



Effect of Imagery Training on Selected Skill Performance Variables of Male Volleyball Players

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Received 21st February 2016, Accepted 12th April 2016

Abstract

The purpose of the study was to find out the effect of imagery training on selected skill performance variables of male volleyball players. To achieve the purpose of the present study, 30 male volleyball players were randomly selected from players participated at intercollegiate level. The subject's age ranged from 18 to 25 years. For this study, pre post random group design was been employed with two groups namely experimental and control group with 15 subjects each. The variables used in this study were serving and passing. Russell lange volleyball test was used to measure the serving and passing ability. The experimental group underwent imagery training for the period of six weeks. The imagery training considered of having auditory listen to a imagery tape. Each participant should listen the auditory and visual for 15 minutes prior to passing and serving performance in volleyball. The control group was not given any treatment. The pre and posttest data were collected before and after training period of both experiential and control groups. The Analysis of Covariance (ANCOVA) was used to investigate the effect of imagery training on selected skill performance variables of male volleyball players. Imagery training has significant impact on passing and serving among the players of imagery training compared to players of control group.

Keywords: Imagery Training, Passing, Serving, Volleyball.

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Introduction

Volleyball is a team sport. The game volleyball has offensive and defensive play which is differed in nature. The abilities of spiking, serving, passing and setting are fundamental skills in game volleyball. In these skills some of players may excel either in spiking or serving or setting the ball or passing the ball. Thus players would differ significantly by having their own interest and attitude towards the particular skills. Psychologically, the attitude and approach of a player determine the effectiveness of player's skills. Generally in any activity, its success depends upon voluntary control, commitment, confidence and consciousness over the activity of an individual. Such type of psychological skill have been concentrated in this study and effect taken to develop these imagery training was employed to the players. Serving is one of the fundamental skills in volleyball. It can be classified as a) under hand serve and b) overhand serve by its nature of movement. In the under hand serve the serving player stands facing the net with the foot opposite and the hitting hand forward. The ball is held at waist level. The player leans forward as he or she swings an arm forward and contacts the ball. The

hand holding the ball is dropped just before the contact. The player then hits the ball underneath with the fist or heel of the hand. The hitting arm follows through in the direction of the target. Likewise in the overhand serve with a firm wrist, the player tosses the ball 18 inches above his or her head so that the ball falls to the spot just inside the lead foot and in line with the hitting shoulder. The player's elbow and hand are at shoulder height or above throughout the entire serving motion. The player shifts his or her weight to the lead foot and contact is made with the ball.

Passing is a fundamental skill in which once the ball is served and is in play, the teams take turns passing the ball back and forth. Players can use a variety of passes to get the ball over the net including forearm Pass/dig, passing with movement, The basic skill is called "pass," when receiving the serve and "dig" when handling an opponent's attack. The player begins by getting into the "ready position" with his or her arms away from the body. As the ball comes to the player, he or she contacts the ball with the forearms. The pass or dig is completed with the player's hands pointing at the target. The player begins this pass by getting into the ready position. The player raises the arms above the head, with fingers spread in the shape of a ball. Then the player forms a triangle with thumbs and pointer fingers - but keeps hands apart. Hands are directly in front of the face and close to the forehead. This is called the neutral

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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. (Chindi Gregory, 2006)

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. According to Murphy and Martin (2002), imagery who have better in relationship between imagery ability and sport performance. Players use imagery to aid in their performances (Haunsenblas, Hall, Rodgers & Munroe, 1999). 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 (Khaled, 2004). 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 (Morris, Spittle & Watt, 2005). 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 natures of these skills are described as follows. The above said

fundamental skills of serving and passing have been taken 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

To achieve the purpose of the present study, 30 male volleyball players were randomly selected from the players at intercollegiate level. The subject's age ranged from 18 to 25 years. For this study the pre post random group. Experimental design has been employed with two groups namely experimental and control group with 15 subjects each. The variables used in this study are serving and passing. Russell lange volleyball test was used to measure the serving and passing ability. The experimental group underwent imagery training for the period of six weeks the control group was not given any treatment. The pre and posttest data were collected before and after training period of both experiential and control groups.

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 and Discussion

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	

*Significant at 0.05 level

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 post-test). 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 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.

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

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: 0.29 (pre - test) 18.21 (post - test) and 18.09 (adjusted post-test). 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 found to be significant at 0.05 level since they exceed the required critical value 4.21. Further when testing the F- ratio 18.09 (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 serving ability among the volleyball players.

Discussion on 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. Khitam (2013) observed that it was found that learning was enhanced and performance was improved by mental

movement imagery training and physical practice. Lori A. Ansbach (1987) suggested that 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. Hassan Sadeghiet al (2010) reported that the results of interviews showed an insightful knowledge on psychological factor and mental training approaches that are associated with effective football performance. Tarun Routhan (2014) indicated that 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. Michael (2014) indicated that 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 player 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.

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