



## RESEARCH ARTICLE

### OUT-TURN OF AUTOGENIC PEDAGOGY ON THE REGULATION OF ANXIETY AND STRESS AMONG DISTANCE RUNNERS

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#### ABSTRACT

The purpose of the study was to find out the Out-turn of autogenic training on the management of anxiety, stress among distance runners. Thirty men inter-collegiate level athletes were selected from Algappa University college of physical education Karaikudi. The selected subjects' age group ranged from 18 to 25. The subjects were divided into control and experimental group, each group consists of fifteen subjects. All the selected subjects underwent one and half hour distance running training in the morning and evening. The experimental group underwent autogenic training thrice a week. The pre-test and post-test were assessed on the psychological variable anxiety and stress. Anxiety was measured by using Spielberge's (1932) Anxiety scale questionnaire; Stress was measured by using Della franklin questionnaire. The data collected from the control group and experimental group on the anxiety and stress were treated statistically by applying analysis of covariance (ANCOVA). The obtained F ratio was tested at 0.05 level of significance. It was concluded that experimental group significantly reduced anxiety and stress than the control group.

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## INTRODUCTION

**Autogenic training:** The basic Autogenic training exercises focus on various physical manifestations of relaxation in the body: heaviness in the musculo-skeletal system and warmth in the circulatory system. These are followed by awareness of the heartbeat, breathing, the abdomen and a cool forehead. 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. Autogenic training involves learning a set of easy mental exercises using designated phrases that are repeated as silent thoughts while sitting or lying in a specific, supported and neutral posture. It allows the mind and body to switch off the 'fight/flight/freeze' stress response, and instead promotes rest, recuperation and recovery.

**Distance running:** The most prominent long-distance running sports are grouped within the sport of athletics, where running competitions are held on strictly defined courses and the fastest runner to complete the distance wins. The foremost types are long-distance track, road running and cross-country running. Both track and road races are usually timed, while cross country races are not usually timed and only the placing is of importance.

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The 5000 meters is a premier event that requires tactics and superior aerobic conditioning. Training for such an event may consist of a total of 60–200 kilometres (40–120 miles) a week, although training regimens vary greatly. The 5000 is often a popular entry-level race for beginning runners. The 10,000 meters is the longest standard track event. Most of those running such races also compete in races and cross country running events.

## METHODOLOGY

Thirty inter-collegiate level athletes were selected from Algappa University college of physical education karaikudi., Tamilnadu The selected subjects' age group was ranged from 18 to 25. The subjects were randomly divided into two groups (control and experimental) and each group consists of fifteen subjects. The investigator reviewed a number of research journals, magazines and books on speed training and selected Dependent variables were Anxiety and Stress and Six weeks training as the Independent Variable. The study was formulated as a true random design, consisting of a pre test and post test. All the selected subjects underwent six weeks of distance running training in the morning and evening for one and half hour, thrice a week. Only the experimental group underwent autogenic training in the morning and evening for 30 minutes, before the distance running training. The pre-test and post-test were assessed on anxiety and stress. Anxiety was measured by using by Charles Spielberger's Anxiety scale questionnaire; Stress was measured by using Della franklin questionnaire.

**Table 1. computation of analysis of covariance on anxiety between control and experimental group**

	Control Group	Experimental Group	Source Of Variance	Sum Of Squares	df	Mean Squares	F Value
Pre Test Mean	100	86.46	Between	120	1	120.0	
			Within	2093.46	28	74.76	1.60
Post Test Mean	104	75.93	Between	832.13	1	832.13	6.714*
			Within	3456.66	28	123.45	
Adjusted Post Test Mean	86.46	75.93	Between	769.75	1	769.75	6.06*
			Within	3454.90	27	127.95	

F ratio 0.05 level of confidence for 1 and 27 (df) = 4.23.

**Table 2. computation of analysis of covariance on stress between control and experimental group**

	Control Group	Experimental Group	Source of Variance	Sum of Squares	df	Mean Squares	F Value
Pre Test Mean	20.20	19.26	Between	6.53	1	6.53	1.46
			Within	125.33	28	4.47	
Post Test Mean	17.53	15.33	Between	36.30	1	36.30	7.30*
			Within	139.06	28	4.96	
Adjusted Post Test Mean	17.53	15.33	Between	39.81	1	39.81	7.49*
			Within	135.22	27	5.08	
Mean Diff	2.67	3.9					

F ratio 0.05 level of confidence for 1 and 28 (df) = 4.2 ,1 and 27 (df) = 4.23 \* Significant

The analysis of covariance (ANCOVA) was used as a statistical tool to determine the significance difference on the data of pre and post mean obtained for anxiety and stress between experimental and control group.

## RESULTS AND DISCUSSION

The analysis of covariance on the data on anxiety post test were tabulated and presented in the Table 1. The pretest mean on anxiety scores of control group was 100 and experimental group was 86.46 and the obtained F value was 1.60, which was lesser than the required F value of 4.23 to be significant at 0.05 level. Hence, it was found that no significant difference exists at the initial stage of the groups. The comparison of post test means on anxiety after six weeks of autogenic training shows that control group scored 104 and experimental group 75.93 and the obtained F value of 6.714 was greater than the required table F value of 4.23 to be significant at 0.05 level. Hence there was a significant difference between the post test score of the control and experimental group. Taking into consideration the initial and final mean values adjusted post means were calculated and the obtained F value of 6.06 was greater than the required table F value of 4.23. Hence, there was a significant difference between the means of the groups.

Thus, it was proved that autogenic training on experimental group significantly reduced anxiety of distance runners. The pretest mean on stress scores of control group was 20.20 and experimental group was 19.26 and the obtained F value was 1.46, which was less than the required F value of 4.2 to be significant. Hence, it was found that no significant difference exists at the initial stage of the groups. The comparison of post test means on stress after six weeks of autogenic and progressive muscular relaxation training shows that control group scored 17.53 and experimental group 15.33 which proved that the difference were significant at 0.05 level as the obtained F value 7.30 was greater than the required table F value of 4.2 to be significant at 0.05 level. Taking into consideration the initial and final mean values adjusted post means were calculated and the obtained F value of 7.49 was greater than the required table F value of 4.2 and hence, there was significant difference between the means of the groups.

Thus, it was proved that autogenic and progressive muscular relaxation training on experimental group significantly reduced the level of stress of distance runners.

## Conclusion

Based on the result the following conclusions were drawn.

1. It was concluded that six weeks of Autogenic training reduced the level of anxiety and stress in distance runners
2. Due to six weeks autogenic training, the subjects might have improved their overall mental ailments which enabled them to improve their distance running performance significantly.

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