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The efficacy of employing educational activities based on the guided imagination method and its influence on the acquisition of certain defensive abilities in boxing among students

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Abstract

The objective of the present study is to ascertain the efficacy of educational exercises in this regard. This approach aligns with the strategy of guided imagination in the context of learning defensive boxing skills for students. The researcher employed an experimental approach by formulating two experimental groups. The subject is administered educational exercises in accordance with the strategy of guided visualization. The group's activities are subject to regulation in accordance with the conventional curriculum that has been endorsed by the institution.

The research community was selected by the intentional method from the second-stage students at the Faculty of Physical Education and Sports Sciences at the University of Babylon for the academic year 2024-2025. The student body was comprised of 240 individuals. The random method was employed to select the research sample. Ten students were selected to participate in the experimental group. Ten students constituted the control group. (5) Students representing the survey sample were selected.

Following the administration of tests and the implementation of exercises, the results were statistically processed using a statistical software package. The researcher's findings yielded the following conclusions: students' performance in defensive boxing skills exhibited improvement after the implementation of educational exercises based on the strategy of guided visualization. The most salient recommendations are as follows: the incorporation of educational exercises based on the strategy of guided imagination into educational programs or sports training for boxing.

Keywords:

Didactic exercises, wave visualization strategy, defense skills in boxing.

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1- Introduction:

Educational exercises constitute an indispensable component of the educational process. The objective of the program is to enhance learning and develop the skills and abilities of learners. These exercises encompass a series of practical activities. These activities are meticulously designed to cultivate specific competencies.

As Al-Bassam (2010) defined, "structured educational activities are designed to enhance learning and develop learners' skills and abilities, including practical activities for the development of specific skills such as motor, intellectual, or social skills" (Al-Bassam, 2010, p. 28).

According to Abdul Zaid (2013, p. 157), the term "educational exercises" is defined as "an educational method aimed at achieving a sufficient level of motor skill in the learner, thereby enhancing and developing their sports performance or effectiveness."

Hassanin (2008, p. 122) posits that educational exercises "contribute to the promotion of effective learning by providing opportunities for learners to practice and apply the knowledge and skills they learn, help in the development of motor, intellectual, and social skills, increase the motivation of learners, and enhance their desire to learn."

Guided visualization is regarded as one of the most effective types of visualization. It serves as a guide for learners, facilitating their discovery of the imaginative role of the senses. In addition, the cultivation of relaxation and the emphasis on sensory elements during the execution of the desired role are paramount.

Guided imagination is a cognitive process in which an individual synthesizes and integrates components of memory, perception, and mental images derived from past experiences to form novel perceptions. According to Partin and Ronald (2009), Guided Imagination is defined as "a positive and active educational strategy that motivates students to solve problems, set goals, build hypotheses to study complex issues, and also helps them discover their feelings, directions, and immersion in the subject of study."

As posited by Al-arajah (2004, p. 16), the pedagogical approach of guided imagination has been demonstrated to facilitate the enhancement of students' cognitive abilities. This enhancement is achieved by leveraging the cognitive potential inherent in imagination and foresight, thereby enabling students to develop mental representations that are pertinent to the subject matter. Consequently, this approach contributes to the enrichment of the curriculum through the facilitation of guided mental perceptions.

As posited by Al-Afwan (2021, p. 34), the efficacy of a guided learning strategy is predicated on its ability to facilitate a more profound comprehension of subject matter by establishing a correlation between information and mental images. This pedagogical approach fosters an environment conducive to creative thinking and the generation of novel concepts among students. While contributing to the enhancement of memory by linking information to mental images and perceptions, it also motivates students to learn by providing a more interactive and exciting learning experience. The aforementioned phenomenon has also been demonstrated to enhance cognitive functions, including imagination, visualization, and concentration.

Boxing is a combat sport that involves two players competing against each other. In this particular scenario, the two parties engage in a duel, utilizing gloves for protection. The objective of this activity is to accrue points or to successfully knock down one's opponent. The

discipline of boxing demands a high level of physical fitness, technical proficiency, and intuitive speed. Boxing is a globally popular sport. The scope of the competition encompasses both professional and amateur categories.

The importance of defensive skills, which are inherently sensitive, cannot be overstated for any age group. This is particularly salient during the learning stages, as these devices serve to prevent injuries, foster self-confidence, and encourage the pursuit of training and competition. As Abdulaziz (2005) asserts, "The efficacy of defensive maneuvers is paramount in determining the outcome of a match. Mastery of these techniques entails the ability to thwart opponent attacks and prevent their strikes from reaching the goal, thereby creating opportunities for effective counterattacks."

As Shaalan (2005, 128) asserts, the fundamental defensive skill in boxing entails the disruption of an opponent's blows prior to their arrival and the subsequent acceptance of blows on the gloves after their arrival. This strategy serves to safeguard the boxer and mitigate the impact of blows.

The significance of the research lies in its contribution to the development of effective educational methodologies for acquiring defensive competencies in boxing. It facilitates the enhancement of students' performance in this domain and furnishes coaches and students with invaluable insights regarding optimal practices for acquiring defensive skills.

1-2 Research problem:

The research problem in this context is how to improve the learning of defensive skills in boxing among students. Researchers are seeking effective educational methods and strategies to enhance students' abilities in this area. The main question posed by the research is: "What is the effectiveness of using educational exercises based on guided imagery strategy in improving the learning of defensive skills in boxing among students?"

The problem includes several aspects, such as:

1. Identifying best educational practices: The research aims to determine the best ways to teach defensive skills in boxing.
2. Evaluating the impact of the guided imagery strategy: The research seeks to understand the effect of using the guided imagery strategy on learning defensive skills.
3. Improving student performance: The research aims to enhance students' performance in learning defensive skills in boxing.

1-3 Research objectives:

1- Designing educational exercises according to the guided imagery strategy for learning defensive skills in boxing.

2- Identifying the effectiveness of these exercises in improving students' performance level in defensive skills in boxing.

1-4 Research hypothesis:

There are statistically significant differences in the level of learning defensive skills between pre-tests and post-tests.

- ❖ There are statistically significant differences in learning defensive skills in boxing between students who receive instructional training based on the guided imagery strategy and students who receive traditional methods.

1-5 Research Fields:

1- Human Field: Second-year students of the College of Physical Education and Sports Sciences / University of Babylon for the academic year 2024-2025.
2- Temporal Field: From 07/10/2024 to 05/12/2024.
3- Spatial Field: The boxing hall in the college.

2- Methodology and Field Procedures:

2-1 Methodology:

The researcher employed the experimental method with a design of experimental and control groups suitable for the research problem and its sample.

2-2 Community and Sample:

The research community was intentionally selected from second-year students in the College of Physical Education and Sports Science at Babylon University for the academic year 2024-2025. The experimental and control samples were randomly selected. The experimental group consisted of (10) students from section (C), while the control group consisted of (10) students from section (H), in addition to 5 students for the exploratory sample.

2-3 Means, Devices, and Tools Used in the Research:

2-3-1 Data Collection Methods:

1. Observation (Performance Evaluation).
2. Arabic and foreign sources and references.
3. World Wide Web (Internet).

2-3-2 Devices and Tools Used in the Research:

1. One electronic medical scale for measuring mass.
2. One measuring tape.
3. Camera.
4. Twenty pairs of gloves.
5. One boxing ring.
6. Electronic calculator.
7. Electronic stopwatch.

2-4 Field Research Procedures:

2-4-1 Preparation of Educational Exercises:

After reviewing numerous scientific sources and leveraging the researcher’s expertise as a boxing instructor at the college and interest in this sport, ten well-structured educational exercises were designed and developed to enhance defensive skills in boxing. The aim is to strengthen students' abilities and improve their performance in this sport.

2-4-2 Tests Used in the Research:

1- SAM Test:

Test for Defense Against Various Punches

Purpose of the Test: To assess the student's ability to defend against different punches.
Required Tools: Four boxing gloves, a stopwatch, a scoring sheet, and one video camera.

Performance Description:

- The test involves two students:

First Student: Performs various punches for 60 seconds.
Second Student: Executes four types of defense:
- Punch blocking
- Slipping

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- Leaning back with the torso
- Stepping back for defense

- The students switch roles, with the first student performing defensive exercises and the second student throwing punches.

Scoring Method:

- Punch blocking skill: 2 points
- Slipping skill: 3 points
- Leaning back with the torso skill: 2 points
- Stepping back skill: 3 points
- Total score: 10 points.

2.4.3 Exploratory experience:

It is imperative to ensure the accuracy of actions and to make any necessary adjustments to rectify potential errors. The researcher conducted an exploratory experiment on July 10, 2024, on five students from the research community who were not part of the main sample. The objective of this experiment is twofold: first, to verify the suitability of educational tests and exercises for the research sample; and second, to ensure their readiness for actual application.

2.4.4 Pre-test:

The tribal tests were conducted on Thursday, October 10, 2024. This is done to assess the level of participants before the application of exercises, and to provide a reference for comparing the results after the application. The temporal and spatial parameters have been meticulously delineated. The objectives of the tests were explained to the participants, and accurate and standardized measurement tools were used to ensure the correctness and consistency of the results.

2-4-5 Main Experiment (Implementation of Educational Exercises)

After conducting pre-tests on the variables under study for the experimental and control groups, the educational exercises were implemented on the main experiment sample. The number of units was (8) units, with one unit per week. The educational exercises took place from Monday, October 14, to December 2, 2024. The exercises were applied in the main section, lasting (60) minutes, which included the following: -

- Educational Component:

The session is designed to last for a duration of twenty minutes, during which the instructor will formulate a hypothetical scenario, elucidating the targeted skill through the utilization of diverse illustrative tools. This includes an educational flex presentation that details the skill to be learned, with an explanation based on the displayed image regarding how to achieve the correct stopping position of the arms and legs. The presentation is facilitated using a projector. In all units, an educational flex presentation is shown first, followed by a teaching video that is played slowly and repeated multiple times without sound, relying on the teacher's explanation. Subsequently, preparatory imaginative activities commence, wherein students are instructed to inhale deeply, relax, close their eyes, and visualize the sights and sounds they have just experienced for a duration of (3-5) seconds.

- Practical Component:

The duration is 40 minutes, during which a creative activity is implemented that includes three educational exercises, progressively arranged from easy to difficult. The teacher explains the

exercise and asks the students to close their eyes, relax, and take a deep breath, allowing them to imagine the exercise for 5 seconds before performing it.

2-4-6 Post-Test:

After the main experiment, post-tests were conducted on December 5, 2024, under the same conditions and variables that were present during the pre-tests, in order to ensure the accuracy and reliability of the results and to enable comparison between the pre-test and post-test results.

2-4-7 Statistical Tools:

The results were statistically processed using the SPSS statistical package, where appropriate statistical methods were applied to analyze the data and derive accurate results

3-Presenting and Discussing Results:

3-1 Presenting and Discussing the Results of the Experimental and Control Groups:

Table (1)

Illustrate the results of the two groups in the research variables

Groups	Variables	Tests	Arithmetic mean	Standard Deviation	Calculated value	Error Ratio	Significance
Experimental Group	Defensive Skills/Degree	Pre-test	3.65	0.94	7.26	0.001	Moral
		Post-test	6.75	0.97			
Control Group	Defensive Skills/Degree	Pre-test	3.6	0.77	2.93	0.000	Moral
		Post-test	4.65	0.83			

3-1-1 Discussion of Results:

The results in Table (1) demonstrated the presence of significant differences in the experimental group. For the purpose of conducting dimensional testing.

These disparities can be attributed to the beneficial impact of the strategy of guided visualization and multimedia illustration in the classroom environment. The researcher's commitment to regulating and enhancing the learning environment in alignment with the learners' requirements proved instrumental in attaining favorable outcomes.

The ensuing exposition shall persist throughout the primary segment of the lesson. Furthermore, the involvement of students in the demonstration of the requisite skills contributed to the enhancement of the efficacy of the educational strategy.

This assertion is corroborated by Williams (1983, 52), who posits that "imagination in teaching begins with the transformation of perception into real knowledge. The efficacy of educators is contingent upon their aspiration and confidence that their implementation of varied and pioneering pedagogical approaches will captivate students and engender profound and emotive comprehension. This commitment is fueled by a profound love for their students and a determination to empower them. Furthermore, Al-Saadi (2012, 12–13) posits that guided visualization plays a pivotal role in enhancing an individual's capacity to visualize objects

visually. This facilitates the translation of the intricacies of skills into lucid mental images. This accelerated assimilation of skills has been demonstrated to be more effective than traditional learning methods. In addition to fostering imagination, it is a distinctive instrument that sets individuals apart, contributing to the cultivation of mental, exploratory, and creative capacities in students. This approach has been shown to enhance their focus and propel their educational engagement.

As posited by Al-Zaghloul (2017, 199), "guided visualization facilitates the storage of information and retention in memory for extended periods, and enhances the speed of remembering and retrieval. This approach facilitates the integration of information, thereby enhancing the comprehensibility and coherence of the narrative. It has been demonstrated that students who employ guided visualization exhibit elevated levels of self-confidence, noteworthy achievements, and exceptional visual and spatial intelligence. In addition to their capacity to rectify misconceptions and comprehend subjects with greater precision, they also demonstrate an aptitude for expeditious problem resolution through innovative methodologies.

3-2 Presentation of the Results of the Two Groups in the Post-Test and Discussion:

Table (2)

Demonstrate the results of the two groups in the post-tests

Variables	Groups	Arithmetic mean	Standard Deviation	Calculated value	Error Ratio	Significance
Defensive Skills	Experimental	6.75	0.97	5.2	0.001	Moral
	control	4.65	0.83			

3-2-1 Discussion of the Results:

As illustrated in Table (2), the experimental group demonstrated superior performance in the dimensional test when compared to the control group.

This superiority can be attributed to the effectiveness of the guided visualization strategy. This has had a significant impact on the direction of the learning process and has enhanced the investment of knowledge among learners. This pedagogical approach fostered a mindset conducive to applied learning. She encouraged students to cultivate vivid mental images and apply them in real-world settings. This objective is realized through a meticulous examination of the intricacies involved in the execution of the skill. This approach has been shown to facilitate substantial skill development among learners.

This assertion is corroborated by Leboutiller's findings in 2003, p. 94, which state, "The imagination reinforces the notion that when students execute a task with precision, they are guided by a preconceived notion of their objectives. This cognitive process prepares the nervous system in the brain, facilitating psychological preparation for the task and its outcomes. Consequently, this contributes to a reduction in errors and an enhancement in the quality of work, along with an increase in internal enthusiasm and self-motivation to accomplish the task in the most optimal manner."

As Mathewson (1999) posits on page 34, "imagination is more significant than knowledge because it signifies a perpetual influx of concepts that we discern in diverse manners, such as sight, hearing, and sensation. These conceptualizations are not confined exclusively to vision; they extend to the domains of touch, taste, and sound. Imagination can be defined as an internal expression of experiences and perceptions."

The integration of multimedia elements, including the display of skill components on dedicated stands, the selection of pertinent visual representations, the repeated viewing of instructional videos in a designated area of the Sports Hall, has been identified as a significant factor in enhancing the learning process. The presentation utilized visual aids and periods of silence, with the instructor assuming the role of elucidating and clarifying the motor program of the skill, emphasizing the sequence of the skill, from preparation to execution. Furthermore, he encouraged students to develop their own understanding of the intricacies of the skill during the applied phase. The students were instructed to summon mental images and focus their attention on the performance's steps with precision.

The instructor provided assistance to the students, guiding their body positions during the performance to mitigate prevalent errors. These applications have demonstrated a marked positive effect in enhancing the acquisition of defensive skills in the discipline of boxing."

4. Conclusions and Recommendations:

4.1 Conclusions:

1. The results showed that the use of guided imagery strategy in learning defensive skills in boxing for students had a significant positive impact on their learning level and performance.
2. The guided imagery strategy helped students enhance their self-confidence and increase their focus while performing skills, leading to an overall improvement in their performance.

4.2 Recommendations:

1. It is essential to provide a supportive learning environment that encourages students to use and apply the guided imagery strategy in learning various skills.
2. It is recommended to train teachers on how to effectively implement the guided imagery strategy in teaching sports skills.

Resources:

- ✓ Abdul Hamid Ahmed (1990); Boxing, 5th ed., Publishing House, Cairo.
- ✓ Abdullah Abdul Rahman Al-Basam (2010); Educational Exercises in Sports, Al-Hamed Publishing and Distribution.
- ✓ Atef Maghawi Shalaan (2005); Teaching and Training Boxing, Cairo.
- ✓ Hassan Mohammed Al-Saadi (2012); The effect of the imagination strategy on reading comprehension for fifth-grade students, College of Education, Al-Mustansiriya University, unpublished Master's thesis.
- ✓ Imad Abdul Rahim Al-Zghoul (2017); Cognitive Psychology, Amman, Dar Al-Shorouk Publishing and Distribution.
- ✓ Khaled Hassan Mohammed Al-Arja (2004); The effect of imaginative learning on achievement and retention in mathematics among ninth-grade students in UNRWA schools in Nablus Governorate, An-Najah National University.
- ✓ Leboutiller ,N &Marks ,D.F (2003), Mental imagery in program creativity ,a meta-analytic review study , British journal of psychology, Vol.94,N1.
- ✓ Margaret ,W Motlin(1994) , Cognition ,Horcout publishers.
- ✓ Mohammed Sobhi Hassanain (2008); Learning Sports Skills, Arab Thought House.
- ✓ Nadia Al-Afwan (2021); Modern Trends in Teaching and Developing Thinking, Amman, Dar Safa Publishing and Distribution.
- ✓ Nahida Abdul Zaid (2013); Methods in Motor Learning, 1st ed., Amman, Scientific Books House.
- ✓ Partin ,Ronald (2009),The Class room The cheras Survival Guide . 3d edition , published by jossey- bass ,united States of America.

Appendix No. (1)

Clarifies the names of the Assessors

NO.	Scientific title and name	Workplace
1	Asst. Prof. Dr Zaid Mohammed Raouf	Faculty of Physical Education and Sport Sciences, University of Babylon
2	Asst. Dr. Ihsan Ali Nasser	Faculty of Physical Education and Sport Sciences, University of Babylon
3	Asst. Lect. Mustafa Alaa Abdel Amir	Faculty of Physical Education and Sport Sciences, University of Babylon

Appendix No. (2)

Performance Appraisal Form

NO.	**Skills to be evaluated**	**Grade**	**Expert Calendar**
1	**Punch Repellent**	**2degree**	
2	**Deletion**	**3 degree**	
3	**Tilting the torso backwards**	**2 degree**	
4	**Defense by taking a step back**	**3 degree**	
Total		**10**	**10**

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Appendix No. (3)

Illustrates a module template

First Educational Module Educational Objective: - Learn some defensive skills
Date: 14-10-2024 Educational Objective: Spreading the spirit of motivation and excitement
Time:- 60m

Sections of the Unit	Time	Events & Motor Skills	Output	Observations
Main Section **Educational aspect**	**(20) min**	**- Explaining the defensive skills by the teacher and presenting them through a picture that shows the performance (preparing an imaginary scenario).** **Students are asked to imagine what - has been watched and a headset (start with imaginary preparatory .activities)**	********** * * * * * *	**- The show takes place in one of the corners of the stadium** **- Emphasizing the technique and performance of defensive skills**
Practical aspect	**(40) min**	**(Implementation of the Imaginative Activity)** **The students stand in one line and take the defense position and the movement is carried out without a colleague, i.e. the defense is carried out by each student alone.** **- Students stand in a line in front of the teacher, to perform various punches and students perform the required defensive skills.** **- (5) two students stand facing (5) other students in the ring, and (5) students attack with various punches,**		**Close your eyes, relax, and then take a deep breath for the student's guided imagery before performing each exercise for (5) seconds.**

		and (5) others do the defense work according to the required skills with the exchange of roles.		