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Effect of Yogic Practice on Selected Psychological Entities of Tribal School Children

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Abstract

The purpose of the study was to find out the effect of yogic practice on selected psychological entities of tribal school children. The study was formulated as a true random group design, consisting of a pre-test, post-test and retention-test. Forty tribal upper primary students from tribal areas around Coimbatore city; Tamil Nadu, India were selected as subjects at random and their ages ranged from 11 to 14 years. The subjects were divided into two *equal groups of twenty each Pre-test was conducted for all the subjects on selected psychological variables and academic achievement. This initial test scores formed as pre-test scores of the subjects. The groups were assigned as Experimental Group I and Control Group in an equivalent manner. Experimental Group* was *exposed to yogic practice and Control Group* was *not exposed to any experimental training. The duration of experimental period was 12 weeks. After the experimental treatment, experimental group and* control group *were tested on their selected psychological variables. This test scores formed as post-test scores of the experimental group subjects. Analysis of Covariance (ANCOVA) is used to find out the significant difference between tribal yogic practice group,* and *control group on selected psychological variables. In all cases 0.05 level of significance was fixed to test hypotheses.* It is concluded that *the tribal children participated in the yogic practice have better adjustment behaviour than counterparts who have not participated in the yogic practice.* It is concluded that *the tribal children participated in the yogic practice have reduced their aggression behaviour than their counterparts who have not participated in the yogic practice.* It is concluded that the *tribal children participated in the yogic practice have better Span of memory than counterparts who have not participated in the yogic practice.*

Keywords: Yoga, Tribal, School, Psychological.

Introduction

Yoga is a psycho somatic spiritual discipline for achieving union & harmony between our mind, body and soul and the ultimate union of our individual consciousness with the Universal consciousness. Yoga is mind-body technique which involves relaxation, meditation and a set of physical exercises performed in sync with breathing. Being holistic, it is the best means for achieving physical, mental, social and spiritual wellbeing of the practitioners. This can be achieved by systematic and disciplined practice of Ashtanga (eight-limbed) yoga described by sage Patanjali. Yoga reduces stress and promotes relaxation. Yoga has long been known to be a great antidote to stress. Yoga combines many popular stress-reducing methods, including exercise and learning to control the breath, clear the mind and relax the body. Over time practitioners report lower levels of stress and increase feelings of happiness and wellness. This is because concentrating on postures and breathing acts as a powerful form of meditation (Brown and Gerbarq, 2005).

Offensive behaviour or aggression among children and adolescents is a significant clinical and social problem. The significance derived from findings that antisocial behaviour (particularly aggressive acts) are relatively prevalent among community samples, serve as the basis for one third to one-half of clinical referrals among children, are relatively stable over the course of development, often portend major dysfunction in adulthood (e.g., criminal behaviour, alcoholism, antisocial personality), and are likely to be transmitted to one's offspring's (Kazdin, in Press; Loeber 1985; Robins, 1981; Rutter &Giller, 1983). Practising yoga in a school teaches students physical awareness, mental awareness, emotional awareness, community awareness and how to use relaxation techniques to reduce stress. Yoga in the school is a convenient and practical outlet that also improves balance, strength, flexibility, kinesthetic sense, focus and attention. Yoga not only teaches children techniques to sharpen their focus by quieting the mind, but also creates a subtle motivation to learn. Yoga fosters self-acceptance, which is increasingly significant as children approach the peer-pressured, teenage years.

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Methodology

The purpose of the study was to find out the effect of yogic practices on selected psychological variables and academic achievement of tribal upper primary children. To achieve the purpose of the present study, forty tribal upper primary students from tribal areas around Coimbatore city; Tamil Nadu, India were selected as subjects at random and their ages ranged from 11 to 14 years. The subjects were divided into two equal groups of twenty each. Group I acted as Experimental Group I (Tribal yogic practice group) and Group II acted a 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.

Selection of Variables

The research scholar reviewed the available scientific literature pertaining to the problem from books, journals, magazines, websites, and research papers which revealed the importance of yogic practice. Taking into consideration of feasibility, criteria and availability of the instruments the following variables were selected for this study.

Dependent Variables

Psychological variables

- Adjustment
- Aggression
- Span of memory

Independent Variables

- Yogic practice

Experimental Design

The study was formulated as a true random group design, consisting of a pre-test, post-test and retention-test. Forty tribal upper primary students from tribal areas around Coimbatore city; Tamil Nadu, India were selected as subjects at random and their ages ranged from 11 to 14 years. The subjects were divided into two equal groups of twenty each Pre-test was conducted for all the subjects on selected psychological variables and academic achievement. This initial test scores formed as pre-test scores of the subjects. The groups were assigned as Experimental Group Iand Control Group in an equivalent manner. Experimental Group was exposed to yogic practice and Control Group was not exposed to any experimental training. The duration of experimental period was 12 weeks. After the experimental treatment, experimental group and control group were tested on their selected psychological variables. This test scores formed as post-test scores of the experimental group subjects. Analysis of Covariance (ANCOVA) is used to find out the significant difference between tribal yogic practice group, and control group on selected psychological variables. In all cases 0.05 level of significance was fixed to test hypotheses.

Results

Table I. Computation of analysis of covariance of yogic practice group and control group of tribal children on adjustment behaviour

	Yogic practice Group	Control Group	Source of Variance	Sum of Squares	df	Mean Squares	F-ratio
Pre-Test Means	33.850	34.650	**BG**	6.400	1	6.400	0.717
			WG	339.100	38	8.924	
Post-Test Means	39.100	37.650	**BG**	21.025	1	21.025	3.191
			WG	250.350	38	6.588	
Adjusted Post-Test Means	39.224	37.526	**BG**	28.277	1	28.277	4.801*
			WG	217.930	37	5.890	

*Significant at 0.05 level

An examination of table – I indicates the results of ANCOVA for pre-test scores of the yogic practice group and control group of tribal children regarding their adjustment behaviour. The obtained F-ratio for the pre-test is 0.717indicating that the random sampling is successful and the table F-ratio is 4.098. Hence the pre-test mean F-ratio is insignificant at 0.05 level of confidence for the degree of freedom 1 and 38. The obtained F-ratio for the post-test is 3.191 and the table F-ratio is 4.098. Hence the post-test mean F-ratio is insignificant at 0.05 level of confidence for the degree of freedom 1 and 38. The adjusted post-test means of yogic practice group and control group of tribal children are 39.224 and 37.526 respectively. The obtained F-ratio for the adjusted post-test means is 4.801and the table F-ratio is 4.105. Hence the adjusted post-test mean on adjustment F-ratio is significant at 0.05 level of confidence for the degree of freedom 1 and 37.

Figure I. Bar diagram showing the pre-test, post-test and adjusted post-test mean differences of yogic practice group and control group of tribal children on adjustment behaviour

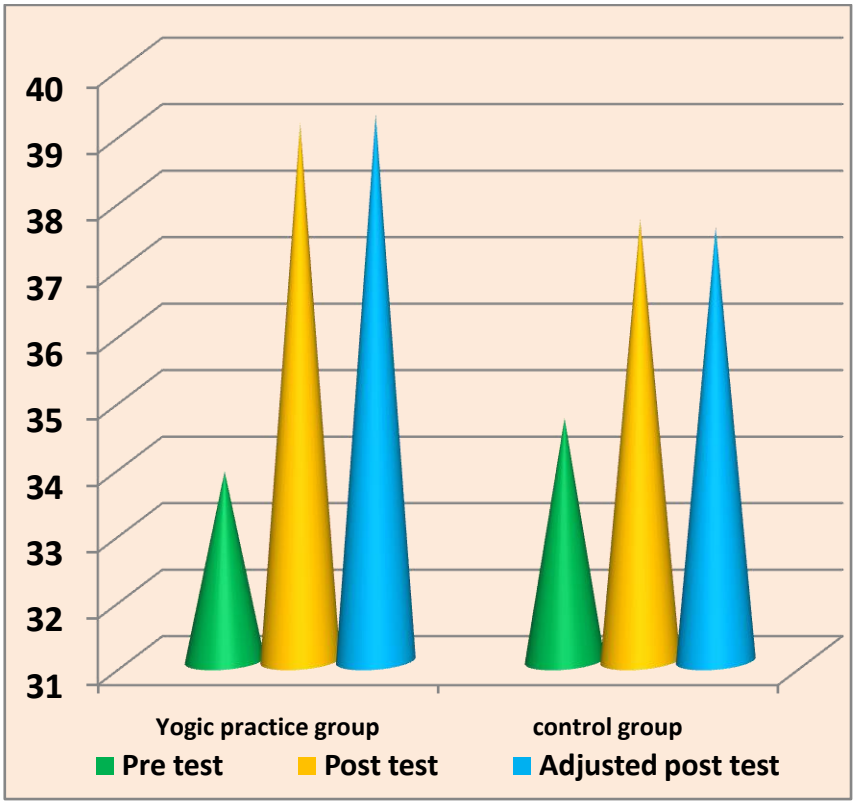


Table II. Computation of analysis of covariance of yogic practice group and control group of tribal children on aggression behaviour

	Yogic practice Group	Control Group	Source of Variance	Sum of Squares	df	Mean Squares	F-ratio
Pre-Test Means	74.400	76.900	**BG**	62.500	1	62.500	0.586
			WG	4050.600	38	106.595	
Post-Test Means	56.600	75.550	**BG**	3591.025	1	3591.025	37.205**
			WG	3667.750	38	96.520	
Adjusted Post-Test Means	56.832	75.318	**BG**	3365.505	1	3365.505	35.292**
			WG	3528.400	37	95.362	

**Significant at 0.01 level

An examination of table II indicates the results of ANCOVA for pre-test scores of the yogic practice group and control group of tribal children regarding their aggression behaviour. The obtained F-ratio for the pre-test is 0.586 indicating that the random sampling is successful and the table F-ratio is 4.098. Hence the pre-test mean F-ratio is insignificant at 0.05 level of confidence for the degree of freedom 1 and 38. The obtained F-ratio for the post-test is 37.205 and the table F-ratio is 7.35. Hence the post-test mean F-ratio is significant at 0.01 level of confidence for the degree of freedom 1 and 38. The adjusted post-test means of yogic practice group and control group of tribal children are 56.832 and 75.318 respectively. The obtained F-ratio for the adjusted post-test means is 35.292 and the table F-ratio is 7.37. Hence the adjusted post-test mean on aggression F-ratio is significant at 0.01 level of confidence for the degree of freedom 1 and 37.

Figure II. Bar diagram showing the pre-test, post-test and adjusted post-test mean differences of yogic practice group and control group of tribal children on aggression behavior

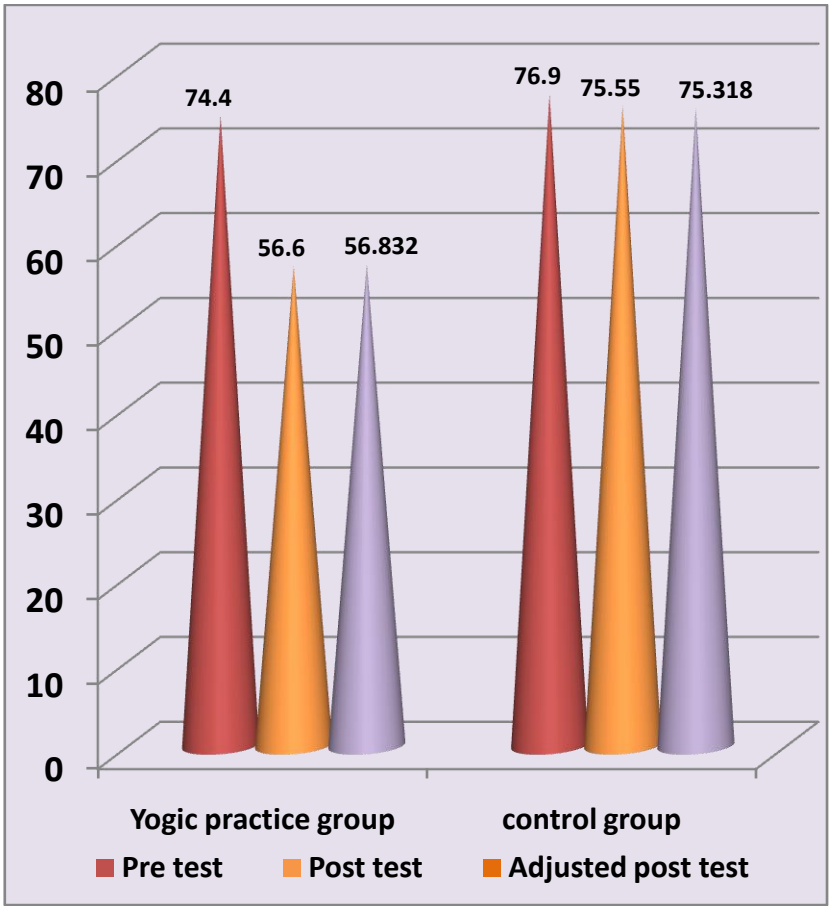


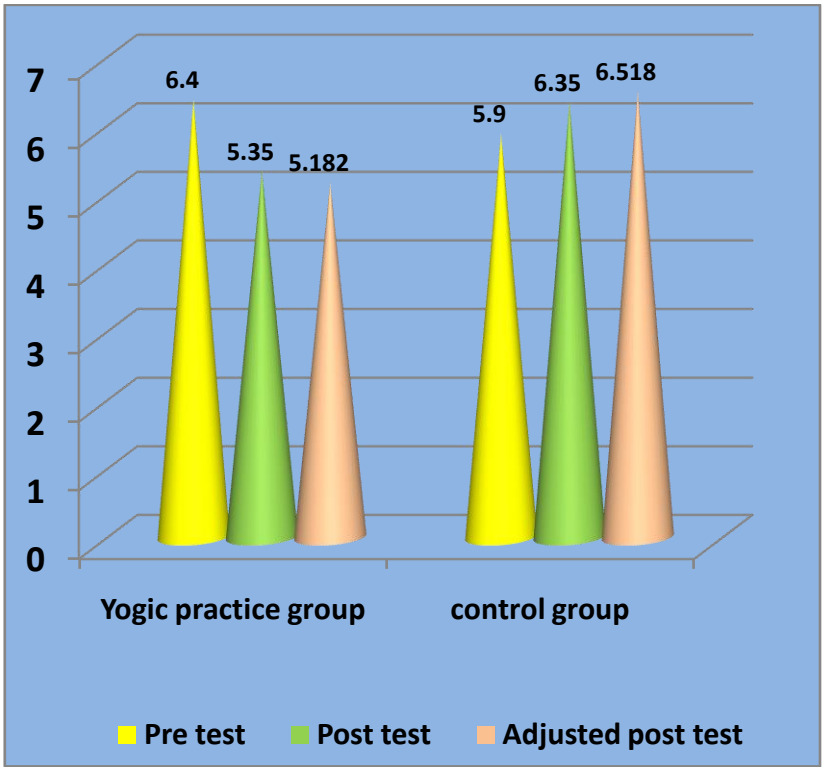
Table III. Computation of analysis of covariance of yogic practice group and control group of tribal children on span of memory

	Yogic practice Group	Control Group	Source of Variance	Sum of Squares	df	Mean Squares	F-ratio
Pre-Test Means	6.400	5.900	**BG**	2.500	1	2.500	2.13
			WG	44.600	38	1.174	
Post-Test Means	5.350	6.350	**BG**	10.000	1	10.000	10.826**
			WG	35.100	38	0.924	
Adjusted Post-Test Means	5.182	6.518	**BG**	16.881	1	16.881	41.489**
			WG	15.055	37	0.407	

**Significant at 0.01 level

An examination of table – III indicates the results of ANCOVA for pre-test scores of the yogic practice group and control group of tribal children. The obtained F-ratio for the pre-test is 2.130 indicating that the random sampling is successful and the table F-ratio is 4.098. Hence the pre-test mean F-ratio is insignificant at 0.05 level of confidence for the degree of freedom 1 and 38. The obtained F-ratio for the post-test is 10.826 and the table F-ratio is 7.35. Hence the post-test mean F-ratio is significant at 0.01 level of confidence for the degree of freedom 1 and 38. The adjusted post-test means of yogic practice group and control group of tribal children are 5.182 and 6.518 respectively. The obtained F-ratio for the adjusted post-test means is 41.489 and the table F-ratio is 7.37. Hence the adjusted post-test mean on span of memory F-ratio is significant at 0.01 level of confidence for the degree of freedom 1 and 37.

Figure III. Bar diagram showing the pre-test, post-test and adjusted post-test mean differences of yogic practice group and control group of tribal children on span of memory



Conclusions

1. It is concluded that the tribal children participated in the yogic practice have better adjustment behaviour than counterparts who have not participated in the yogic practice.
2. It is concluded that the tribal children participated in the yogic practice have reduced their aggression behaviour than their counterparts who have not participated in the yogic practice.
3. It is concluded that the tribal children participated in the yogic practice have better Span of memory than counterparts who have not participated in the yogic practice.

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