

THE EFFECT OF RELAXATION EXERCISES AND MENTAL VISUALIZATION (EXTERNAL AND INTERNAL) ON LEARNING SOME TYPES OF SERVE IN VOLLEYBALL

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ABSTRACT

The importance of research is to improve the level of volleyball player's learning by conveying scientific information about the role and importance of the mental and psychological aspect in learning and training in basic skills, especially serve because it is the beginning of every attack and its success sometimes achieves a point without the effort of other players and this is what serves the training process in general Serving coaches and preparing junior volleyball players for competitions. The research objectives were to prepare relaxation exercises and mental visualization (external and internal) in learning some types of serve in volleyball, as well as to identify the effect of relaxation exercises and mental visualization (external and internal) on learning some types of volleyball serve.

The most important conclusions were:

1. Relaxation and mental visualization exercises have had an effective role in increasing the learning of skill performance, especially the performance of different types of serve in terms of difficulty and performance.
2. Relaxation helps remove fear and anxiety in execution and reduces fatigue in specific repetitions of performance, and this is what helped the correct performance of serving in volleyball.

Keywords: Relaxation, exercises, mental and visualization.

I. INTRODUCTION

The world is seeing an exceptional improvement at all levels that are in contact with the individual's occupation and wellbeing, as science appeared to advance in logical creation that helps this turn of events, including the numerical angle. Also, because the game has demonstrated its quality in raising human wellbeing and accomplishing his longings, premium in its turn of events and thriving appeared to be the best evidence of this the outcomes accomplished by sports competitions in different games. One of the capacities that assist the player with accomplishing athletic accomplishment and greatness.

On the mental side, the conclusive factor in many matches is the fundamental impetus in detonating the player's energies to accomplish the ideal objective, which is the right specialized presentation. The most ideal approach to accomplish evasion, later on, is to assemble the correct guidelines in making players and showing them the right capable presentation as per mental establishments, including how to loosen up when performing or a fitting mental discernment in execution.¹

Unwinding is one of the significant mental aptitudes that help keep the degree of excitement inside ordinary cutoff points and that add to the improvement of the degree of accomplishment and the capacity to control mental pressing factors that affect the degree of the major part in accomplishment, and unwinding upgrades the capacity to finish life normally with no pressure and mental and actual impacts. It enables the brain to think discreetly and assists with confronting and withstand all troubles. Either mental insight is one of the significant factors that influence the exhibition level of a volleyball player,² as it is utilized to typify the presentation by investigating the engine aptitude intellectually and this incorporates killing blunders by imagining the right strategy for execution. Henceforth the significance of exploration to improve the degree of volleyball player's learning by passing on logical data about

the job and significance of the psychological and mental viewpoint in learning and preparing in fundamental aptitudes, particularly serve since it is the start of each assault and its prosperity once in a while accomplishes a point without the exertion of different players and this is the thing that serves the preparation cycle, by and large, serving mentors and getting ready junior volleyball players for rivalries.

II. RESEARCH PROBLEM

During learning, training and competition, the volleyball player faces pressures each according to the stage of building the player correctly, and in the learning stage is the basic stage in which it is built in an appropriate and developed manner, the player faces fear and failure in skill performance, especially serve, so it must be properly constructed in the correct psychological manner.

Through the researcher's humble experience as a former player and academic specializing in volleyball, he noticed that most of the failure is in the development and upgrading of the player's level, especially the skill and the service, in particular, being more failure most of the time due to not giving him the appropriate exercises in relaxation and the appropriate mental perception in the early stages of learning that will help them in the future. In his development towards the best in skill performance, which prompted the researcher to address the problem by using relaxation exercises and mental visualization (external and internal) in learning some types of volleyball serve.

Research objectives

1. Preparing relaxation exercises and mental visualization (external and internal) in learning some types of serve in volleyball.
2. Identify the effect of relaxation exercises and mental visualization (external and internal) on learning some types of volleyball serve.
3. Identify the results of the differences between the pre and post-tests and the control and experimental groups in learning some types of volleyball serve.
4. Identifying the results of the differences in the post-tests between the control and experimental groups in learning some types of serve in volleyball.

Research hypotheses

1. A positive effect by using relaxation exercises and mental visualization (external and internal) in learning some types of volleyball serve.
2. The presence of significant differences between the results of the pre and post-tests and in favour of the post-tests and for the control and experimental groups in learning some types of serve in volleyball.
3. The presence of significant differences in the results of the posttests between the control and experimental groups in favour of the experimental group in learning some types of volleyball serve.

Research fields

- The human field: students of the first stage in the College of Physical Education and Sports Sciences - University of Basra
- Spatial field: the closed hall for volleyball in the College of Physical Education and Sports Sciences - University of Basra.
- Time range: the period from 4/3/2019 to 7/4/2019.

Research Methodology

The researcher used the experimental approach designed for equivalent groups (control and experimental) to suit in solving the research problem and achieving its objectives.

Research community and sample

The research community was identified for the first stage students in the College of Physical Education and Sports Sciences and Basra University, and their number reached (180) students. The research sample was selected (20 students) representing one division, and then they were divided into two control and experimental groups so that each group became (10) students, and the sample was homogeneous within each group and the two groups were equivalent to the research variables, as in Table (1).

Table 1. Shows the homogeneity and parity of the control and experimental groups

Variables	Control group			Experimental group			Calculated (t) value*
	Mean	SD	Coefficient of variation	Mean	SD	Coefficient of variation	
Length (Cm)	174.56	3.262	1.868	174.89	3.994	2.283	0.192
Weight (Kg)	74.623	2.447	3.279	73.745	2.745	3.722	0.716
Difficult Point Serve Accuracy (Degree)	20.23	0.475	2.347	20.451	0.652	3.188	0.824
Serve routing accuracy to specific regions (Degree)	10.23	0.662	6.471	10.451	0.456	4.363	0.827
Top and bottom serve test(Degree)	12.345	0.741	6.002	12.452	0.711	5.709	0.312
Long serve accuracy (Degree)	15.232	0.556	3.65	15.623	0.536	3.43	1.521

* The tabular value (t) at the degree of freedom (18) and the level (0.05) = 1.724

Methods for gathering information

- Arab and foreign sources.
- Tests used.
- Scientific observation.
- Regular volleyball court.
- (10) flying balls.
- Medical balance.
- A metric tape measure (2) meters long.

Field research procedures

Determine search variables

The research variables were identified, which are the types of serve, and it is within the research problem, which the researcher believes is important and necessary for volleyball players.

Tests used:

Difficult Point Resolution ³

1. The purpose of the test: measure the serving accuracy for specific difficult points.
2. Tools: legal volleyball court, (6) balls, the field is divided into three areas.
3. Performance Specifications: The laboratory performs ten serves for each of the three specified regions, that is, ten serves on area (A), ten more on area (B) and ten seconds on area (C), and calculates only the attempts in which the ball falls in the specified areas.
4. Registration: 4 points for every correct serve in which the ball falls within the designated area.

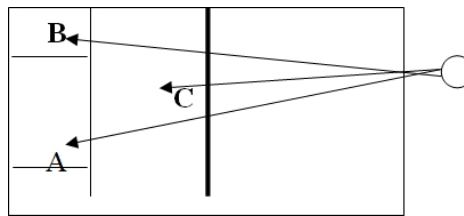


Figure 1. Shows the accuracy of sending for difficult points

Serve routing accuracy for specific regions ⁴

- Purpose of testing: measuring serve accuracy for specific areas.
- Tools: Legal Volleyball Court, Legal Volleyball.
- Performance Specifications:
 1. Each player has ten attempts.
 2. If the ball falls on a line separating two areas, the player is credited with the highest score of the region.
- Registration: The player takes a score for the highest area in which the ball is located.

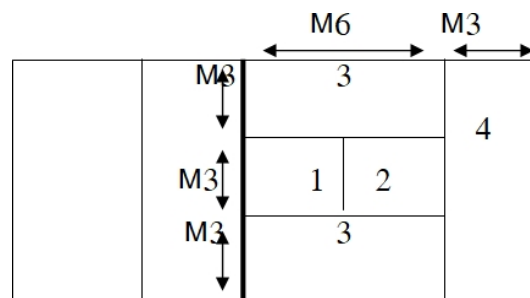


Figure 2. Shows the accuracy of serve routing for specific regions

Top and bottom serve test ⁵

- The purpose of the test: measurement of serve accuracy from top and bottom.
- Tools: Ten Flying Balls, Legal Flying Ball Court, Number of Points Awarded on Targeted Areas.
- Performance specifications: The laboratory performs five consecutive attempts from the bottom, trying to direct the ball to the area within which he wrote the highest score, then the laboratory performs again five consecutive serves from the top (tennis service) trying to direct the ball to the area in which he wrote the highest score.
- The conditions :
 1. Each laboratory has ten attempts (five using the serve from the bottom, and five using the serve from the top).
 2. Points are calculated according to the fall of the ball in the specified area on the court so that the tester gets the score inside the area in which the ball fell.
 3. If the ball touches the net or goes outside the field, the tester gets a (zero)
 4. If the ball falls on the line, it is counted as if it fell in the area specified by this line, and if it fell on a common line between two areas, the laboratory awards the score contained in the region with the highest score.

- Registration: Records for the test the scores he obtained in the ten attempts he made, noting that the final score is 50.

Long Serve Resolution ⁶

- The purpose of the test: measurement of long serve accuracy.
- Tools: Legal Flying Ball Court, 3 Volleyball.
- Performance specifications: From the place designated for serve, the laboratory performs the serve towards the other half of the stadium, so that ten serves are assigned to Area (A), another ten to Zone (B), and another ten to Area (C).
- Registration: 4 points for each correct serve in which the ball falls inside the specified square 2 points for each correct service in which the ball lands inside the square next to the specified square.

Pilot study

The researcher conducted an Pilot study on 4/3/2019 on the same research sample to find out the ability of the sample to perform and the difficulty they face in implementing the exercises set in addition to knowing the specific time and appropriate size.

Field experiment

Pre-test:

The pre-tests were conducted on 3/11/2019.

User education

The researcher has prepared many relaxation exercises, mental visualization and a special performance in serve in volleyball, where (10) relaxation exercises and (10) mental perception exercises of the quality of (internal and external) were developed, and the exercises were programmed in the applied section of the physical education lesson for first-stage students In the College of Physical Education and Sports Sciences, University of Basra, the program included (16) units for relaxation and mental visualization, at the rate of two units per week, the duration of each unit is (15-20) minutes, and the application of the exercises began on 3/12/ 2019 and ended on 6/4/2019.

Posttests:

The post-tests were conducted on 7/4/2019.

Results and discussions

Table 2. Shows the values of (v) pre and post control group in the used serve tests

Variables	Pretest		Posttest		Standard error	Calculate d (t) value*	The level of significance
	Mean	SD	Mean	SD			
Difficult Point Serve Accuracy (Degree)	20.23	0.475	22.35	0.745	0.655	3.236	Sig.
Serve routing accuracy to specific regions (Degree)	10.23	0.662	12.44	0.623	0.571	3.87	Sig.
Top and bottom serve test(Degree)	12.345	0.741	13.45	0.362	0.338	3.269	Sig.
Long serve accuracy (Degree)	15.232	0.556	17.56	0.362	0.862	0.7	Sig.

*The tabular value of (t) at the degree of freedom (9) and below the level (0.05) = 1.833

Table 3. Shows the values of (c) pre and post for the experimental group in the used serve tests

Variables	Pretest		Posttest		Standard error	Calculate d (t) value*	The level of significance
	Mean	SD	Mean	SD			
Difficult Point Serve Accuracy (Degree)	20.451	0.652	24.89	0.945	1.552	2.86	Sig.
Serve routing accuracy to specific regions (Degree)	10.451	0.456	14.99	0.864	1.623	2.796	Sig.
Top and bottom serve test(Degree)	12.452	0.711	16.74	1.668	1.557	2.754	Sig.
Long serve accuracy (Degree)	15.623	0.536	19.74	0.869	1.88	2.189	Sig.

*The tabular value of (t) at the degree of freedom (9) and below the level (0.05) = 1.833

Table 4. Shows the post (t) values between the two experimental groups in the used serve tests

Variables	Control group		Experimental group		Calculated (t) value*	The level of significance
	Mean	SD	Mean	SD		
Difficult Point Serve Accuracy (Degree)	22.35	0.745	24.89	0.945	6.35	Sig.
Serve routing accuracy to specific regions (Degree)	12.44	0.623	14.99	0.864	7.183	Sig.
Top and bottom serve test(Degree)	13.45	0.362	16.74	1.668	5.792	Sig.
Long serve accuracy (Degree)	17.56	0.362	19.74	0.869	6.964	Sig.

*The tabular value (t) at the degree of freedom (18) and below the level (0.05) = 1.724

By observing tables (2) and (3) the presence of significant differences between the results of the pre and post-tests and in favour of the post-tests and for the control and experimental groups, and this indicates the improvement and learning of the two groups in the performance of the serve of its different types in terms of performance and difficulty, and this is due to the correct performance and appropriate repetition used as asserts that “the educational program inevitably leads to the development of achievement, if it is built on a scientific basis in organizing the education process, programming it, using appropriate methods that are graded with difficulty and noting individual differences as well as using effective educational means”⁷.

Either by observing Table (4), we found out that the experimental group is better than the control group in learning and improvement in the performance of the serve in volleyball, which is due to the exercises used that contain relaxation and mental perception of both internal and external quality because the performance by exercises to relax and mental perception helps the player to Addressing all types of negative cognitive, physical and emotional pressures and thus increasing the ability to consistency and stability of skill performance, "mental training is one of the factors for obtaining self-control, focusing attention on the side of emotional control, and contributing to more Self-confidence and focus on positive aspects that work to better expect performance, and prevent the occurrence of negative perception that harms performance through negative feelings that cause increased anxiety and failed expectations that reduce the chances of success”⁸.

Also, relaxation exercises helped the player to control his emotions caused by the distribution of effort during the repetition of the serve exercises and on difficult and specific sites, as well as the appropriate inhalation, which works to supply the working organs and organs with oxygen, which helps to speed up the return to a normal state as “it is difficult for an athlete to be tense while in a relaxed state, because the tension of the muscles and involuntary organs can be reduced if the associated skeletal muscles are in a state of relaxation, and according to Jacobson's opinion, the exhausted mind, anxiety and tension cannot exist in a state of Relaxation”⁹. The researcher also believes that mental relaxation in situations helps to use visualization and visualization, and it is an effective way to get rid of anxiety and stress, which is due to our role in re-enjoying the situation we want by creating an image in our minds that gives comfort, and whenever we live in this state of imagination and focus Reduced tension and various pressures, and this led to the creation of an enjoyable environment in which the athlete exercises the maximum psychological and physical energies and motivates him to the correct performance of motor skills, "Mind

visualization is a powerful tool that can be used to improve anything and everything that You do it when you exercise mentally "¹⁰.

We also see that the mental perception before the performance gives better achievements as happened in the serve in volleyball to the experimental group, "After practising meditation, visualization and visualization, the player will feel a feeling rooted in him, and this has a beneficial and beneficial role for physical growth. And mental, perception is the only language for man to communicate with his inner self, and it is like a storm that comes on the daily pressures and troubles that encounter the player, and by practising them regularly we will reach tremendous and wonderful results for the players "¹¹.

III. CONCLUSIONS

1. Relaxation and mental visualization exercises have had an effective role in increasing the learning of skill performance, especially the performance of different types of serve in terms of difficulty and performance.
2. Relaxation helps remove fear and anxiety in execution and reduces fatigue in specific repetitions of performance, and this is what helped the correct performance of serving in volleyball.
3. A mental visualization is a powerful tool that can be used to improve anything and everything that you do when you train mentally, and this is what happened in learning to send serve and the difficulty of implementing it.

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