



## Effect of Autogenic Training on Selected Psychological Variables among Volleyball Players

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### Abstract

*The purpose of the study was to find out the effect of autogenic training on selected psychological variables among volleyball players. It was hypothesized that the autogenic training group would show significant improvement on selected psychological variables than control group. To achieve the purpose of the present study, thirty volleyball players from Mayiladuthurai, Nagapattinam district, Tamilnadu, India were selected as subjects at random and their ages ranged from 18 to 25 years. The study was formulated as a true random group design, consisting of a pre-test and post-test. The subjects (n=30) were randomly assigned to two equal groups as autogenic training group (ATG) and control group (CG) in an equivalent manner. The autogenic training group participated for a period of twelve weeks for alternate three days in a week and the post-tests were taken. The psychological variables such as locus of control, anxiety and assertiveness were assessed by administering the following questionnaires Rotter's, speilberger and Rathus assertiveness scale respectively. To find out the difference between the two groups analysis of covariance (ANCOVA) was used. The result reveals that the autogenic training group showed better psychological on locus of control, anxiety and assertiveness than the control group owing to the effects of autogenic training.*

**Keywords:** Autogenic, Volleyball, Locus of Control, Anxiety, Assertiveness.

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### Introduction

Autogenic training is developed by Johannes Heinrich Schultz, a German psychiatrist, and first published in 1932. The technique involves the daily practice of sessions that last around 15 minutes, usually in the morning, at lunch time, and in the evening. During each session, the practitioner will repeat a set of visualisations that induce a state of relaxation. Each session can be practiced in a position chosen amongst a set of recommended postures. The technique can be used to alleviate psychosomatic disorders. Autogenic training restores the balance between the activity of the sympathetic and the parasympathetic branches of the autonomic nervous system. This has important health benefits, promotes digestion and bowel movements, lowers the blood pressure, slows the heart rate, and promotes the functions of the immune system. Autogenic Therapy (AT) is a powerful mind and body technique involving simple relaxation and body awareness exercises. These reduce the intensity of the body's stress response, and replace it with a calmer physiological state in which self-healing naturally begins to occur (Stetter & Kupper, 2002).

Volleyball is a worldwide popular game and ranks third as a recreational team sport. It is one of the

few popular games that originated from the United States. The object of the game is to keep the ball in flight, going back and forth over the net without it touching the floor. Volleyball has been described as an 'interval' sport with both anaerobic and aerobic components. At the higher skill levels, technical performance may be limited by physical characteristics as well as physical fitness, and performance characteristics. Volleyball is an Olympic team sport in which two teams of six active players, separated by a high net, each trying to score points by trying to ground the ball on the other team's court under organized rules (McGown, 1994).

### Methodology

The purpose of the study was to find out the effect of autogenic training on selected psychological variables among volleyball players. It was hypothesized that the autogenic training group would show significant improvement on selected psychological variables than control group. To achieve the purpose of the present study, thirty volleyball players from Mayiladuthurai, Nagapattinam district, Tamilnadu, India were selected as subjects at random and their ages ranged from 18 to 25 years. The study was formulated as a true random group design, consisting of a pre-test and post-test. The subjects (n=30) were randomly assigned to two equal groups as autogenic training group (ATG) and control group (CG) in an equivalent manner. The autogenic

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training group participated for a period of twelve weeks for alternate three days in a week and the post-tests were taken. The psychological variables such as locus of control, anxiety and assertiveness were assessed by administering the following questionnaires Rotter's, speilberger and Rathus assertiveness scale respectively. To find out the difference between the two groups

analysis of covariance (ANCOVA) was used.

### Results

The detailed procedure of analysis of data and interpretation were given below.

**Table I.** Summary of Mean for the Pre and Post Tests on Selected Psychological Variables among Volleyball Players

SNo	Variables	Experimental Group				Control Group			
		Pre	SD ( $\pm$ )	Post	SD ( $\pm$ )	Pre	SD ( $\pm$ )	Post	SD ( $\pm$ )
1	Locus of Control	11.80	1.82	13.33	1.34	11.26	2.25	11.73	3.03
2	Anxiety	59.20	4.85	43.06	4.60	59.46	4.45	58.66	4.08
3	Assertiveness	16.00	5.91	31.33	7.72	15.53	5.55	16.20	6.37

The table I shows that the pre and post test means on selected psychological variables among

volleyball players.

**Table II.** Analysis of Variance of Pre Test Scores on Selected Psychological Variables among Volleyball Players

Sl. No	Variables	Source of Variance	Sum of Squares	df	Mean Squares	F-Value
1	Locus of Control	BG	2.13	1	2.13	0.50
		WG	117.33	28	4.19	
2	Anxiety	BG	0.53	1	0	0.02
		WG	608.13	28	21.71	
3	Assertiveness	BG	1.63	1	1.63	0.05
		WG	921.73	28	32.91	

\*  $P < 0.05$  Table F, df (1,28) (0.05) = 4.19

In table II, the results of analysis of variance of pre test scores on locus of control (0.50), anxiety (0.02) and assertiveness (0.05) were lesser than the table value of 4.19 indicating that it

was not significant for the degrees of freedom (1,28) at 0.05 level of confidence indicating that the random sampling was successful.

**Table III.** Analysis of Variance of Post Test Scores on Selected Psychological Variables among Volleyball Players

Sl. No	Variables	Source of Variance	Sum of Squares	df	Mean Squares	F-Value
1	Locus of Control	BG	23.20	1	23.20	4.21*
		WG	154.26	28	5.51	
2	Anxiety	BG	554.70	1	554.70	6.18*
		WG	2512.26	28	89.72	
3	Assertiveness	BG	1717.63	1	1717.63	34.26*
		WG	1403.73	28	50.13	

\*  $P < 0.05$  Table F, df (1,28) (0.05) = 4.19

In table III, the results of analysis of variance of post test scores on locus of control (4.21), anxiety (6.18) and assertiveness (34.26) were greater than the

table value of 4.19 indicating that it was significant for the degrees of freedom (1,28) at 0.05 level of confidence.

**Table IV.** Analysis of Covariance of Selected Psychological Variables among Volleyball Players

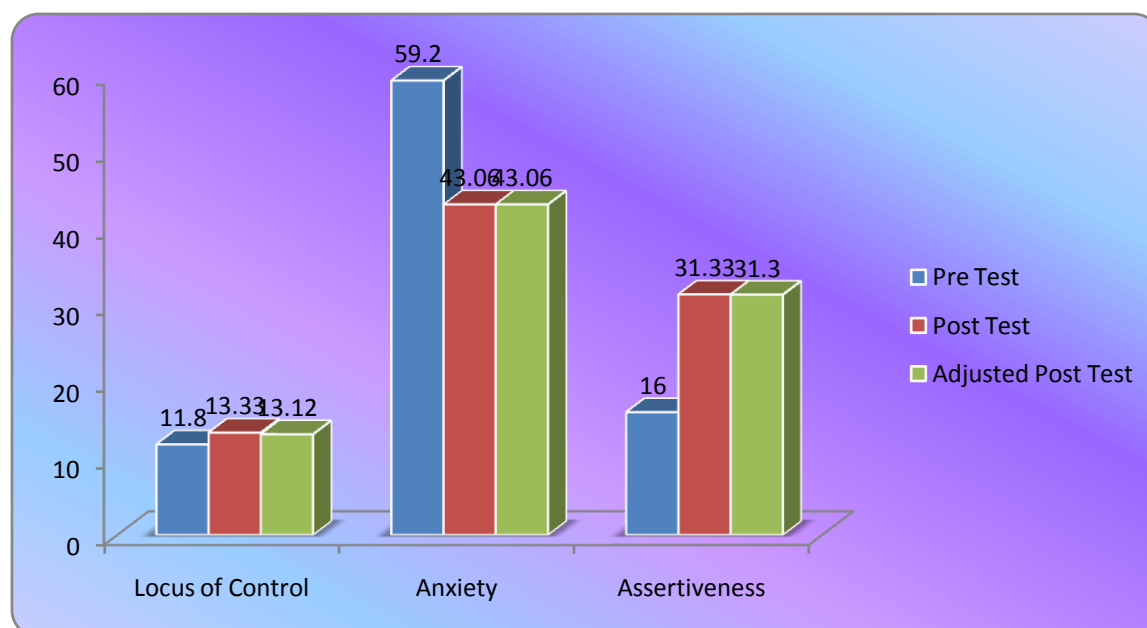
Sl. No	Variables	Adjusted Mean		Source of Variance	Sum of Squares	df	Mean Squares	F-Value
		ATG	CG					
1	Locus of Control	13.12	11.94	BG	15.12	1	15.12	5.17*
				WG	78.85	27	2.92	
2	Anxiety	43.06	51.67	BG	555.16	1	555.16	5.96*
				WG	2511.79	27	93.03	
3	Assertiveness	31.30	16.23	BG	1700.12	1	1700.12	33.11*
				WG	1386.40	27	51.34	

\*  $P < 0.05$  Table F, df (1,27) (0.05) = 4.21

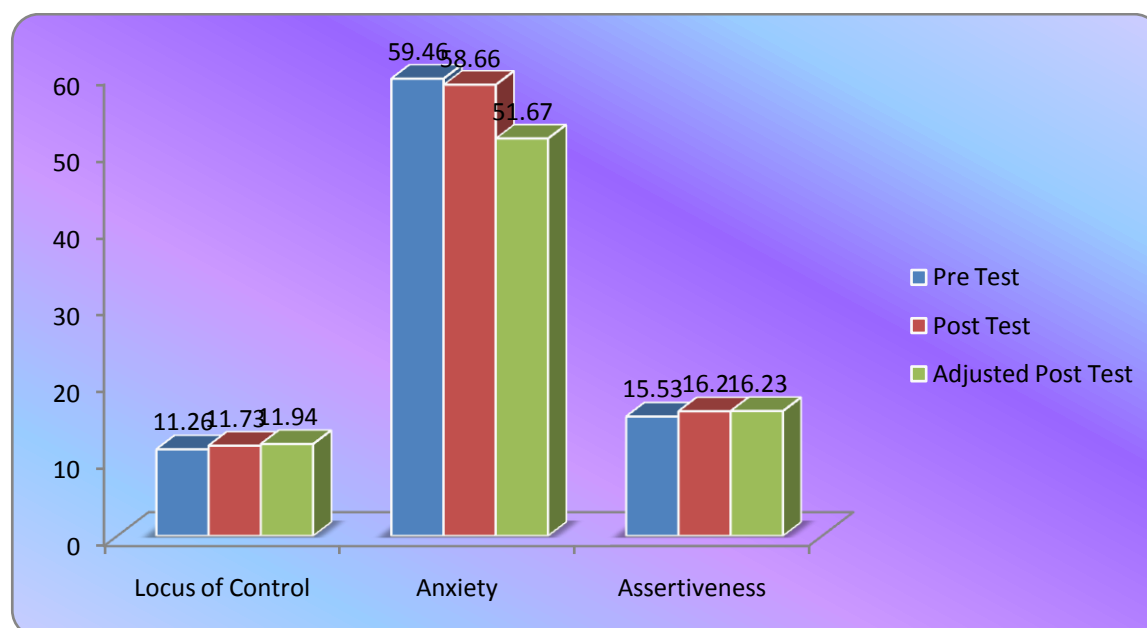
In table IV, the results of analysis of covariance on locus of control (5.17), anxiety (5.96) and assertiveness (33.11) were greater than the table

value of 4.21 indicating that it was significant for the degrees of freedom (1,27) at 0.05 level of confidence.

**Figure I.** Shows the Mean Values of Locus of Control, Anxiety and Assertiveness on Autogenic training Group among Volleyball Players



**Figure II.** Shows the Mean Values of Locus of Control, Anxiety and Assertiveness on Control Group among Volleyball Players



### Discussions and Conclusions

In case of psychological variables i.e. locus of control, anxiety and assertiveness the results between pre and post (12 weeks) test has been found significantly higher in experimental group in comparison to control group. The findings of the present study have strongly indicates that twelve weeks of autogenic training have significant effect on selected psychological variables i.e., locus of control, anxiety and assertiveness of volleyball players. Hence the hypothesis earlier set that autogenic training would have been significant effect on selected psychological variables in light of the same the hypothesis was accepted. The result reveals that the autogenic training group showed better on locus of control, anxiety and assertiveness than the control group owing to the effects of autogenic training.

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