

## Impact of Skill Execution – A Case Study on Volleyball Matches

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### Abstract

The current study was performed so as to study the impact of imagery training on performance variables of male Volleyball players. For the current study, 30 male Volleyball players were selected randomly. The age of selected players was found to be between 18 to 25 years.

There were two groups were involved in the present study namely experimental and control group. Each group had 15 players and pre post random group design was implemented on both the groups. Serving and passing were used as variables. These two variables were measured with the help of Russell lange volleyball test.

The time duration for the imagery training of the experimental group was six weeks. An imagery tape was played for imagery training. Prior to passing and serving in Volleyball, each player was allowed to listen the audio and visuals for 15 minutes. On the other hand, no type of service was provided to the control group. The data was collected two times, before and after the training sessions.

The impact of imagery training on selected male Volleyball players was measured with the help of Analysis of Covariance (ANCOVA). The current article highlights the impact of imagery training on Volleyball players.

**Keywords:** Imagery Training, Passing, Serving, Volleyball.

### Introduction

Volleyball is very popular game in India. This game has two different nature of offensive and defensive. The game of Volleyball requires different kind of abilities like serving and passing. It is observed that some players are good in serving and others in passing ability; which depends on their ability.

Effectiveness of the skills of a player can be easily measured by his/her approach and attitude. Usually, the performance in an activity by an individual depends on confidence, commitment and consciousness over the activity. In this study, these kinds of psychological skills are analyzed and their impact on imagery training on the players.

The role of serving is very important in Volleyball. There are two types of serving in Volleyball. First is under hand serve and second is over hand serve. For the under hand serve, the serving player used to stand while facing the net and his foot is in the opposite direction and has to hit hand in forward direction.

The ball is taken at waist level. The serving player has to move forward as an arm is swung forward and hits the ball. The hand having the ball is moved little down just before the hit. After that, the player uses the heel of the hand to hit the ball. The hitting arm follows through in the direction of the target.

On the other hand, in overhead serving, player uses the wrist. The player moves the ball upward to 18 inches above head so that the ball falls in line with the hitting shoulder. It is observed that the elbow and hand of the serving player are at shoulder height or above during the entire serving motion.

During passing, when the ball is served then the teams pass the ball and forth. A variety of passes can be used by the players to hit the ball over the net. These passes include passing with movement, fore-arm pass etc. The procedure of 'pass' includes receiving the serve and dig.

The player has to keep his or her arm at a distant from the body to get into 'ready' position. A player uses the fore-arms on contacting with the ball. For a complete pass or dig, the hands of player should be pointed towards the target. After getting in ready position, the player goes for the pass and moves the arms above the head. Then the player forms a triangle with thumbs and pointer fingers - but keeps hands apart.

## Research Work

Hands are directly in front of the face and close to the forehead. This is called the neutral position. When making contact with the ball, the player extends his arms so the ball goes over the net. The player gets into the ready position and waits for the ball with his hands raised 4 to 6 inches above his / her forehead. Then the player keeps his thumbs and index fingers in a triangle through which he can see the ball and has his hands in the shape of a ball. Now he contacts the ball just above the forehead, moves his hands in one direction and extends and "freezes" his arms in the direction in which he wants the ball to go.

Imagery is a part of psychology skill (mental skill), where it effect to athletes to success in their tournament or game. In addition, many athletes and coaches today recognize the power of imagery in sport performance. In fact, athletes from most sport attribute at least part of their success to their use of imagery. It is observed that imagery who have better in relationship between imagery ability and sport performance. Players use imagery to aid in their performances.

The imagery system can be used to help person meet some personal or performance goal. But not all athletes are able to verbally describe exactly how they use imagery, but some can. Clearly, imagery has been useful for great athletes. The concept of imagery is used in many different contexts.

Sport imagery can be defined as using all sense to re-create or create a sport experience in the mind with the goal of enhancing sport performance during training and competition. It was explained clearly where the brain recalls and reconstructs pieces of information stored in memory to build a meaningful image. It is means that most athletes can recall previous experiences in great vividness and detail through imagery.

This can be explaining by this phenomenon; a softball player may recall what it feels like hit or contact the pitched ball. Athletes can also create images of event yet to occur by piercing together bits of information already stored in their memories. Imagery conducted for sport performance is referred to as sport imagery, but can be used interchangeably with the boarder term mental imagery.

Several other terms including mental practice, mental rehearsal and visualization have also been used to refer to various components of mental imagery in sport. Such type of imagery skill has been incorporated in the regular training schedule for volleyball players. So as to improve their performance is selected fundamental skill of volleyball namely serving and passing. The above said fundamental skills of serving and passing have been takes to find the influence of imagery training. For which the methodology adopted in connection with subject, variables, experimental design, tools used to collecting of data and statistical techniques and discussed as follows.

## Methodology

For the current study, 30 male Volleyball players were selected randomly. The age of selected players was found to be between 18 to 25 years.

There were two groups were involved in the present study namely experimental and control group. Each group had 15 players and pre post random group design was implemented on both the groups. Serving and passing were used as variables. These two variables were measured with the help of Russell lange volleyball test.

The time duration for the imagery training of the experimental group was six weeks. An imagery tape was played for imagery training. Prior to passing and serving in Volleyball, each player was allowed to listen the audio and visuals for 15 minutes. On the other hand, no type of service was provided to the control group. The data was collected two times, before and after the training sessions.

The impact of imagery training on selected male Volleyball players was measured with the help of Analysis of Covariance (ANCOVA).

## Training Protocol

The imagery phase considered of having auditory listen to a imagery tape. Each participant should listen the auditory and visual for 15 minutes prior to performing the passing and serving practices in volleyball. The athlete closed her eyes and imagined her own actions. The imagery guidelines are a) imaging the execution of the skill and the outcome; (b) the more vivid and the more detailed one can make the image the better; (c) image the skill as it naturally occurs, in order to analyze the performance to make improvements; (d) not only see oneself doing the skill, but feel oneself go through the motions; (e) practice the imagery with either an internal or external focus; (f) image the skill being performed successfully; (g) use imagery to strengthen the "blueprint" of those aspects of passing and serving performed well, and; (h) emphasize the quality of practice and not just the quantity. Each imagery session was held once per day, which lasted approximately 15 minutes, prior to passing and serving performance.

## Results

The Analysis of Covariance (ANCOVA) was used to investigate the effect of imagery training on selected skill performance variables of male volleyball players. For this study 0.05 level of confidence were fixed.

**Table I:** Analysis of covariance on passing among volleyball players

	Experimental	Control	Source of variance	Some of square	df	Mean square	F ratio
Pre-test mean	51.33	45.27	BG	276.03	1	276.03	6.31
			WG	1224.27	28	43.72	
Posttest mean	54.40	44.40	BG	750.00	1	750.00	19.60
			WG	1071.20	28	38.26	
Adjusted posttest mean	51.87	46.93	BG	148.97	1	148.97	18.50
			WG	217.38	27	8.05	

The obtained F-ratio on testing the significance men difference between players who were treated with imagery training and players with practiced only traditional training without imagery training are: 6.31 (pre - test) 19.60 (post - test) and 18.50(adjusted posttest). The obtained F – ratio of pre – test and post – tests are tested at 0.05 level for the degrees of freedom 1, 27. Thus the obtained F- ratios were

**Table II:** Analysis of covariance on serving among volleyball players

	Experimental	Control	Source of variance	Some of square	df	Mean square	F ratio
Pre-test mean	35.26	34.06	BG	10.80	1	10.80	0.29
			WG	1033.87	28	36.92	
Posttest mean	40.93	34.07	BG	353.63	1	353.63	18.21
			WG	543.87	28	19.42	
Adjusted posttest mean	40.78	34.22	BG	319.53	1	319.53	18.09
			WG	476.86	27	17.66	

\*Significant at 0.05 level

Were found to be significant at 0.05 level since they exceed the required critical value 4.21. Further when testing the F- ratio 18.50 (adjusted post-test), at 0.05 level for degrees of freedom 1, 27 it was found to be significance since the F – ratio exceed the required critical value. From the result, it was inferred that imagery training has significant impact on improving the passing ability among the volleyball players.

## Findings

The result of six weeks imagery training was found to be significantly improve the experimental group on passing and serving among volleyball players. Imagery training will improve the players strategic. It was found that learning was enhanced and performance was improved by mental movement imagery training and physical practice.

The mental imagery group did improve their free throw shooting, although was not statistically significant. However, the combination of physical and mental practice proved to be statistically significant when compared to the control group.

The results of interviews showed an insightful knowledge on psychological factor and mental training approaches that are associated with effective football performance. Mental imagery training were proved to be effective means for the improvement in stopping the penalty stroke in hockey and hence it may be used as an part of cognitive training for the making an hockey goalkeeper player.

There was a statistically significant difference in running performance between the Event Rehearsal Imagery, Event Rehearsal Imagery with Distractions and the Control group. Overall, there was a significant mean difference in running among male and female participants.

## Conclusions

Based on the results the following conclusions have been drawn. In the present study, the obtained result was favored to the efficacy of imagery training in improving the skill performance of players. In sport performance of a players in any skills, is influenced by his/her physical and mental aspects. Normally in day to day activities, individual is mentally rehearsing the event before execution so as to complete successfully. In such a way, participating the skills and situation through the imagery would significantly and in improving the efficiency of players. Thus, it was concluded that positive energy added to the player's level aspects may be the significant source for the imagery group who were performed better in passing and serving.

## Reference

1. Morris MB. Doing sport psychology (chapter 6, doing imagery in the field), 2014.
2. Spittle. A Comprehensive Guide to Sports Skills Tests and Measurement (2nd ed.). Lanham, MD: Scarecrow Press, 2013, 288-290.
3. Watt. Why athletes and exercisers use imagery. Symposium presented at the annual conference for the Association or the Advancement of Applied Sport Psychology. Oct. 3-7, 2001, Orlando, FL, 2012.
4. Sadeghi. The Mental Skills Training of University Soccer Players. International Education Studies. 2010; 3(2)
5. Hausenblas. Exercise imagery: its nature and measurement. Journal of Applied Sport Psychology. 2009; 11:171-180.
6. Khaled T. The effects of mental imagery on the acquisition of motor performance: A literature review with theoretical implications. Journal of mental imagery. 2014; 28:79-114.
7. Khitam. the effect of movement imagery training on learning forearm pass in volleyball. Academic Journal Education Winter. 2013; 134(2):227.
8. Ansbach. The Effects of Mental Imagery on Free Throw Performance. A unpublished thesis in The College at Brockport: State University of New York, 2010.
9. Michael. Effect of Mental Training on the Performance of College Age Distance Runners. Sports Journal, Published by the United States Sports Academy ISSN: 1543-9518, 2014.
10. Murphy, Martin. The use of imagery in sport. In advances in sport psychology, 2nd ed. T.S. Horn. Champaign, IL: Human Kinetics, 2012
11. Tarun Routhan. Effect of Mental Imagery Training & Tratak Kriya on Stopping of Penalty Strokes in Hockey. International Journal of Scientific and Research Publications. 2014; 4(1).