The effect of exercises using a device designed to develop the attention stamina of young boxers

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Abstract---The importance of research To develop constancy of attention and abilities for mental operations not only for competitions or tournaments, but for For the sake of acquiring mental skills, and increasing the mental ability and ability to respond offensively and defensively as well, because the punch is performed in the fewest fractions of a second, and thus the boxer depends on a motor program stored in the brain, and this does not come arbitrarily, but through experience, exercises and repetitions in educational and training units. As for the research problem, The researchers noted that the low level of performance of boxers due to the lack of attention to the manifestations of attention, and in order to improve the educational and training process, the researcher decided to develop a Stability of attention by designing a device using special skill exercises to develop the stability of attention for the youth of the national centers for the care of sports talent in boxing. Constancy of attention among young boxers in centers The National Sports Talent in Boxing - Preparing skill exercises designed in The development of constancy of attention in young boxers in The national centers for the care of sports talent in boxing and to identify the effect of the skill exercises designed in The development of constancy of attention in young boxers in The National Centers for the Care of Sports Talent in Boxing. The researchers hypothesized that there are statistically significant differences between the post tests between the experimental and control group in the test. Attention stability, the experimental method was used in the manner of two equal groups on a sample of the players of the National Center for the Care of Sports Talent for Boxing of the Ministry of Youth. Use of special skill exercises Consistency of attention in developing the skill side of boxers, and attention to special skill.
exercises, as it is a training method for physical, psychological and tactical preparation.

**Keywords**—Device, stability, attention, boxer.

**Introduction**

games, which is characterized by attack, defense and counterattack at the same time, as it requires great effort due to its fast and active movements, high endurance and attention, so training on the size and stability of attention helps the boxer direct his attention, and isolate all distractions. Attention, this is done using special skill exercises that work on the development of persistence of attention and the importance of research lies to develop constancy of attention and abilities for mental operations not only for competitions or tournaments, but for the sake of acquiring mental skills, and increasing the mental ability and ability to respond offensively and defensively as well, because the punch is performed in the fewest fractions of a second, and thus the boxer depends on a motor program stored in the brain, and this does not come arbitrarily, but through experience, exercises and repetitions in educational and training units.

As for the research problem, The researchers noted that the low level of performance of boxers due to the lack of attention to the manifestations of attention, and in order to improve the educational and training process, the researcher decided to develop a Stability of attention by designing a device using special skill exercises to develop the stability of attention for the youth of the National Centers for the Care of Sports Talent in Boxing. This is for the purpose of finding appropriate solutions to help coaches and boxers at the same time. The aim of the research was to design a device to be used in measuring a test constancy of attention among young boxers in centers The National Sports Talent in Boxing. Preparing skill exercises designed in the development of constancy of attention in young boxers in The national centers for the care of sports talent in boxing and to identify the effect of the skill exercises designed in The development of constancy of attention in young boxers in The national centers for the care of sports talent in boxing. The researchers hypothesized that there are statistically significant differences between the post tests between the experimental and control group in the test attention stability. In this field, studies were conducted, including the study of Raad Ramadan Ahmed (Dagestani, 2004), which aimed at identifying the effect of concentration exercises and diverting attention to develop the performance of some basic skills of the players of the Iraqi national team for fencing with the fencing weapon. A set of conclusions was reached, including that the exercises used in training on some basic skills of weapon players Blinds, and the experimental group in all tests of concentration and diversion of attention were positive and effective effects. And the study of Elaf Rabie Abbas (Abbas, 2012), which aimed to prepare a proposed curriculum for mental training accompanying skill exercises for boxing. And designing new skill tests to measure the two aspects of attention (focus and diversion) among the Iraqi youth boxing team players. The results of the study indicated that the use of mental training accompanied by skill exercises helped in building special motor programs, which contributed to the development of focus and attention diversion, and that the
tests designed by the researcher proved their validity to measure the two manifestations of focus and diversion.

**Methodology**

**Method and tools**

The main tests and experiment were conducted at the National Center for Sports Talent in Boxing, Youth City of the Ministry of Youth and Sports / Baghdad, and a hall boxing in the College of Physical Education and Sports Science/University of Baghdad. The experimental method was used in the manner of two equal groups, and it represented the research community with young boxers aged (15-16) years and their number (60) boxers. 30 (12) control boxers, (12) experimental boxers, and (6) experimental boxers, as the proportion of the sample from the community reached (50 %) boxers who were divided into two equal groups according to weights by random method, that is, each weight separately by lottery. The pre-test for the purpose of starting a single starting line, and Table (1) shows this.

<table>
<thead>
<tr>
<th>T</th>
<th>the test</th>
<th>the group Experimental</th>
<th>the group the officer</th>
<th>calculated t</th>
<th>real moral</th>
<th>indication statistic</th>
</tr>
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<tbody>
<tr>
<td>2</td>
<td>Attention stability</td>
<td>583.8 ± 678.2</td>
<td>083.9 ± 745.2</td>
<td>452.0</td>
<td>549.0</td>
<td>random</td>
</tr>
</tbody>
</table>

The researchers used a set of devices, tools and means of collecting information, including a device to measure attention stability (designed by the researcher). Gloves (34) pair Training bags, wall pillows and hand shields (10) Fox whistle number head protectors (30) dental guards, pcs. (30) As well as Arabic sources, the Internet, and personal interviews.

Designed device: idea the device from Through note researcher for not Presence Tests proces for appearances Attention (volume and persistence of attention) because most the exams existing Tests theory no mimic The field, an example of this is the Borden Anfimov test using paper and pen, for y a job researcher on Design a test my work To measure size Attention and constancy of attention (with help The engineer The specialist, and the researcher presented the idea to the experts and specialists about the validity of the test and the idea of the device as in Appendix (1). The researcher relied on local markets to provide the device’s tools, and the researcher took into account the device’s suitability to the environment and all the variables.

Specifications The device: The device consists of a light bag coated from the outside with a leather material divided into (7) directions, from the middle with a (+) sign representing straight punches, from the side, two representing side
punches, and from the bottom one representing upward punches. Inside the board contains electric lamps against concussion. Number (7). It is multi-colored: (yellow, red, green, blue, orange, white, pink) and it is called the photoacoustic bag.

How the device works: The light bag is connected to an electric wire with a length of 10 meters, and it is connected to the electronic base, i.e. (the start switch), which is: a board containing an EPROM-IC electronic circuit through which instructions are issued to randomly turn on the lamps in the light bag so that the laboratory cannot memorize Test In addition, the test can be changed, ie (the circuit is randomly programmed from one test to another), instructions are issued that differ from the unit from the other.

Field Research Tests

Test name: Muhammad Abbas test.
The purpose from test: measure stability Attention For budding boxers.
Tools used:
1. Boxing gloves, 30 pairs, 10 ounces.
2. Head guards (15).
3. 15 dental guards.
4. Electronic stopwatch (5).
5. Boxing bags that contain photostimulants.
6. Boxing referees (3).
7. Registration form and pen.

Specifications The device: The device consists of a light bag covered from the outside with a leather material divided into (7) directions, from the middle with a (+) sign representing straight punches, from the two side representing side punches, and from the bottom one representing the upward punches. Inside the board contains multiple (7) light bulbs The colors are: (yellow, red, green, blue, orange, white, pink) connected to an electric wire with a length of 10 meters, and it is linked to the electronic base, i.e. the operating switch, which is: a board containing an electronic circuit EPROM-IC issued by Its way is instructing to randomly turn on the lamps in the light bag so that the tester cannot memorize the test. In addition, the test can be changed, ie (the circuit is randomly programmed from one test to another), instructions are issued that differ from the unit from the other.

Method performance Test: The boxer stands in front of the light bag in a position of readiness to play, and the three or five judges sit in front of the device to record the correct punches within (30 seconds) using paper and pen. Performance time (30 seconds) and the boxer punches the colors (lamps) as quickly as possible, as the device is programmed in a way that allows changing the lighting of the lamps (from one lamp to another) within, (30 milliseconds). The second is until the stability required for the stimulus, so the boxer keeps his attention, on the color of The stimulus required throughout the test period, and that the colors that are issued from the device to the light bag are random, so that the boxer cannot memorize them.
It measures the stability of attention. Constancy of attention is known as ("The ability to pay attention to a particular stimulus and retain this attention for as long as possible") (Ahmed, 1976)

Method Calculation Degree: The judge - the judge - records the correct number of punches within (30 seconds) using the hand pointing device as in Appendix (8) approved by the International Federation as a camera for documentation and presentation to the experts.

<table>
<thead>
<tr>
<th>T</th>
<th>the exams</th>
<th>constancy</th>
<th>Sig</th>
<th>indication</th>
<th>Objectivity</th>
<th>Sig</th>
<th>indication</th>
</tr>
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<tbody>
<tr>
<td>2</td>
<td>constancy of attention</td>
<td>0.862</td>
<td>0.000</td>
<td>D</td>
<td>0.894</td>
<td>0.000</td>
<td>D</td>
</tr>
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</table>

It was completed Procedure the exams tribal to sample search w at day Thursday Coincidence 1/13/2022 and in OK The time is (3) in the afternoon Hall boxing At the College of Physical Education and Sports Sciences/ University of Baghdad, Ali Total T search the officer and experimental And their number is (24) boxers To measure the stability of attention, And yet an end the exams did researcher to unload Results at Form discharge.

After the pre-test, the curriculum of the exercises prepared by the two researchers was applied on Saturday 15 /1/ 2022 that is developing size Attention and stability Attention and use exercises Hussein _ Attention manifestations are of two types: the size of attention and the stability of attention as at The appendix (6), and T is from (24) lonliness training That is (8) weeks By (3) units In the week, which is Saturday - and Monday - and Wednesday, and the time of the
educational training unit (it varies from one unit to another due to repetition and re-exercises in the previous training and educational units) i.e. the main part was used only from The whole unit, as all the conditions of the control and experimental groups were similar in the preparatory section and the final section of the unit sections, as the researchers used the following exercises.

Playing on the numbered bag and playing on the hand shield, dancing balls and light cushions, as well as playing with the colleague in applying all the compound skills that contain a series of an integrated quantity and making them in a situation similar to competition, knowing that all the exercises came gradually, as the researcher was keen to re-exercise in the previous educational training unit in The current educational training unit, as the exercise time differed from one unit to another due to the repetitions of re-exercises in the previous training units. And training in boxing.

Distance that It was completed finished from Application curriculum, It was completed Procedure the exams dimensionality to sample The search for the control group and experimental at Thursday _ Coincidence 3/17/2022 on OK the time (3) afternoon in Hall boxing In the College of Physical Education and Sports Science/University of Baghdad, and here commit _ Albah th style Himself Which It was completed in it Procedure the exams tribal from hand time and circumstances and procedures and a team the work helper same e Done evacuation data at Form discharge. The statistical package (SPSS) was used to process the research data.

**Results**

<table>
<thead>
<tr>
<th>the test</th>
<th>pretest</th>
<th>post test</th>
<th>s</th>
<th>p</th>
<th>Values (t)</th>
<th>Rate The error</th>
<th>indication</th>
</tr>
</thead>
<tbody>
<tr>
<td>constancy of attention</td>
<td>s ±</td>
<td>s ±</td>
<td>-</td>
<td>1.666</td>
<td>0.752</td>
<td>2.216</td>
<td>0.049</td>
</tr>
<tr>
<td></td>
<td>9.083</td>
<td>2.745</td>
<td>10.750</td>
<td>0.753</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

*Significant at a lower error rate (0.05) degree of freedom (11)

Discussing the results of the differences between the pre and post tests with the variable of attention stability. From the presentation of the differences in the results of the stability of attention shown in Table (4), where the (t) test was used, there was a significant effect in the level of constancy of attention Between the pre and posttests, and in favor of the post test of the control group, the stability of attention One of the mental processes based on internal control, and these manifestations of attention have to do with the information reception system, the type of information, and the perception of this information within the central nervous system, that is, the type of input and interpretation of boxers and the ability to interact with external stimuli. The boxer and then determine the path or direction. (Therefore, the researcher believes that the reasons for the development
in the stability of attention are due to the quality of the skill and movement exercises of the educational training program prepared by the trainer and the practice of the sample for daily training, as (Wajeeh Mahjoub) points out, “The exercises provide the athlete with voluntary and intellectual preparation and acquisition of Linking the parts of movement and its beauty and expanding the elements of sensory perception that have priority for a group of sports activities. (Mahgoub, 2001)”

Table (5)
The arithmetic means of the test show the stability of the pre and post attention, the average differences, the standard deviation of the differences, and the calculated (t) value for the members of the experimental group.

<table>
<thead>
<tr>
<th>indication</th>
<th>Rate at the error</th>
<th>Values (t)</th>
<th>p</th>
<th>s</th>
<th>post test</th>
<th>pretest</th>
<th>the test</th>
</tr>
</thead>
<tbody>
<tr>
<td>moral</td>
<td>0.000</td>
<td>6.224</td>
<td>0.723</td>
<td>4.500-</td>
<td>± _</td>
<td>s</td>
<td>1.378</td>
</tr>
</tbody>
</table>

* Significant at a lower error rate (0.05) and a degree of freedom (11)

Discussing the results of the differences between the pre and posttests with the variable of stability of attention, attention stability shown in Table (5), where the (t) test was used, there was a significant effect on the level of attention stability, between the pre and post tests and in favor of the post test for the experimental group. Constancy of attention is related to the ability of boxers to quickly change the direction of their attention from one stimulus to another or the stability of the focus of attention at a high speed from one situation to another. The researcher believes that the skill exercises that the experimental group was subjected to contributed to the development of the stability of attention as a result of practicing the exercises by developing the skill capabilities, which the boxers must perform distinctive artistic performance through the organization of neuromuscular work and the speed of information processing, i.e. the use of mental processes effectively), with greater or faster repetitions and This contributed to prompting boxers to quickly change the directive of their attention from one stimulus to another and to harness faster and greater mental treatments to face the situations and challenges facing boxers, especially situations that require speedy decision-making and execution during the performance of skills, and here he points (Munir Abdel-Sahib, quoting Ibrahim Salem Al-Skar) The increase in training gives reactions of the nervous system to the correct repetition of these movements and in proportion to the correct technical performance, which contributes to an economy in movement and the absence of additional and excess movements, (Sahib, 2012) and then the development of the appearance of the stability of attention in the post test.
Table (6)

<table>
<thead>
<tr>
<th>the test</th>
<th>the group Experimental s</th>
<th>±</th>
<th>the group the officer</th>
<th>±</th>
<th>Values (t)</th>
<th>Rate The error</th>
<th>indication statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>constancy of attention</td>
<td>083.13</td>
<td>378.1</td>
<td>750.10</td>
<td>753.0</td>
<td>143.5</td>
<td>0.000</td>
<td>moral</td>
</tr>
</tbody>
</table>

*moral when Rate Error Less (0.05) and a degree of freedom (22)

**Discuss the Results**

The results showed that there were significant differences in the attention stability test between the experimental and control groups and in favor of the post test for the experimental group. Consistency of attention is one of the necessary manifestations of attention that boxers must possess in a distinctive way. It is ("a continuous process between stimuli in the environment to try to choose the correct responses that work to achieve the goals") ("Arabs, 1983) and the researcher believes that the results that have appeared indicate an increase in the researcher 's interest and focus during the development of skill exercises On the use of exercises in the presence of equipment and tools for boxing and the use of more than one boxer for the same group or competitor as one of the main requirements and affecting the skill performance, i.e. the stability of attention from a source with the application of these skills by pressure factor of time according to stimuli or stimuli in the external environment and the internal environment and this is what is imposed by the nature of performance The required motor skill to be done continuously and successively, i.e. the stability of attention and the transition from the internal self to the external environment according to the requirements of the situation. So it was all of these factors. Its great impact on the development of the stability of attention of the experimental group at the expense of the control group, and this is consistent with what (Saad Mohsen) indicated in “The training curriculum inevitably leads to development and achievement, if it is built on the foundation.” Scientific organization in the training process (Ismail, 1999) So the results made sense.

In light of the results that were presented, the researchers reached a set of conclusions, including the tests that contributed to achieving the purpose in measuring the stability of attention for young boxers and that the skill exercises for boxing contribute to the development of the stability of attention for the emerging boxers of the National Center for Talent Care, and that there is a preference for special skill exercises over the training followed in developing Consistency of attention to the emerging boxers of the National Center for Talent Care. Accordingly, the researchers recommend the following:

1. Adoption of the test prepared by the researchers to measure stability.
2. Necessity Use of special skill exercises Consistency of attention in developing the skill side of boxers.
3. Paying attention to special skill exercises as a training method for physical, psychological and tactical preparation.
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5. Munir Abdel Sahib. (2012). Special exercises to develop some of the physical and motor abilities of the weak man and their impact on the skill of blocking the ball for soccer goalkeepers for youth aged 17–19 years.