times for different starts each time, in addition to the possibility of redistributing the numbers if used several times. Attachments (5)

Scientific transactions of data collection tools:

Calculation of the validity of tests and standards:

The researcher has made the validity and stability of this form on the survey sample of 60 players from outside the basic research sample.

Honesty account

Table (1)
Significance of the differences between the upper and lower quartile of the survey sample
To calculate the sincerity of the tests

n = 60

Variable	Spring	nun	M	on	The value of "T"
Relax	Top	15	47.1333	2.79966	6.805*
	Minimum	15	39.8667	3.04412	
Mental visualization	Top	15	43.3333	0.81650	6.883*
	Minimum	15	39.2000	2.17781	
Focus attention	Top	15	9.0667	1.09978	7.802*
	Minimum	15	5.9333	1.09978	

Tabular value of "T" at a significant level of 0.05 and a degree of freedom of 28 in one direction = 1.701

It is clear from Table (1) that there are statistically significant differences between the upper and lower quartiles in the three variables (relaxation - mental perception - concentration of attention) in the direction of the upper quartile, which indicates the ability of the brother to distinguish and thus the validity of the tests used and their suitability for the sample.

Stability calculation:

The stability of the form under research was calculated by finding the correlation coefficient between the application of this form and its re-application and the researcher took into account the interval between the two applications capacity of 10 days on a sample of 30 players and the results indicated the following:

Coefficient of stability

Table (2)
Correlation coefficient between the first and second application of the tests
To calculate the stability of the tests
n = 30

auditions	Application	M	on	The value of "t"
Relax	First	40.9333	3.64770	0.943*
	Second	46.0667	4.10998	
Mental visualization	First	39.4000	2.25297	0.717*
	Second	43.1333	1.33218	
Focus attention	First	6.1333	1.33218	0.904*
	Second	8.8667	1.33218	

The tabular value of "t" at a significant level of 0.05 and a degree of freedom of 28 = 0.361

It is clear from Table (2) that there is a correlation between the first and second application of the tests under research, which indicates the stability of these tests, and the values of the correlation coefficient between 0.717 and 0.943 have been seen.

Survey Studies:

Assistants:

They are the coaches of the selected clubs and the program, its purpose and method of application have been explained.

First Survey:

The survey was conducted on a sample consisting of (60) players from outside the study sample who are registered within the records of the Egyptian Boxing Federation and apply to them the same conditions as the basic study sample in order to identify the validity of the research tools and organize the method of measuring and testing the proposed program, in order to identify the validity of the training place and avoid any difficulties in the time period from Saturday, 24/1/2019 until Monday, 26/1/2019, and the resultsof the study resulted in On:

1- Validity of tools and place.

2- Identify problems and obstacles.

3- The sample understands the nature of the work.

4- Suitability of the proposed program.

Second Survey:

The researcher conducted the second survey on the same sample of the first survey in the time period from Saturday 31/1/2019 to Monday 9/2/2019 with the aim of conducting scientific transactions, for the questionnaire (relaxation - mental perception - concentration of attention).

Basic experience:

Application of the proposed program for mental training:

Pre-measurements:

The pre-measurements of the research group were made in all the specific variables under study from Saturday 14/2/2019 to Monday 16/2/2019, the necessary data was recorded in the forms and cards prepared for that.

Basic experience:

The proposed international training program was applied toone experimental group from Saturday 21/2/ 2019 to Wednesday, 20/5/2019, i.e. for a period of twelve weeks, with three training units per week and an average of 30 minutes according to the set plan. The training for the research group is carried out on (Saturday, Monday and Wednesday) of each week.

Dimensional measurements:

The dimensional measurements of the research group were carried out in the selected variables according to the following order: (relaxation - mental perception - concentration of attention - level of achievement) starting from Saturday 23/5/2019 to Saturday 30/5/2019 taking into account the same conditions and conditions that were followed in the prior measurements.

Psychological Skills Training Program

Psychological skills training program

Through the study of mental training programs and psychological skills that were mentioned in specialized references and previous studies, the researcher developed a program to train psychological skills, a program that specializes in training on several important psychological skills "mental", namely:

1- Relaxation

2- Mental visualization

3- Focus attention

The researcher used two important steps before preparing the program:

- Determining the goal of the program, which is training on the psychological skills of the players, which are (relaxation - mental perception - concentration of attention) and that the content of the program serves the main objective of the research, which is to improve the level of performance.
- Reviewing the scientific references and previous studies that indicate the goal set for the program in terms of program time, weekly dose and daily training dose time.

Program Objectives:

The proposed program for training on psychological skills associated with learning difficulties in technical and tactical skills aims to:

- Develop the level of performance of the ability to relax, themental perception, concentration of attention.
- Developing the level of performance in technical and tactical skills.

Program Duration:

Through previous studies, the researcher was able to determine the duration of the program, as well as the time of the training unit, then the researcher presented the program to the experts who approved the appropriateness and adequacy of the duration of the program and the time of the training unit, which is:

- 12 weeks with 3 training units per week
- Module time 30 minutes
- Thus, the total number of training units in the program reached 36 training units, and the number of mental training hours as a whole reached 18 training hours by 1080 minutes.

Program Components:

First Dimension: Muscular/Mental Relaxation:

- Objective: Teach the player to distinguish between tension and relaxation and control the work of the muscular and respiratory systems, in order to reduce stress and anxiety.
- Distance duration: two weeks and four days, three units per week, i.e. from the first training unit to the eighth training unit.
- The unit time is equal to 12.5 s muscle relaxation, 12.5 s mental relaxation control breathing, and 5 s awakening.

The second dimension: muscular/mental/conceptualized relaxation:

- The goal is to help the player reach mental relaxation and relieve the accumulation of pressure, anxiety and clarity of mind with the formation of a preliminary mental image.
- Distance duration: one week and three days, three units per week, i.e. from the ninth training unit to the twelfth training unit.
- Unit time: 10 s muscle relaxation, 10 s mental relaxation, 5 s mental perception, 5 s awakening.

The third dimension: muscular / mental relaxation / mental perception (clarity):

- The goal is to control the work of the muscular system and relieve the accumulation of pressure and anxiety and clarity of mind with the formation of a clear and well-defined mental image.
- The duration is one week and four days, three units per week, i.e. from the thirteenth training unit to the sixteenth training unit.
- Loneliness time 5 s muscle relaxation, 5 smental relaxation, 15 s mental perception, 5 s awakening.

Fourth dimension: muscle relaxation / mental relaxation / basic mental perception (control):

- The goal is to help the player to form an initial mental image and gradient it to form a clear mental image with full control over the perception of the events of the competition.
- Duration: One week and three days, three units per week, i.e. from the seventeenth training unit to the twentieth training unit.
- Unit time: 5 s muscle relaxation, 5 s mental relaxation, 17 s basic mental perception, 3 s awakening.

The fifth dimension: multidimensional mental perception:

- Objective: Improving the degree of purity and clarity of the mental image while increasing control over the emotional state associated with performance, and developing a sense of sensory awareness.
- The duration is a week and four days, three units per week, i.e. from the twenty-first training unit to the twenty-fourth training unit.
- Loneliness time 5 s muscle relaxation, 5 s mental relaxation, 17 multidimensional mental perception, 3 s awakening.

The sixth dimension: mental perception and concentration of attention:

- Objective: The ability to visualize motor skills with a high level of motor performance and increase the ability to focus and isolate negative thoughts.
- The duration is one week and three days, three units per week, i.e. from the twenty-fifth training unit to the twenty-eighth training unit.
- Unit Time: 3 s muscle relaxation, 3 s mental relaxation, 7.5 s multidimensional mental perception, 11.5 s attention concentration, 5 s awakening.

The seventh dimension: focusing attention:

- Objective: The ability to visualize motor skills with a high level of motor performance with a focus on the fine aspects of performance.
- Duration: One week and four days, three units per week, i.e. from the twenty-ninth training unit to the second training unit.

- Unit Time: 3 s muscle relaxation, 3 s mental relaxation, 5 s multidimensional mental perception, 15 s attention concentration, 4 s awakening.

The eighth dimension: mental perception and concentration of attention:

- Objective: Mix multidimensional mental perception by focusing attention on the most accurate technical and tactical aspects of performance in the competition.
- Duration: One week and three days and three training units per week, i.e. from the thirty-third unit to the thirty-sixth and final unit in the mental training program.
- Unit time: 3 s muscle relaxation, 3 s mental relaxation, 3 s multidimensional mental perception, 17 s attention concentration, 4 s awakening.

Experts:

Expert Specifications:

1- Workers in the field of sports training.
2- To have a doctorate degree in physical education.

Table (3)

Expert Survey on Determining Program Content

Experts/Program Content	Total duration 12 weeks	Number of Units 3 Units	The time of the training unit is 30 s
1	✓	✓	✓
2	✗	✓	✓
3	✓	✓	✓
4	✓	✓	✓
5	✓	✓	✗
6	✓	✓	✓
7	✓	✗	✓
8	✓	✓	✓
Total	7	7	7
Percentage	87.5%	87.5%	87.5%

Table (3) shows the agreement of experts on the contents of the proposed program for brain trainingby 87.5% according to the objectives of the research.

Statistical Treatments

In light of the research objectives and the data obtained, the following statistical treatments were carried out:

- Mean - Mediator- Standard Deviator - Skewness Spearman correlation

Present, discuss and interpret results

1- Presentation of results:

Through the objectives of the research,hypotheses and data of the research sample, tabulated in tables and processed statistically, the results of the research appeared:

Table (4)
The arithmetic mean of the pre- and post-measurement of the research sample
In scales (relaxation - mental perception - concentration of attention)
n = 22

Variable	scaling	M	on
Relax	Tribal	41.0000	4.35343
	Post	47.3182	5.29498
Mental visualization	Tribal	41.2727	5.62462
	Post	47.2727	5.66679
Focus attention	Tribal	9.5909	2.01569
	Post	13.7273	3.23937

It is clear from Table (4) that the arithmetic mean of the pre-measurement in the relaxation scale was 41 and was 47.3182 for the post-measurement, and the arithmetic mean of the pre-measurement of the mental perception scale was 41.2727 while it was 47.2727 for the post-measurement, and the arithmetic mean of the pre-measurement of the attention concentration scale was 9.5909 and the post-measurement was 13.7273.

This shows that there are significant differences between both the pre- and post-measurements in the three tests (relaxation - mental perception - concentration of attention) in favor of the post-measurement, and this is shown in Figure (1)

Table (5)
Test "T" to calculate the significance of the differences between the pre- and post-measurement of the research sample
In scales (relaxation - mental perception - concentration of attention)
n = 22

Variable	scaling	M	on	The value of "T"
Relax	Tribal	41.0000	4.35343	-19.857*
	Post	47.3182	5.29498	
Mental visualization	Tribal	41.2727	5.62462	-8.395*
	Post	47.2727	5.66679	
Focus attention	Tribal	9.5909	2.01569	-11.238*
	Post	13.7273	3.23937	

Tabular value of "T" at a significant level of 0.05 and a degree of freedom of 21 = 1.721

It is clear from Table (5) that there are statistically significant differences between the pre- and post-measurement of the three scales, where the calculated value of the "T" test was higher than the tabular one, and by referring to Table (4) for the arithmetic averages of the pre- and post-measurements of the three scales, it is clear that the differences in the direction of the post-measurements, where the arithmetic averages of the post-measurements were higher than the arithmetic averages of the pre-measurements, where The arithmetic mean of the pre-measurement in the relaxation scale was 41 and was 47.31 for the post-measurement, and the arithmetic mean of the pre-measurement of the mental perception scale was 41.27 while it was 47.27 for the post-measurement, and the arithmetic mean of the pre-measurement of the attention concentration scale was 9.59 and the post-measurement was 13.72.

Table (6)

Improvement rates for the arithmetic mean of the pre- and post-measurement of the research sample

In scales (relaxation - mental perception - concentration of attention)

n = 22

Variable	Spring	M	on	Percentage of improvement
Relax	Tribal	41.0000	4.35343	15.41%
	Post	47.3182	5.29498	
Mental visualization	Tribal	41.2727	5.62462	14.54%
	Post	47.2727	5.66679	
Focus attention	Tribal	9.5909	2.01569	43.13%
	Post	13.7273	3.23937	

It is clear from Table (6) that the percentage of improvement for the relaxation scale was 15.41%, and the percentage of improvement for the mental perception scale was 14.54%, and the percentage of improvement for the attention concentration scale was 43.13%, and it is clear that the highest percentage of improvement was in favor of the attention concentration scale.

Table (7)

The correlation coefficient between the three scales and the ranking of players in the
Republic Championship **using Spearman's correlation coefficient**

n = 22

Variables	**Value "t:" with the order of the players**
Relax	-0.948*
Mental visualization	-0.939*
Focus attention	-0.943*

The tabular value of "t" at a significant level of 0.05 and a degree of freedom of 20 = 0.359

It is clear from Table (7) that there are statistically significant correlations between the three scales and the ranking of players in the Republic Championship and the most variable related to the results of the matches is the relaxation variable and that was with a correlation coefficient of 0.948, which is an inverse correlation in the sense that the greater the degree of relaxation of the players, the better there is to achieve higher positions.

Table (8)

Correlation coefficient between the three scales using Spearman's correlation coefficient

n = 22

Variables	Relax	Mental visualization	Focus attention
Relax		0.878*	0.841*
Mental visualization			0.875*
Focus attention			

The tabular value of "t" at a significant level of 0.05 and a degree of freedom of 20 = 0.359

It is clear from Table (8) that there are statistically significant correlations between the three scales, and the most associated with relaxation with mental perception with a correlation coefficient of 0.878, then perception concentration of attention with a coefficient of 0.875 and relaxation with a concentration of correlation coefficient of 0.841.

2. Discuss and interpret the results

- The results of Table (4) indicate that there are significant differences between the pre- and post-measurements in the skills of (relaxation - mental perception - concentration of attention) in favor of the dimensional measurement due to the impact of the mental training program on upgrading the level of mental skills because the program contains relaxation skills and mental perception skills and attention concentration skills and this is what illustratesFigure (1)

- Table (5) shows that there are significant differences between the pre- and post-measurements of relaxation, where the calculated value of the "T" test was higher than the tabular one, and by referring toTable (4) for the arithmetic averages of the pre- and post-measurements of the three scales, it is clear that the differences in the direction of the post-measurements, where the arithmetic averages of the post-measurements were higher than the arithmetic averages of the pre-measurements, where the arithmetic average of the pre-measurement in the relaxation scale was 41 and was 47.31 for the post-measurement.

- It is also clear from Table (6), which shows the percentage of improvement for the arithmetic average of the pre- and post-measurement of the research sample in the scale of (relaxation) that the percentage of improvement was 15.41%

- The researcher attributed the improvement in the ability to relax to the effectiveness of the experimental program because of its effects psychologically on teaching the distinction between tension and relaxation, and reducing tension for all parts of the body as the exercises that dealt with the areas where tension is concentrated such as (neck - face - legs - stomach - shoulders - back - hands - mind), which are known as areas of tension in humans.

- These results are consistent with the results of Abdel Aziz Abdel Meguid (1987) (19), Madiha Mohamed Ismail (1987) (40), Ikram Abdel Hafeez (1988) (10), Hamed Mohamed Hamed El Komi (1993) (14), Ayman Abdel Rahman (1994) (11), Salah Mohsen Naja (1997) (17), Ali Rehan and Hamdy El Gohary (1997) (22), Naglaa Fathi Mahdi (1997) (52), Mohamed Naji (1998) (37), Walid Ahmed Gabr (1999) (48), Mohamed Mahmoud Abdel Hamid (2000) (36), Ahmed Rabie Radwan (2002) (2), Haitham Ahmed Ibrahim Mohamed (2006) (45) "Savoy S" Savoy, C. (1993) (80), Baker F.: and Kaiser K.S. "Bakker.F.C &; Kayser, C.S" (1994) (54),Lamirand, M. & Rainey, D. (1994) (68) that relaxation exercises have a positive effect in reducing anxiety and tension, which leads to an improvement in the level of performance and maintains the energy of the player.

- The results of Table (4) also indicate that there are significant differences between the pre- and post-measurements in the skill of (mental perception) in favor of the dimensional measurement due to the impact of the mental training program on upgrading the level of mental skills because of the training program contains mental visualization skills and this is what illustratesFigure (1)

- Table (5) shows that there are significant differences between the pre- and post-measurements of mental perception, where the calculated value of the "T" test is higher than the tabular one, and by referring to Table (4) for the arithmetic averages of the pre- and post-measurements of the three scales, it is clear that the differences in the direction of the post-measurements, where the arithmetic averages of the post-measurements were higher than the arithmetic averages of the pre-measurements, where the arithmetic average of the pre-measurement of the mental perception scale was 41.27 while it was 47.27 for the post-measurement. .

- It is also clear from Table (6), which shows the percentage of improvement for the arithmetic average of the pre- and post-measurement of the research sample in the scale (mental perception) that the percentage of improvement was 14.54%.

- These results are consistent with those of Mohammed Larbi Chamoun (1982) (27), Nadia Hassan Rasmi (1989) (50), Nadia Abdel Qader (1987) (51), Hana Abdel Wahab (1990) (44), Suhair Bahjat Fahim (1994) (15), Jalila Hassan Mohamed (1993) (13), Mohamed Anbar Bilal (1996) (35), Salah Mohsen Naja (1997) (17), Wafa Mahmoud Hassan (1997) (47), Mohamed Naji (1998)

  (37), Mustafa Abdel Salam Al-Omari (1998) (42), Moussa Talaat Ibrahim (1998) (43), Atef Nimr Khalifa (2000) (18), Naglaa Fathy (2002) (52), Ahmed Sobhy Salem (2004) (3), Massad Rashad Al-Ayouti (2004) (41), Haitham A. Hamad Ibrahim Mohamed (2006) (45), Bohat et al. (1999) (56), Shanks & Cameron (2000) (82), Wulf et al. (2001) (89), "Beale" (2003) (55) on the importance of using mental visualization in raising the level of performance and mastery of skill.

- The results of Table (3) also indicate that there are significant differences between the pre- and post-measurements in the skill (concentration of attention) in favor of the dimensional measurement due to the impact of the mental training program on upgrading the level of mental skills because the program contains exercises for the skills of concentration of attention and this is what illustrates Figure (1)

- Table (5) shows that there are significant differences between the pre- and post-measurements of the concentration of attention, where the calculated value of the "T" test was higher than the tabular one, and by

referring toTable (4) for the arithmetic averages of the pre- and post-measurements of the three scales, it is clear that the differences in the direction of the post-measurements, where the arithmetic averages of the post-measurements were higher than the arithmetic averages of the pre-measurements, where the arithmetic average of the pre-measurement of the attention concentration scale was 9.59 and the post-13.72.

- It is also clear from Table (6), which shows the percentage of improvement for the arithmetic mean of the pre- and post-measurement of the research sample in the attention concentration scale , that the percentage of improvement was 43.13%.
- The researcher returns this to the fact that focusing attention and isolating negative stimuli and thoughts and repeating the focus on the most accurate points of technical performance in all aspects (offensive, defensive, counter-offensive, deception and movements) is one of the basic points for developing the ability to focus attention and thus develop the ideal technical performance.
- These results are consistent with the results of Ikram Abdel Hafeez (1988) (10), Feryal Zahran (1989) (23), Hana Abdel Wahab (1990) (44), Suhair Bahgat (1994) (15), Mahasen Amer, Najwa Ismail (1991) (26), Jalila Hassan Mohamed (1993) (13), Ayman Abdel Rahman (1994) (11), Salah Mohsen Naja (1997) (17), Naglaa Fathy (1997) (52), Walid Ahmed Gabr (1999) (48), Mohamed Mahmoud Abdel Hamid (2000) (36), Ahmed Sobhi Salem (2004) (3), Haitham A. Hamad Ibrahim Mohammed (2006) (45), "Grouss, G" Grouios, G (1992) (60), "Savoy S", Savoy, C. (1993) (80), Frankesia, R.A., Cook, D.L. (1993) (88), Bakker, F.C &Kayser, C.S (1994) (54), Singer et al (1994) (84), Lamirand M. & Rainey, D (1994)(68).), where their results indicated the effectiveness of attention focus programs as a dimension of mental training to develop the level of skill and technical performance.

Conclusions and recommendations

Conclusions:

In the light of the objectives, hypotheses, research sample and characteristics, and based on the results reached, the researcher could reach the following conclusions:

1- The existence of significant differences between both the pre- and post-quotes in the three scales (relaxation - mental perception - concentration of attention) in favor of the post-measurement.
2- The existence of statistically significant correlations between the three scales and the ranking of players in the Republic Championship .
3- The existence of statistically significant correlations between the three scales, and the most closely related measures were relaxation with mental perception, followed by perception with concentration of attention, and finally relaxation with concentration of attention.
4- The mental training program used is effective in developing skills (relaxation - mental visualization - attention concentration).

Recommendations:

The researcher recommends the following:

1- The importance of using the mental training program proposed by the researcher and including it within the physical training programs for boxers because of its importance in developing the level of performance of the skills (relaxation - mental perception - concentration of attention) on the research sample.
2- The importance of the Egyptian Boxing Federation conducting training courses to refine boxing coaches in the field of guidance and psychological counseling and shedding light on the importance of mental training and the power of its impact in improving the technical and tactical level and then achieving victory and developing the level of achievement for boxers.
3- Designing many mental training programs to suit the different age stages, levels and technical and tactical abilities of boxers and integrating them into physical, skill and tactical training programs to achieve the maximum benefit and reach the capabilities of the players to their maximum levels.
4- Conducting such a study on other samples of boxing players varies in age stage and technical levels.
5-

First: Arabic References

1- Abu Al-Ela Ahmed Abdel Fattah, Muhammad Subhi Hassanein: Physiology and morphology of mathematics and methods of measurement and evaluation, Dar Al-Fikr Al-Arabi, 1997.

2- Ahmed Rabie Radwan: The effectiveness of a mental training program to learn some basic skills for junior football, unpublished master's thesis, Faculty of Physical Education in Port Said, Suez Canal University, 2002.

3- Ahmed Sobhi Salem: The effect of mental training on the development of some motor skills of junior table tennis, unpublished doctoral thesis, Faculty of Physical Education, Alexandria University, 2004.

4- Osama Kamel Rateb: Motives for Excellence in Sports Activity, Dar Al-Fikr Al-Arabi, Cairo, 1990.

5- Sports Psychology, Dar Al-Fikr Al-Arabi, Cairo, 1995.

6- Psychological preparation for the training of young people, a guide for trainers and parents, Dar Al-Fikr Al-Arabi, 1997.

7- Training of psychological skills, Dar Al-Fikr Al-Arabi, Cairo, 2000.

8- Osama Kamel Rateb, Ali Mohamed Zaki: The Scientific Foundations of Swimming Training, Second Edition, Dar Al-Fikr Al-Arabi, Cairo, 1992.

9- Ismail Hamed Othman and others: Boxing Education and Training, Dar Al-Saada Press, Cairo, 1997.

10- Ikram Mohamed Abdel Hafeez: The effect of a mental training program on raising the level of technical and digital performance in the high jump competition, Journal of Sports Sciences, Volume I, Number III, Faculty of Physical Education, Minia University, 1988.

11- Ayman Mahmoud Abdel Rahman: The effect of a mental training program on the level of performance of juniors in the sport of wrestling for Minya Governorate, Master Thesis, Faculty of Physical Education, Minia University, 1994.

12- Basmat Mohamed Ali: The effect of a mental training program on the level of offensive and defensive performance of karate players, Master Thesis, Faculty of Physical Education, Minia University, 1998.

13- Jalila Hassan Mohamed: The effect of mental training on upgrading the level of motor performance of the skill of reverse diving for young players, research published in the Scientific Journal of Education and Sports, Alexandria University, Faculty of Physical Education for Girls, fourth issue, January, 1993.

14- Hamed Al-Komi: The effect of a proposed program for mental training on the level of performance of the penalty throw for junior handball, Master Thesis, Faculty of Physical Education for Boys, Zagazig University, 1993.

15- Suhair Bahgat Fahim: mental training as an aid next to physical training to develop motor performance in swimming, Journal of Science and Arts, Studies and Research, Volume VI, Issue One, Helwan University, 1994.

16- Safwat Mohamed Youssef, Ahmed Al-Metwally Mansour: The impact of physical mental practice in teaching gymnastics skills, Sports for All Conference Research, Volume IV, Faculty of Physical Education for Boys in Cairo, Helwan University, 1984.

17- Salah Mohsen Naga: The effect of using mental training on the performance of some performance components in the shot put, PhD thesis, Alexandria University, 1997.

18- Atef Nimr Khalifa, Mohamed Hamed Shaddad: The Dynamic of Mental Perception among Boxing and Judo Players during the Competition Period, Published Research, Journal of Physical Education, Assiut University, 2000.

19- Abdel Aziz Abdel Meguid: A comparative study of the ability to relax and its relationship to the digital level of players and players of field and track competitions in first-class clubs, the first scientific conference, Faculty of Physical Education for Girls in Cairo, Helwan University, 1987.

20- Abdul Ali Al-Jasmani: Psychology and its social and educational applications, Dar Al-Arabiya Al-Ulum, 2004.

21- Essam Mohamed Amin Helmy: Swimming training between theory and practice, Dar Al-Maaref, Cairo, 1980.

22- Ali Al-Saeed Rihan, Hamdi Al-Gohary: The effect of a mental training program on the performance of some arching movements as a successor to the great wrestlers of Ismailia Governorate, published research, International Scientific Conference, Sports and the Challenges of the Twenty-first Century, Faculty of Physical Education for Boys in Cairo, Helwan University, March, 1997.

23- Feryal Ibrahim Zahran: The effect of a mental training program on raising the level of skill and digital performance of the shot put, Journal of Studies and Research, Helwan University, 1989.

24- Farida Ibrahim Othman, Mohamed Abdel Ghani Othman: An analytical study of the effect of using mental training supported by practical performance and feedback on the speed of learning complex motor skills for students of the College of Basic Education in the State of Kuwait, research of the first conference, physical education and heroism, part 6, Faculty of Physical Education for Girls in Cairo, Helwan University, 1987.

25- Magda Mohamed Ismail, Mohamed El-Arabi Chamoun: The effect of the mental training program on the level of performance on the jumping horse device in gymnastics for students of the Faculty of Physical Education, Journal of Studies and Research of Physical Education, fourth issue, Helwan University, 1983.

26- Mahasen El-Sayed Amer, Nagwa Abdel Fattah Ismail: The effect of the mental training program on raising the level of performance of the extrovert movement (appeal) in the subject of fencing, published research, Journal of Science, Arts, Studies and Research, Helwan University, Volume III, Number Two, Cairo, 1991.

27- Mohamed Elaraby Chamoun: Kinetic perception and its relationship to the level of performance in gymnastics among G. M. A. players, published research, Faculty of Physical Education, Helwan University, 1982.

28- Mental Training in the Sports Field, Dar Al-Fikr Al-Arabi, Cairo, 1996.

29- Sports Psychology and Psychometrics, Book Center for Publishing, Cairo, 1999

30-: Mental Training in the Sports Field, 2nd Edition, Dar Al-Fikr Al-Arabi, 2001.

31- Guidance and psychological counseling in the sports field, Dar Al-Fikr Al-Arabi, Cairo, 2002.

32- Muhammad al-Arabi Chamoun, Abd al-Nabi al-Jamal: Mental Training in Tennis, Dar al-Fikr al-Arabi, Cairo, 1996.

33- Mohamed El-Arabi Chamoun, Magda Mohamed Ismail: The Player and Mental Training, Al-Kitab Center for Publishing, 1st Edition, 2001.

34- Mohamed Hassan Allawi: Psychology of the Coach and Sports Training, Dar Al-Maaref, Cairo, 1997.

35- Mohamed Anbar Belal: The impact of a proposed program for mental training on the level of digital achievement for the physically disabled, Master Thesis, Faculty of Physical Education, Helwan University, Cairo, 1996.

36- Mohamed Mahmoud Abdel Hamid: The effect of developing attention and mental perception on the performance of transmission for volleyball players, unpublished master's thesis, Faculty of Physical Education for Boys in Zagazig, Zagazig University, 2000.

37- Mohamed Nagy Mahmoud: The impact of mental perception on the digital achievement of long jump runners, Master Thesis, Faculty of Physical Education, Zagazig University, 1998.

38- Mahmoud Abdel Fattah Anan: The psychology of physical education and sports - theory, practice and experimentation, Dar Al-Fikr Al-Arabi, Cairo, 1995.

44- Hanaa Abdel Wahab Hassan: The effect of mental training on the level of performance of the high jump competition (dorsal method) for students of the Faculty of Physical Education of Lebanon in Alexandria, Volume IV, the first scientific conference, Zagazig University, 1990.