



EFFECT OF YOGA, MEDITATION AND BRAIN TRAINING EXERCISES ON CAREER DECISION MAKING OF TRIBAL STUDENTS

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ABSTRACT

The purpose of the study was to find out the effect of yoga, meditation and brain training exercises on career decision making of tribal students. To achieve the purpose of the present study, eighty tribal students from Palakkad District, Kerala, India were selected as subjects at random and their ages ranged from 14 to 17 years. The subjects were divided into four equal groups of twenty each. Group I acted as Experimental Group I (Yoga Training), Group II acted as Experimental Group II (Meditation Training), Group III acted as Experimental Group III (Brain Training Exercises) and Group IV acted as Control Group. The requirement of the experiment procedures, testing as well as exercise schedule was explained to the subjects so as to get full co-operation of the effort required on their part and prior to the administration of the study. Experimental groups underwent their respective experimental training on three days in a week for twelve weeks. After the experimental treatment, all the eighty subjects were tested on their selected life skills, cognitive skills and intellectual skills. This final test scores formed as post test scores of the subjects. The pre test and post test scores were subjected to statistical analysis using Analysis of Covariance (ANCOVA) to find out the significance among the mean differences, whenever the 'F' ratio for adjusted test was found to be significant, Scheffe's post hoc test was used. In all cases 0.05 level of significance was fixed to test hypotheses. The brain training exercises group had shown significant improvement in all the career decision making of tribal students than the yoga training, brain training and control groups.

KEYWORDS : Yoga, Meditation, Brain Fitness, Career Decision Making, Tribal Student

INTRODUCTION

The term brain fitness reflects a hypothesis that cognitive abilities can be maintained or improved by exercising the brain, in analogy to the way physical fitness is improved by exercising the body. Although there is strong evidence that aspects of brain structure remain plastic throughout life, and that high levels of mental activity are associated with reduced risks of age-related dementia, scientific support for the concept of "brain fitness" is limited. Exercise plays an important role in one's health and wellness, and while often forgotten it absolutely applies to the brain. When the brain is exercised, it helps prevent depreciation of one's mental faculties as they age. Like any other muscle in the body, the brain can be strengthened through the implementation of regular brain exercise. Brain fitness training changes the brain, provides a stimulating environment for the brain, develops a healthy brain and keeps the brain alert and active.

METHODOLOGY

The purpose of the study was to find out the effect of yoga, meditation and brain training exercises on career decision making of tribal students. To achieve the purpose of the present study, eighty tribal students from Palakkad District, Kerala, India were selected as subjects at random and their ages ranged from 14 to 17 years. The subjects were divided into four equal groups of twenty each. Group I acted as Experimental Group I (Yoga Training), Group II acted as Experimental Group II (Meditation Training), Group III acted as Experimental Group III (Brain Training Exercises) and Group IV acted as Control Group. The requirement of the experiment procedures, testing as well as exercise schedule was explained to the subjects so as to get full co-operation of the effort required on their part and prior to the administration of the study. The study was formulated as a true random group design, consisting of a pre-test and post-test. Eighty tribal students from Palakkad District, Kerala, India were selected as subjects at random and their ages ranged from 14 to 17 years. The subjects (N=80) were randomly assigned to four equal groups of twenty students each. Pre test was conducted for all the subjects on selected life skills, cognitive skills and intellectual skills. This initial test scores formed as pre test scores of the subjects. The groups were assigned as Experimental Group I, Experimental Group II and Control Group in an equivalent manner. Experimental Group I was exposed to yoga training, Experimental Group II was exposed to meditation training, Experimental Group III was exposed to brain training exercises and Control Group was not exposed to any experimental training other than their regular daily activities. Experimental groups underwent their respective experimental training on three days in a week for twelve weeks.

After the experimental treatment, all the eighty subjects were tested on their selected life skills, cognitive skills and intellectual skills. This final test scores formed as post test scores of the subjects. The pre test and post test scores were subjected to statistical analysis using Analysis of Covariance (ANCOVA) to find out the significance among the mean differences, whenever the 'F' ratio for adjusted test was found to be significant, Scheffe's post hoc test was used. In all cases 0.05 level of significance was fixed to test hypotheses.

RESULTS

TABLE - I

COMPUTATION OF ANALYSIS OF COVARIANCE OF YOGA MEDITATION BRAIN TRAINING EXERCISES AND CONTROL GROUPS ON CAREER DECISION MAKING

	YTG	MTG	BTEG	CG	SV	SS	DF	MS	F-ratio
Pre-Test Means	26.85	27.10	27.15	26.15	BG WG	12.73 333.45	3 76	4.24 4.38	0.96
Post-Test Means	33.20	33.00	37.70	26.45	BG WG	1287.03 324.35	3 76	429.01 4.26	100.52*
Adjusted Post-Test Means	33.20	32.99	37.69	26.45	BG WG	1244.20 324.32	3 75	414.73 4.32	95.90*

An examination of table - I indicated that the pre test means of yoga, meditation, brain training exercises and control groups were 26.85, 27.10, 27.15 and 26.15 respectively. The obtained F-ratio for the pre-test was 0.96 and the table F-ratio was 2.72. Hence the pre-test mean F-ratio was insignificant at 0.05 level of confidence for the degree of freedom 3 and 76. This proved that there were no significant difference between the experimental and control groups indicating, that the process of randomization of the groups was perfect while assigning the subjects to groups. The post-test means of the yoga, meditation, brain training exercises and control groups were 33.20, 33.00, 37.70 and 26.45 respectively. The obtained F-ratio for the post-test was 100.52 and the table F-ratio was 2.72. Hence the post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 3 and 76. This proved that the differences between the post-test means of the subjects were significant. The adjusted post-test means of the yoga, meditation, brain training exercises and control groups were 33.20, 32.99, 37.69 and 26.45 respectively. The obtained F-ratio for the adjusted post-test means was 95.90 and the table F-ratio was 2.72.

Hence the adjusted post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 3 and 75. This proved that there was a significant difference among the means due to the experimental trainings on career decision making. Since significant differences were recorded, the results were subjected to post hoc analysis using Scheffe's post hoc test. The results were presented in Table-II.

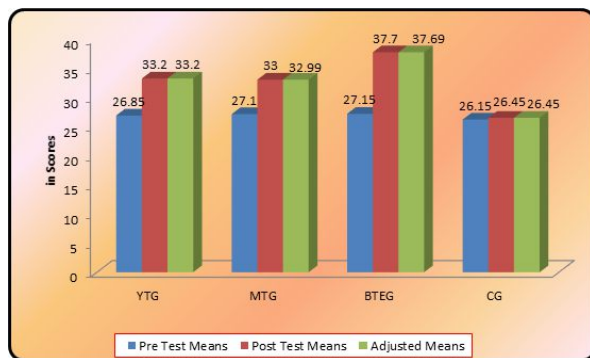
TABLE – II THE SCHEFFE'S TEST FOR THE DIFFERENCES BETWEEN THE ADJUSTED POST-TEST MEANS ON CAREER DECISION MAKING

Adjusted Post-Test Means				Mean Difference	Confidence Interval
YTG	MTG	BTEG	CG		
33.20	32.99	---	---	0.21	1.87
33.20	---	37.69	---	4.49*	
33.20	---	---	26.45	6.75*	
---	32.99	37.69	---	4.70*	
---	32.99	---	26.45	6.54*	
---	---	37.69	26.45	11.24	

* Significant at 0.05 level

The multiple comparisons showed in Table II proved that there existed significant differences between the adjusted means of yoga training group and brain training exercises group (4.49), yoga training group and control group (6.75), meditation training group and brain training exercises group (4.70), meditation training group and control group (6.54), brain training exercises group and control group (11.24). There was no significant difference between yoga training group and meditation training group (0.21) at 0.05 level of confidence with the confidence interval value of 1.87. The pre, post and adjusted means on career decision making were presented through bar diagram for better understanding of the results of this study in Figure-I.

**FIGURE - I
PRE POST AND ADJUSTED POST-TEST DIFFERENCES OF
YOGA MEDITATION BRAIN TRAINING EXERCISES AND
CONTROL GROUPS ON CAREER DECISION MAKING**



DISCUSSION

The results presented in table I showed that obtained adjusted means on career decision making among brain training exercises group was 37.69 followed by yoga training group with mean value of 33.20, followed by meditation training group with the mean value of 32.99 and control group with mean value of 26.45. The differences among pre-test scores, post-test scores and adjusted mean scores of the subjects were statistically treated using ANCOVA and the obtained F values were 0.96, 100.52 and 95.90 respectively. It was found that obtained F value on pre test scores were not significant and the obtained F values on post-test and adjusted means were significant at 0.05 level of confidence as these were greater than the required table F value of 2.72 and 2.72. The post hoc analysis through Scheffe's Confidence test proved that due to twelve weeks training of yoga training, meditation training and brain training exercises groups has improved career decision making than the control group and the differences were significant at 0.05 level. Further, the post hoc analysis showed that there was significant differences exist between the experimental groups, clearly indicating that brain training exercises group was significantly better than yoga training group, meditation training group and control group in improving career decision making of the tribal students.

CONCLUSION

1. The brain training exercises group had shown significant improvement in all the career decision making of tribal students than the yoga training, brain training and control groups.

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