

**EFFECT OF PSYCHOLOGICAL AND RECREATIONAL INTERVENTIONS ON
SELECTED PSYCHOLOGICAL VARIABLES AMONG INFORMATION
TECHNOLOGY PROFESSIONALS****A.Murugan ¹, Dr.A.Praveen ²**

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murugaaruna@yahoo.co.in**Abstract:**

To achieve the purpose of the study, 60 male IT professionals working in different business centers in Tidal Park, Chennai were selected as subjects and their age were ranging from 25 to 35 years. All the subjects were residing in Chennai and participated in the experiments after their working hours. The following variables were selected. For the purpose of the study, random group design was employed. The randomly selected sixty IT professionals were divided into three groups, consisting of twenty in each group. Group I was placed in experimental group I which practiced psychological interventions consisting of meditation, relaxation and autogenic techniques for 12 weeks. Group II was placed in experimental group II which practiced recreational interventions consisting of minor games, swimming and any one major game for 12 weeks. The third group was placed as control group, which did not participate in any of the special treatment. Prior and After 12 weeks to experimental treatments all the subjects were tested of their health related psychological on anxiety, stress and aggression which formed the initial scores. The analysis of covariance (ANCOVA) was used to find out the significant difference if any, among the groups on selected criterion variables separately. In all the cases, 0.05 level of confidence was fixed to test the significance, which was considered as appropriate.

Key words: meditation, relaxation, physical fitness, psychological and autogenic techniques

Interdiction:

A significant association was shown between low tension and the results in the test shootings Meditation may enhance competitive shooting performance. (Solberg E.E1996). The use of psychological interventions in sports has become increasingly popular (Weinberg, 1994), and has been described in several publications (Renz, 1986). The efficacy of

such interventions has been poorly documented. Recent reviews, however, suggest that more than 85% of studies addressing the issue have reported significant improvement of performance after mental training (Greenspan, 1989). On the other hand, the validity of these studies has been questioned. Causality between the psychological intervention and performance could be inferred in fewer of the studies.

The lack of manipulation checks, appropriate controls, and clearly described (Solberg E.E1996). An intervention has been pointed out as other major research problems. (Vealy, 1994). A variety of psychological interventions has been used, and meditation-not the most frequently used technique-may be classified as relaxation based (Weinberg, 1994), the technique is normally used in sports for the purpose of upgrading the Rate of recovery or enhancing performance by improving the Handling of anxiety pressure. Its possible effect on sports performance, however, has not been well investigated. Among non-athletes, different types of meditation are widespread. Some effects related to relaxation and anxiety have been described (Shapiro, 1982).which can explain in part the beneficial effects hypothesized in sports. Relevant relaxation and arousal indices such as blood lactate, heart rate, and oxygen uptake are all considerably lowered after meditation (Murphy, 1988).Meditation may relieve tension and anxiety. (Shapiro, 1982., Murphy, 1988).

Methodology:

To achieve the purpose of the study, 60 male IT professionals working in different business centers in Tidal Park, Chennai were selected as subjects and their age were ranging from 25 to 35 years. All the subjects were residing in Chennai and participated in the experiments after their working hours. The following variables were selected. Health Related Fitness Variables: Cardiovascular Endurance, Body Composition, Flexibility. For the purpose of the study, random group design was employed. The randomly selected sixty IT professionals were divided into three groups, consisting of twenty in each group. Group I was placed in experimental group I which practiced psychological interventions consisting of meditation, relaxation and autogenic techniques for 12 weeks. Group II was placed in experimental group II

which practiced recreational interventions consisting of minor games, swimming and any one major game for 12 weeks. The third group was placed as control group, which did not participate in any of the special treatment. Prior to experimental treatments all the subjects were tested of their health related physical fitness on cardiovascular endurance, body composition and flexibility and which formed the initial scores. After 12 weeks experimental treatments, all the subjects were measured of their health related physical fitness variables, which formed final scores. The difference between initial and final scores was considered as the effect of respective treatments among the subjects.

Results:

The statistical analysis comparing the initial and final means of Anxiety due to psychological and recreational interventions among Information Technology professionals is presented in Table I As shown in Table I, the obtained pre test means on Anxiety on Psychological intervention Training group was 52.15, Recreational interventions Training group was 52.40 was and control group was 54.65. The obtained pre test F value was 1.40 and the required table F value was 3.16, which proved that there was no significant difference among initial scores of the subjects. The obtained post test means on Anxiety on Psychological intervention Training group was 48.85, Recreational interventions Training group was 49.95 was and control group was 53.00. The obtained post test F value was 4.51 and the required table F value was 3.16, which proved that there was significant difference among post test scores of the subjects. Taking into consideration of the pre test means and post test means adjusted post test means were determined and analysis of covariance was done and the obtained F value 5.79 was greater than the required value of 3.16 and hence it was accepted that there was

significant differences among the treated groups. Since significant differences were recorded, the results were subjected to post hoc analysis using Scheffe's Confidence Interval test. The results were presented in Table I. The post hoc analysis of obtained ordered adjusted means proved that there was significant differences existed between Psychological intervention Training group and control group (MD: 2.20). There was no significant difference between Recreational interventions Training group and control group (MD: 1.29). There was no significant difference between treatment groups, namely, Psychological intervention Training group and Recreational interventions Training group. (MD: 0.90). The ordered adjusted means were presented through bar diagram for better understanding of the results of this study in Figure I. The statistical analysis comparing the initial and final means of Stress due to psychological and recreational interventions among Information Technology professionals is presented in Table II As shown in Table III, the obtained pre test means on Stress on Psychological intervention Training group was 26.20, Recreational interventions Training group was 26.45 and control group was 24.55. The obtained pre test F value was 0.90 and the required table F value was 3.16, which proved that there was no significant difference among initial scores of the subjects. The obtained post test means on Stress on Psychological intervention Training group was 22.10, Recreational interventions Training group was 23.90 and control group was 24.05. The obtained post test F value was 1.25 and the required table F value was 3.16, which proved that there was no significant difference among post test scores of the subjects. Taking into consideration of the pre test means and post test means adjusted post test means were determined and analysis of covariance was done and the obtained F value 26.12 was greater than the required value of 3.16 and hence it was

accepted that there was significant differences among the treated groups.

Since significant differences were recorded, the results were subjected to post hoc analysis using Scheffe's Confidence Interval test. The results were presented in Table IV. The post hoc analysis of obtained ordered adjusted means proved that there was significant differences existed between Psychological intervention Training group and control group (MD: 3.34). There was significant difference between Recreational interventions Training group and control group (MD: 1.75). There was significant difference between treatment groups, namely, Psychological intervention Training group and Recreational interventions Training group. (MD: 1.59). The ordered adjusted means were presented through bar diagram for better understanding of the results of this study in Figure II. The statistical analysis comparing the initial and final means of Aggression due to psychological and recreational interventions among Information Technology professionals is presented in Table III As shown in Table IV, the obtained pre test means on Aggression on Psychological intervention Training group was 173.50, Recreational interventions Training group was 174.30 and control group was 170.45. The obtained pre test F value was 0.23 and the required table F value was 3.16, which proved that there was no significant difference among initial scores of the subjects. The obtained post test means on Aggression on Psychological intervention Training group was 163.00, Recreational interventions Training group was 170.80 and control group was 169.75. The obtained post test F value was 1.28 and the required table F value was 3.16, which proved that there was no significant difference among post test scores of the subjects. Taking into consideration of the pre test means and post test means adjusted post test means were determined and analysis of covariance was done and the

obtained F value 12.42 was greater than the required value of 3.16 and hence it was accepted that there was significant differences among the treated groups. Since significant differences were recorded, the results were subjected to post hoc analysis using Scheffe's Confidence Interval test. The results were presented in Table VI. The post hoc analysis of obtained ordered adjusted means proved that there was significant differences existed between Psychological intervention Training group

and control group (MD: 9.25). There was no significant difference between Recreational interventions Training group and control group (MD: 2.10). There was significant difference between treatment groups, namely, Psychological intervention Training group and Recreational interventions Training group. (MD: 7.15). The ordered adjusted means were presented through bar diagram for better understanding of the results of this study in Figure III

Table-1**Computation of analysis of covariance of anxiety**

	psychological intervention training	recreational interventions training	control group	source of variance	sum of squares	df	mean squares	obtained f
Pre Test Mean	52.15	52.40	54.65	Between	75.83	2	37.92	1.40
				Within	1545.90	57	27.12	
Post Test Mean	48.85	49.95	53.00	Between	184.90	2	92.45	4.51*
				Within	1169.50	57	20.52	
Adjusted Post Test Mean	49.57	50.47	51.76	Between	46.72	2	23.36	5.79*
				Within	225.78	56	4.03	
Mean Diff	-3.30	-2.45	-1.65					

Table F-ratio at 0.05 level of confidence for 2 and 57 (df) =3.16, 2 and 56 (df) =3.16.

*Significant

Table-2**Scheffe's confidence interval test scores on anxiety**

MEANS				Reqd . C I
Psychological intervention Training Group	Recreational interventions Training Group	Control Group	Mean Difference	
49.57	50.47		0.90*	1.59
49.57		51.76	2.20*	1.59
	50.47	51.76	1.29	1.59

* Significant

Table-3**Computation of analysis of covariance of stress**

	psychological intervention training	recreational interventions training	control group	source of variance	sum of squares	df	mean squares	obtained f
Pre Test Mean	26.20	26.45	24.55	Between	42.63	2	21.32	0.90
				Within	1355.10	57	23.77	
Post Test	22.10	23.90	24.05	Between	47.10	2	23.55	1.25

Mean				Within	1072.55	57	18.82	
Adjusted Post Test Mean	21.71	23.30	25.04	Between	109.09	2	54.54	26.12*
				Within	116.95	56	2.09	
Mean Diff	-4.10	-2.55	-0.50					

Table F-ratio at 0.05 level of confidence for 2 and 57 (df) =3.16, 2 and 56 (df) =3.16.

*Significant

Table -4
Scheffe's Confidence Interval Test Scores on Stress

MEANS				Reqd . C I
Psychological intervention Training Group	Recreational interventions Training Group	Control Group	Mean Difference	
21.71	23.30		1.59*	1.15
21.71		25.04	3.34*	1.15
	23.30	25.04	1.75*	1.15

Table-5
Computation of analysis of covariance of aggression

	psychological intervention training	recreational interventions training	control group	source of variance	sum of squares	df	mean squares	obtained f
Pre Test Mean	173.50	174.30	170.45	Between	165.10	2	82.55	0.23
				Within	20632.15	57	361.97	
Post Test Mean	163.00	170.80	169.75	Between	716.70	2	358.35	1.28
				Within	15924.95	57	279.39	
Adjusted Post Test Mean	162.39	169.53	171.63	Between	937.64	2	468.82	12.42*
				Within	2114.00	56	37.75	
Mean Diff	-10.50	-3.50	-0.70					

Table F-ratio at 0.05 level of confidence for 2 and 57 (df) =3.16, 2 and 56 (df) =3.16.

*Significant

Table-6
Scheffe's confidence interval test scores on aggression

MEANS				Reqd . C I
Psychological intervention Training Group	Recreational interventions Training Group	Control Group	Mean Difference	
162.39	169.53		7.15*	4.88
162.39		171.63	9.25*	4.88
	169.53	171.63	2.10	4.88

* Significant

Figure-1
Bar diagram on ordered adjusted means on anxiety

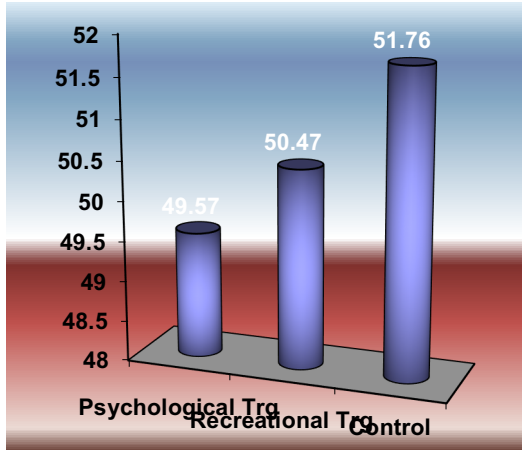


Figure-2
Bar diagram on ordered adjusted means on stress

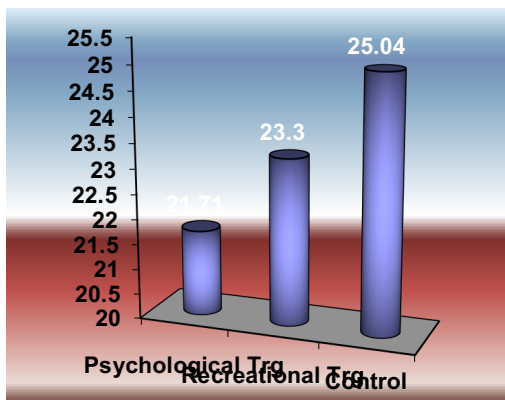
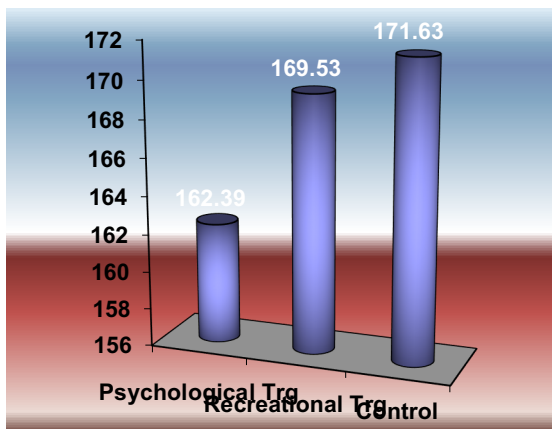


Figure-3
Bar diagram on ordered adjusted means on aggression



Conclusions:

It was concluded that recreational interventions significantly influenced

psychological variable, such as, anxiety, stress and aggress of the IT professionals comparing to control group. Comparisons between treatment groups, namely, psychological interventions and recreational interventions, proved psychological intervention was significantly better than recreational intervention in reducing stress of IT professionals.

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