

## Effect of psychological skill training on selected skill performance of badminton players

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### Abstract

The purpose of the study was to find out the effect of psychological skill training on selected skill performance of badminton players. For this purpose twenty (N=20) (ten experimental and ten control groups) badminton players were randomly selected from Kannur and Kasar god district. Their age was ranged between 18 to 25 years. Psychological skill training program was taken as an independent variable and badminton skill performance variables namely short service, long service and forehand clear were taken as dependent variables. Selected subjects were attended psychological skill training program for a period of sixteen weeks. Tests were conducted and data were collected before and after the sixteen weeks of psychological skill training program. To find the result the collected data were statistically analyzed by using descriptive statistics and paired sample t test. Based on the statistical result it was concluded that the psychological skill training significantly improved short service skill performance. However, the improvements in case of long service and forehand clear performance was no significant at 0.05 levels.

**Keywords:** psychological skill training, skill performance, badminton

### Introduction

Badminton is a racquet sport played using racquets to hit a shuttlecock across a net. Although it may be played with larger teams, the most common forms of the game are singles (with one player per side) and doubles (with two players per side). Badminton is often played as a casual outdoor activity in a yard or on a beach; formal games are played on a rectangular indoor court. Points are scored by striking the shuttlecock with the racquet and landing it within the opposing side's half of the court. Each side may only strike the shuttlecock once before it passes over the net. Play ends once the shuttlecock has struck the floor or if a fault has been called by the umpire, service judge, or (in their absence) the opposing side (Wang Yu Sheng *et al.* 2020) [6].

The basic technique in badminton are racket grip consisting of American grip, forehand grip, backhand grip, and combination grip, service consisting of short service forehand, long service forehand, and short service backhand, upper stroke consisting of overhead lob forehand and overhead drop forehand, blows from below (underhand stroke) consisting of underhand lob forehands, netting forehands, underhand lob backhand, and netting backhand. The techniques that have not been mentioned in the discussion above are incorporated in advanced techniques and achievement techniques.

“Psychological skills training (PST) refers to the systematic and consistent practice of mental or psychological skills for the purpose of enhancing performance, increasing enjoyment, or achieving greater sport and physical activity self-satisfaction”. Therefore, PST should be systematic, goal-oriented, planned, controlled and evaluated (Weinberg & Gould, 2007) [7].

In recent years, the literature on the use of psychological skills has become rapidly available. Most literature on PST use the expressions “psychological skills” and “mental

techniques” more or less interchangeably, whereas some authors (Seiler, 2007) differentiate between psychological skills as the desired outcome (e.g., increased self-confidence and enhanced attentional focus) and psychological methods or techniques (e.g., imagery and self-talk) as the means to promote the desired outcomes through the systematic application of these techniques.

In this context, a skill is the learned capacity (or ability) to carry out a specific task. A technique is the procedure used to enhance that capacity in order to be able to complete this task. Imagery, goal-setting, self-talk and physical relaxation techniques are named as the four basic mental techniques predominantly used in sport psychology interventions, supplemented with multimodal PST, which incorporates a combination of these basic techniques. However, there are numerous additional techniques used to enhance the psychological skills of an athlete, e.g., cognitive restructuring. Sometimes, the term “psychological strategies” is used for the application of psychological techniques. In this paper, the term “strategies” is used to refer to the means or the plan of action used to achieve the enhancement of psychological skills by using one or more psychological techniques. In this context, it is important to note that the same psychological technique can be used for the development of different psychological skills, depending on the specific application (Birrer & Morgan, 2010) [1].

### Objectives of the Study

1. To assess the effect psychological skill training on selected skill performance of badminton players.
2. To compare the experimental and control groups on selected skill performance of badminton players.

### Materials and Methods

The research design of the study was random group design. The twenty (N=20) state level male badminton players were

randomly selected from northern Kerala, India. The selected subject randomly assigned to two groups. Namely male experiment group and male control group. Each group consisted of ten (n= 10) subjects. Before the experimental period, all the subjects were measured of the criterion variables. The experimental group underwent psychological skill training thrice in a week on Mondays, Wednesdays and Fridays for a period of sixteen weeks. After the completion of experimental period all the subjects were again measured of the criterion variable selected. The difference between the initial and final means all criterion variables were considered as the effect of respective treatment among the subject. To test the statistical significance of the difference the obtain data were analyzed using descriptive statistics and paired sample t test. In all the cases 0.05 level was fixed to test the hypothesis.

**Training Intervention**

During the training period the experimental groups underwent psychological skills training (goal setting, relaxation, Imagery and Self-talk) programme in addition to their daily regular activities as per the schedule. Experimental groups underwent their respective experimental training on three days per week for sixteen weeks. The experimental training programmes were designed based on the pilot study results and resources collected from books, periodicals, e-materials and discussions with the experts. The duration of experimental training were planned for 30 minutes. The subjects reported for experimental training between 05 00pm to 5 30pm. All the subjects involved in this study were carefully monitored throughout the training programme and attained 90% of attendance.

**Statistical techniques**

In order to find out the effect of psychological skill training on selected skill performance of badminton players, the descriptive statistics and paired sample ‘t’ test was used to find out the significant differences if any. In all the cases, the level of significance was fixed at 0.05 level.

**Results and Discussions**

**Table 1:** Descriptive statistics and paired sample ‘t’ test for selected skill performance of experimental and control group

Variables	Group	Pre Test	Post Test	t value	Sig
Short Service	Experimental group	71.60	72.60	2.53*	0.03
	Control group	72.40	72.80	1.81	0.104
Long service	Experimental group	59.40	59.80	1.81	0.104
	Control group	57.40	57.50	0.43	0.678
Forehand Clear	Experimental group	67.10	67.80	1.48	0.173
	Control group	65.80	66.00	0.68	0.509

Table 1 shows that, the descriptive statistics and ‘t’ value of the experimental and control group. The pre and posttest means of the experimental group of short service were 71.60 and 72.60 respectively. The pre and posttest means of the control group of short service were 72.40 and 72.80 respectively. The paired sample t-test for the experimental and control groups in case of scores on short service indicates t-values of 2.53 and 1.81 respectively for the experimental and control groups. The t-value of 2.53 in case of experimental group was significant (p=0.03) indicating significant improvement in short service scores from pre to

post test. However, the t-value in case of control group (1.81) was not significant (p>0.05).

Table 1 proved that, the descriptive statistics and ‘t’ value of the experimental and control group. The pre and posttest means of the experimental group of long service were 59.40 and 59.80 respectively. The pre and posttest means of the control group of long service were 57.40 and 57.50 respectively. The paired sample t-test for the experimental and control groups in case of scores on long service indicates t-values of 1.81 and 0.43 respectively for the experimental and control groups. The t-value of 1.81 in case of experimental group was not significant (p=0.104) indicating no significant improvement in long service scores from pre to post test. The t value of 0.43 in case of control group was not significant (p=0.678).

Table 1 indicates that, the descriptive statistics and ‘t’ value of the experimental and control group. The pre and posttest means of the experimental group of forehand clear were 67.10 and 67.80 respectively. The pre and posttest means of the control group of forehand clear were 65.80 and 66.00 respectively. The paired sample t-test for the experimental and control groups in case of scores on forehand clear indicates t-values of 1.48 and 0.68 respectively for the experimental and control groups. The t-value of 1.48 in case of experimental group was not significant (p<0.05) indicating no significant improvement in forehand clear scores from pre to post test. The t value of 0.68 in case of control group was not significant (p>0.05).

**Discussion on findings**

Badminton being a highly technical game, the execution of techniques and skill along with physical attributes contributes to the success of the player at a competitive situation. The present study on effect of psychological skills training on skill performance of badminton players has shown that badminton players significantly improved their performance in short service because of the psychological skills training.

Psychological skills have been effective for attaining optimal athletic performance (Hardy *et al.*, 1996) [3] and have been beneficially reported (Weinberg and Gould, 2007) [7]. Imagery and other psychological skills training provides athletes opportunity to maintain attention focus and also allow transfer of skill execution from training to performance (Van Gyn, Wenger and Gaul, 1990; Jones and Hardy, 1990). Service in badminton, being a closed skill, the successful execution of it depends on the player’s concentration, focus and attention. Short service as a technical skill requires high level of concentration and attention for its execution. The psychological skills training provided to badminton players might have benefited in attaining optimal mental states, specifically in better focus and selective attention among the players. That might be the reason that the players have shown improved performance in short service skill performance.

**Conclusions**

1. It may be concluded that sixteen weeks of psychological skill training improved short service performance of badminton players.
2. The skill performance variables namely, long service and forehand clear did not show significant improvement due to psychological skill training.
3. The control group did not show any significant changes

on selected skill performance variables of badminton players.

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