



The impact of the guided imagination technique on education the skills of spiking and blocking in volleyball for students

تأثير أسلوب التخيل الموجه في تعليم مهارتي الضرب الساحق والصد في الكرة الطائرة للطلاب

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Abstract:

The purpose of this article is to develop instructional units for third-stage students using the guided imagination technique, ascertain how the approach influences students' acquisition of volleyball smash and blocking skills, and establish the connection between guided imagination and student volleyball smash and blocking skills. The investigator utilized The test method's design comprised two groups: an experimental group and a control group. There are two equal groups for the pre-test and post-test. because it better fits the research's objectives and underlying beliefs. For the 2023–2024 school year, 72 third-stage students were selected to comprise the research community. A random lottery was used to choose the study's sample of 20 kids from that community. The students were divided into two groups, the experimental and control, each with 10 students. The experimental group was taught volleyball spiking and blocking methods using the guided imagining methodology. One of the researcher's most important findings was that the experimental group exhibited improvement and proved that the guided imagination technique she had devised helped them learn how to block and spike in volleyball. and individuals of the experimental group who used the directed imagination paradigm to acquire volleyball blocking and spiking tactics outperformed the control group in the dimensions measurements. Using the directed imagination strategy to teach students the basics of volleyball and working on organizing the content of the study materials using design-directed imagination steps and in a way that supports achieving the learning objectives set in other sports activities are two of the researchers' most important recommendations.

Keywords: guided imagination - spiking - blocking in volleyball .

الملخص :

يهدف هذا البحث إلى بناء وحدات تعليمية باستخدام أسلوب التخيل الموجه لطلاب المرحلة الثالثة وتحديد مدى تأثير الاستراتيجية على تعلم أداء مهارتي التكتيس والصد في الكرة الطائرة للطلاب، وتحديد العلاقة بين التخيل الموجه ومهارتي التكتيس والصد في الكرة الطائرة للطلاب. استخدم الباحث أسلوب الاختبار بتصميم تضمن مجموعتين واحدة تجريبية وأخرى ضابطة، وكذلك مجموعتين متساويتين للاختبار القبلي والبعدي لأنه أكثر ملاءمة لأهداف ونظريات البحث. تم اختيار 72 طالبًا وطالبة للدراسة 2023-2024 لتكوين مجتمع البحث. تم اختيار عينة الدراسة من ذلك المجتمع والبالغ (20) طالبًا وطالبة بطريقة عشوائية (قرعة)، والتي تم تقسيمها إلى مجموعتين ضابطة وتجريبية، تتكون كل منهما من عشرة طلاب؛ يتم تدريس المجموعة التجريبية تقنيات التسديد والصد في الكرة الطائرة باستخدام أسلوب التخيل الموجه. ومن أهم الاستنتاجات التي توصلت إليها الباحثة: أثبتت المجموعة التجريبية أن استراتيجية التخيل الموجه التي أعدها كانت فعالة في مساعدتهم على تعلم كيفية الصد والتسديد في الكرة الطائرة، وأظهرت المجموعة الضابطة تحسنًا في تعلم هذه المهارات بأنفسهم، كما أن أفراد المجموعة التجريبية الذين تعلموا تقنيات الصد والتسديد في الكرة الطائرة باستخدام نموذج التخيل الموجه حصلوا على درجات أفضل في مقاييس الأبعاد من المجموعة الضابطة. ومن أهم توصيات الباحثة: استخدام استراتيجية التخيل الموجه لمساعدة الطلاب على تعلم أساسيات الكرة الطائرة والعمل على هيكلة محتوى مادة الدراسة باستخدام تصميم تعليمي يتوافق مع خطوات استراتيجية التخيل الموجه وبما يتماشى مع الوصول إلى أهداف التعلم المحددة في الأنشطة الرياضية الأخرى.

الكلمات الدالة: استراتيجية التخيل الموجه، الضرب الساحق، حائط الصد بالكرة الطائرة.

1-1 Overview of the Study and Its Significance:

Volleyball is unique among sports because of its wide range of skills and their intimate connection, aside from the fact that the player switches between offensive and defensive responsibilities and vice versa, requiring him to execute them as fast and with the least amount of effort possible. This implies that in order to achieve the greatest gameplay outcomes, the player must use the basic abilities in every scenario that the game requires. This includes blocking and spiking skills, which are considered fundamental volleyball skills since they are interchangeable and offer a direct point that puts emphasis on scoring points and moving forward. The process of directed imagination entails pushing the mind to new heights in order to accomplish a specific outcome in a specific scenario and at a specific time. One of the most important things that a volleyball player enjoys is the ability to



anticipate and use imagination (Ali Mustafa Taha and Ahmed Abdel Dayem, 1999). It is commonly known that his performance tasks require a range of imaginative skills, such as the capacity to remember past events. draw the motor programs for the skill based on the learner's abilities and avoid the illusion that results from unguided imagination (perceive the skills of the moment from these experiences to build perceptions about performance). This is how mental training, which depends on the fencer's ability to recall pre-drawn programs in order to match them with the competition's requirements in past events, and contemplation, which involves reflecting on a specific incident and seeking answers, differ from imagination (Jerri, Radhi, and Oleiwi n.d. 2024). The development of mental To achieve integration within the planning process, Strength, flexibility, and speed must be developed in concert with the development of physical fitness components, particularly during the early stages (Saleh, Radhi, and Abdullah 2021). Building mental and emotional talents in addition to physical skills requires work, and neglecting this preparation makes it harder to compete successfully. Because it is a fundamental and useful component of the system of thinking and mental activity, philosophers have been interested in the nature of mental images and imagination since before the creation of the universe. There are several definitions of imagination, but the most significant is that it is a psychological process in which the elements of memory and new mental shapes and formations that arise from perception and the connections between the mental images that have already been formed through past experiences undergo synthesis and integration. Since it is the teacher's job to help students make the connection between imagination and reality by allowing them to mimic the elements of the learning environment, the limits of creativity must not drive students to notions that are outside the realm of human thought. Imagination hence facilitates the development of novel ideas to alter beliefs. Control over minds must be free from compulsion and allow for the development of beliefs, meaning that it can explain the unknown with the known, if we wish to use the human mind's imagination to arrive at and establish scientific truth. Therefore, while mental imagination is less reliant on prior experience than mental imagination, it does not negate its significance. As we might expect, there are performance, mental, emotional, and



cognitive components to the skill. It is impossible to overstate the significance of knowledge as a component of skill; without the foundational understanding needed for it, a skill cannot be effective. As stated, The ability must be displayed quickly, flawlessly, efficiently, and with little effort. Since imagination is regarded as one of the abilities that aid in acquiring the experiences and skills that a learner requires in his everyday life, the study's value lies in emphasizing its function in our daily lives. Since the imagination strategy aids in the development of motor skills and makes it easier to learn challenging movements, the researcher turned to the directed imagination method to help third-stage students master volleyball blocking and spiking techniques to the highest possible level.

1-2 Research Problem:

By advancing the process of artistic creativity, imagination helps learners express themselves artistically. In order to create visual representations, students must have a formative imagination that allows them to envisage shapes, re-integrate them, and arrange them in new shapes. Since blocking and spiking are two of the most crucial talents a player must have, the student's many abilities allow him to use his imagination while making the finest choices possible. Additionally, failing to use the right imagination when spiking or blocking may result in the team losing a goal and failing to win. There is a clear problem with pupils' ability to use their imagination when completing the skills, particularly during contests because the smash needs the player to use their creativity. When this doesn't work, the researcher blames the incapacity to visualize while using the blocking and spiking techniques. Identifying the connection between learning volleyball blocking and spiking techniques and directed imagination is one of the most significant issues that motivated the researcher to investigate this topic and test it in the field.

1-3 Goal of the Research:

1. Develop educational resources for third-stage pupils utilizing the guided imagination technique.



2. Find out how the guided imagination method affects students' performance when they are studying volleyball smash and blocking techniques.
3. Determine how volleyball students' smash and blocking abilities relate to directed imagination.

1-4 Research Hypothesis:

The test results indicate statistically significant differences between the experimental group study's before and after learning to execute the smash and volleyball blocking tactics.

1-5 Limits of Research:

1 - 5 - 1 -Third-stage students in the human area

1 - 5 - 2 -time field: (16/2/2024) to (20/3/2024)

1 - 5 - 3 -closed hall within the college is the spatial field.

Chapter Two: Methods of Research and Field Operations:

2–1 Methods of Research:

The researcher used two equal groups (experimental and control) to administer a test before and after. the experimental design used in the test method. because it better fits the study's objectives and underlying beliefs.

2-2 The Research Population and Its Representative:

Based on this, third-stage students were selected to comprise the research community for the academic year. (2023-2024) with seventy-two students. A random lottery was used to select the study's sample from that community, which consisted of 20 students. These students were divided into two control and experimental groups, each consisting of 10 students. The experimental group was given a guided imagination strategy to help them learn how to spike and block in volleyball.

2-2-1 Sample uniformity:



As shown, using the skewness coefficient The researcher found homogeneity for (mass and height, arm, and age) in order to moderately regulate the research variables that accompanied the research experiment and to determine the validity of the sample and the distribution of the values of its variables.

The sample's homogeneity with regard to mass, height, and age is displayed in Table (1).

Factors	Mean	Std. Deviations	Median	Skewness
Length	169.8	0.93	169	0.83
Age	20.4	0.79	20	0.91
Mass	66.5	0.97	66.2	0.88

2-3 Research Methods, Instruments, and Devices:

1. International and Arab scientific references and sources.
2. A survey of the opinions of specialists and experts.
3. A form for assessment The technological prowess of volleyball blocking and smash tactics Measurements and tests
4. An authorized volleyball court.
5. A volleyball match that is lawful
6. The number (1) of an electronic calculator
7. A weight-measurement medical scale
8. The first video camera.

2-4 Determine and Characterize Special Endurance Tests:

The first test (smash skill)

- Assessing the accuracy of the straight smash in the inner triangle of the opponent's court is the aim of the test.



- Two triangles, representing the opposing halves of the court, and three additional triangles, representing the net's side, make up the inner triangle. Five volleyball-sized regions, each measuring three meters in width, are included in the tools.
- Performance requirements: The tester hits the straight line in the direction of the inner triangle of the net after getting ready.
- Circumstances:
 1. Each tester is given five chances.
 2. Every undertaking needs to be thoroughly planned.
 3. Depending on where the ball lands, the scoring is calculated using the formula below:
 - (A) The first portion contains three points.
 - (B) In the second area, at point (1).
 - (C) The third segment contains five points.
 - (D) Outside of these areas, the tester receives (zero).

The registration process: Since the tester records the points he earned over the five attempts, the final score for this test is 25. points.

Second test (blocking skill): (Ahmed Yousef Mutab, 2003, 62)

- The purpose of the test is to assess the technical performance of the volleyball blocking talent.
- The required equipment includes a 30-cm-tall seat, a legal volleyball court, ten A cameras, a whistle, permitted volleyballs, and colored-numbered adhesive paper.
- Requirements for performance: Each student has three consecutive chances.
- Performance requirements: Touch the ball with both hands to move it towards the net when the starting whistle blows (3), then return to position (3), and so on, performing the same skill one after the other.



Standing on a stool in the second square in front of the net, the instructor holds the ball 30 cm above the net.

Method of registration: Three judges (evaluators) assess the three efforts from each lab after they have been photographed. Each judge assigns three points to each lab, for a total of ten points, which are then split among Each try is given one of the three skill sections—three for the preparatory part, four for the main part, and three for the final part. The final grade for each lab is determined by selection. is then ascertained. evaluator.

2-5 Survey Experiment:

In order to determine the validity of the technical performance assessments of skills closed hall, as well as the feasibility of applying them to the members of the study sample in the future, the researcher conducted an exploratory experiment on four students on Sunday, 18/2/2023.

The following was discovered when the students' exploratory test was administered:

- The appropriateness and safety of the tools and apparatus used.
- The basic skills tests' appropriateness for the specimen.
- The time needed for each of the several experiments was established in order to apply that knowledge when doing the fundamental experiment.
- The support personnel received training on how to administer the tests.

2-6 Pre-tests:

On Monday, 19/2/2024, the researcher carried out the preparatory work for the technical performance of the skills (preparation from above, block). The researcher took into account the following elements when applying:

1. Testing every group member in the same sample under the same conditions and at the same time of day.



2. Performing the checks at the same place for each sample member.
3. Testing each sample member's skills using the identical equipment and instruments.
4. Making an effort to guarantee that each sample member is on the same assistance work team.
5. Setting up an order for video recording

2-7 The Main Experiment

Following a review of the third-stage teaching curriculum and an application of its terminology, the researcher created the teaching units, numbered eight units, using the guided imagination approach. participation in educational modules in line with. The implementation of the instructional units, which lasted 90 minutes each, started on Monday, March 11, 2024, and continued for four weeks at a rate of two educational units each week, on Monday and Wednesday of every week.

2-8 Post-Tests:

The experimental and control groups had post-measurements on Tuesday, 14/1/2024, at nine in the morning, at the same location, and under the same set of conditions as the pre-measurements, following completion of the "guided imagination strategy."

2-9 Statistical Approaches:

The researcher used the seventeenth edition of The Social Sciences Statistical Portfolio (SPSS) to extract the following techniques:

Chapter Three: Presentation, Evaluation, and Talking About the Outcomes

3-1 Results of the investigation are presented and discussed in variables studied for control group:

The outcomes of the skill tests for the control group are displayed in Table (2).



Fars	Prior to the test		After the test		T-value	Sig Level	Type-Sig
	Cto Arithmetic mean	Standard deviation	Arithmetic mean	Typical deviation			
Spiking	10.86	1.324	13.25	1.202	6.721	0.001	Sig
Block	3.92	0.886	5.21	0.932	2.322	0.007	Sig

3-2 Presentation and discussion of the study findings in th experimental variables group:

The outcomes of the competence assessments for the experimental group in Table (3).

Factors	Prior to the test		After the test		T-value	Sig Level	Type-Sig
	Arithmetic mean	Standard deviation	Arithmetic mean	Typical deviation			
Spiking	10.12	1.122	16.24	0.922	4.045	0.000	Sig
Block	3.12	0.891	7.25	0.874	6.114	0.000	Sig

3-3 Presentation and discussion of The post-test results for the experimental and control groups findings on variables under study:

The outcomes of the skill assessments for both the control and experimental groups are displayed in Table (4). in the post-tests.

Variables	Control group		Group under experimentation		T-value	Sig Level	Type-Sig
	Arithmetic mean	Standard deviation	Arithmetic mean	Typical deviation			
Spiking	14.25	1.202	16.24	0.922	3.831	0.003	Sig
Block	5.21	0.932	7.25	0.874	3.449	0.002	Sig

3-4 Analysis of the Findings:

It is evident from Tables 2-3 that both have improved in terms of the students' capacity to acquire the two skills being examined. This is because learning rates vary based on the method and the effectiveness



of the subject delivered, even though every skill may be learned in any way. We discover that both the experimental group and the control group attained a particular degree of education as a result of the teacher's rigorous methods. Teaching the player the material they need to learn is the primary objective of every instructional unit in any game. Significant differences in the skill tests under investigation were ascribed by the researcher to the students' terminology used by the teacher since the curriculum was developed and evaluated based on strong scientific principles, which improved the performance of the students. According to Al-Amaira (2002), "A student is stimulated to achieve optimal performance by being placed in educational settings or atmospheres and given an effective environment, which is achieved by helping him acquire knowledge, abilities, and experiences in a systematic, empirically supported manner." The researcher backs up this assertion. Al-Amaira (2002) and (312). "Blocking and spiking volleyball skills test results showed notable variations between the experimental group's pre- and post-measurements favoring the latter," according to Table (3). Since it was evident that the instructional units that employed the technique improved the performance level of the experimental group, the researcher credits this to the use of the guided imagination approach. operate in line with its six pillars, as it greatly facilitated the demonstration of some of the students' academic abilities in enhancing their self-confidence by sincere participation in the class and discussion without hesitation or fear, which improved their excellence. Additionally, the teacher can maintain the students' interest throughout the presentation of the topic by employing relaxation and focus techniques. Students benefit from this as it raises their level of excitement, focus, and suspense, all of which help them develop certain cognitive skills. This indicates that when applied, the guided imagination technique produced suitable learning settings and ambiances. The guided imagination method's importance stems from its ability to encourage engagement, claims. When these behaviors are sincere and productive, the student actively participates in them.



Chapter Four: Concluding remarks and suggestions:

4-1 In conclusion:

1. The experimental group has shown success in practicing volleyball blocking and spiking strike skills with the aid of the researcher's prepared guided visualizing technique.
2. The control group is improving in its ability to teach pupils how to block and spike in volleyball.
3. Members of the experimental group that used the directed imagination method to acquire volleyball blocking and spiking methods outperformed the control group in the dimensions measurements.

4-2 Suggestions:

1. Teach students the basics of volleyball by using the directed imagination technique.
2. Work on organizing the content of the study materials using an instructional design that complies with the stages of the directed imagination technique in order to accomplish the educational objectives set forth in other athletic activities.
3. Compare the directed imagination method to other teaching modalities or strategies to determine how it impacts the development of basic volleyball and other sports skills.

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