

## EFFECTS OF YOGA PRACTICE ON MENTAL HEALTH AND STUDY SKILLS AMONG SCHOOL CHILDREN IN TAMILNADU

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### ABSTRACT

The purpose of the present study was to find out the effect of yoga practice on mental health and study skills among school children of Tamilnadu. For this purpose, ninety male adolescent studying in socially backward region, with the age group of 15 to 17 years who were studying in Nandanar Boys Higher Secondary School, Chidambaram (Cuddalore District), Government Boys Higher Secondary School, Vallalapatty, Madurai (Madurai District) and Government Boys Higher Secondary School, Thiruvannamalai (Thiruvannamalai District), were chosen as subjects. They were divided into two equal groups, each group consisted of forty five subjects, in which experimental group - I underwent yoga practice and experimental group - II acted as control that did not participate in any special activities apart from their regular curricular activities. The training period for the study was five days (Monday to Friday) in a week for twelve weeks. Prior and after the experimental period, the subjects were tested on mental health and study skills. Mental Health was surveyed by Jegadheesh Srivastava Mental Skill Questionnaire and Study skill was surveyed by M. Kanchana study skill inventory. The Analysis of Covariance (ANCOVA) was applied to find out any significant difference between the experimental groups and control group on selected criterion variables. The result of the study shows that the yoga practice group was significantly improved the mental health and study skills when compared with the control group.

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**Key Words:** *mental health, study skill, 't' – test, Leven's test and ANCOVA.*

Yoga is said to be indispensable of the ultimate accomplishment in life. It is a science that affects not only the conscious self but the subconscious as well. It is a practical physiological training (kriya yoga), which if practiced can exalt man to the 'supra mundane level'.

Academic achievement is defined as a demonstrated ability or level of competence in a school assignment, as measured by standardised examinations and expressed in grades or units based on norms obtained from a representative sample of students' performance. [1] According to studies, even low or moderate amounts of stress can impair task performance. [2, 3] The inability to concentrate is a result of stress-related cognitive processes. [4]

Balance, health, harmony, and bliss are all characteristics of yoga, which is a way of life. [5] Meditation is an element of Ashtanga Yoga's seventh limb, meditation. [6] -a state of alert repose, according to Maharishi Mahesh Yogi[7], the founder of a novel meditation technique known as transcendental meditation. A person is meant to achieve mental equanimity through practising yoga, in which responses to pleasant or negative external circumstances are well under control, and responses are mild in intensity. [8]Yoga is a powerful stream of knowledge that enables practitioners to acquire radiant physical health, a calm mind, ongoing spiritual uplift, and the ability to live in harmony with others. [9]

Hatha yoga activities such as asanas (postures), pranayamas (breathing exercises to impact vital energies), kriyas (cleaning exercises), mudras (interval attitudes), and bandhas (neuromuscular locks) are primarily taught as physical exercises. While diverse meditational techniques work on the cerebral level, all of these practises aim to cultivate a particular level of awareness inside oneself, which leads to changes in emotional and visceral functions, as well as changes in the individual's intellectual and physical functions. [10]

Yoga's techniques of meditation, asanas, and pranayamas have a beneficial influence on stress management in adolescents. [15] The processing of sensory information at the thalamic level is aided when pranayamas[16] and meditation are practised. [17,18] Following 10 days of practise, these two practises, coupled with physical postures (asanas), cleansing practises, devotional sessions, and lectures on the theory and philosophy of yoga, resulted in an improvement in the steadiness of school kids. Improved eye-hand coordination, focus, concentration, and relaxation were thought to be the reasons for the improvement. [19]

## Methodology

To accomplish this reason for the current examination ninety male adolescent studying in Socially Backward region, with the age group of 15 to 17 years who were studying in Nandanar Boys Higher Secondary School, Chidambaram (Cuddalore District), Government Boys Higher Secondary School, Vallalapatty, Madurai (Madurai District) and Government Boys Higher Secondary School, Thiruvannamalai (Thiruvannamalai District), were chosen as subjects. They were separated into two equivalent groups of forty five subjects each. Group - I went through yoga rehearses for five days out of each week for twelve weeks and group - II went about as control group which did not perform any physical activity.

The selected subjects were tested on mental health and study skills at prior and following the yoga exercise program. The preparation program for the current examination was five days (Monday to Friday) out of every week for twelve weeks. The selected criterion variables such as, Mental Health was surveyed by Jegadheesh Srivastava Mental Skill Questionnaire and Study skill was surveyed by M.

Kanchana study skill inventory. The gathered information was measurably inspected for critical contrasts, if any between the experimental group and the control group, applying 't' – test. No endeavor was made to liken the groups in any way. Consequently, to adapt for contrast in the underlying methods and test the changed post-test implies for huge contrasts, the Analysis of Covariance (ANCOVA) was utilized. Altogether the case, 0.05 degree of certainty was utilized to test the importance, which was considered as a proper.

### Analysis of Data and Interpretation

The data collected from the yoga practice group and control group during the pre and post-test period were statistically analyzed to examine the changes in selected mental health and study skills of middle-aged men and the result of the study is present in the tables – I

Table – 1

#### PAIRED SAMPLE 't'-TEST OF HOME-BASED EXERCISE SELF-REGULATIVE TECHNIQUES AND CONTROL GROUPS ON SELECTED DEPENDENT VARIABLES

Name of the Group	Name of the Dependent Variable	Pre test mean	Post test mean	't' test
Yoga Practice Group	Mental Health	75.67	79.56	9.80*
	Study Skills	27.42	32.07	15.77*
Control Group	Mental Health	75.96	76.38	0.99
	Study Skills	26.93	26.42	1.55

\*Significant at 0.05 level of confidence. Table value for level of significance df 14 was 1.753.

The paired sample 't' was computed on the hatha yoga practice group and control group factor was introduced in the above table - I. The 't' value for mental health and study skills for the yoga practice group were 9.80 and 15.77 respectively. The paired sample 't' was computed on the mental health and study skills for the control group was 0.99 and 1.55 respectively. The 't' values for yoga practice group are greater than the required table value of df 14 at 0.05 level of confidence was 1.753. The result of the study shows that the control group did not alter significantly the performance of all the selected dependent variables.

Table – 2

#### ANALYSIS OF COVARIANCE ON MENTAL HEALTH AND STUDY SKILLS OF ADJUSTEDPOST-TEST SCORES OF EXPERIMENTAL AND CONTROL GROUPS

VariableName	Group Name	Yoga Practice Group	Control Group	'F'-ratio
Mental Health (in points)	Pre-test Mean ± S.D.	75.67 ± 1.99	75.96 ± 2.40	0.388
	Post-test Mean ± S.D.	79.56 ± 1.94	76.38 ± 2.55	44.27*
	Adj. Post-test Mean	79.888	76.246	239.88*
	Pre-test Mean ± S.D.	26.93 ± 0.99	27.02 ± 0.81	0.218

Study Skills (in points)	Post-test Mean $\pm$ S.D.	31.51 $\pm$ 2.12	26.58 $\pm$ 1.27	179.67*
	Adj. Post- test Mean	31.551	26.538	232.26*

\* Significant .05 level of confidence. (The table values required for significance at .05 level of confidence with df 1 and 88 and 1 and 87 were 4.01 and 3.98 respectively).

### Results of the Study

Table – 2 shows that the pre-test means 'F' - ratio of yoga practice and control groups on mental health was 0.388 for pre-test scores is less than the required table value of 4.01 for significant at 0.05 level of confidence with df 1 and 88. The post- and adjusted post-test mean 'F' ratio on mental health was 44.27 and 239.88 was greater than the required table value of 4.01 and 3.98 for significant. The above table shows that the pre-test means 'F' ratio of yoga practice groups and control group on study skills was 0.218 which was less than the required table value of of 4.01 for significant at 0.05 level of confidence with df 1 and 88. The post- and adjusted test 'F' ratio of yoga practice groups and control group on anxiety are 179.67 and 232.26 which was greater than the required table value of 4.01 and 3.98 for significant.

### Discussion

The result of the study also shows that there was a significant improvement in study skills and mental health among male adolescent socially backward students from Tamilnadu State, India. **Sheela Joice et al**, [20] suggests that after practicing yoga there was a significant improvement in attention, concentration, and memory due to personality development, higher concentration, and reduction of distraction thoughts (mind wandering) due to yoga training. **Oken et al** [21] found that brain has more energetic by forming memories increasing the level of attention, processing information and making decisions. Wang and Hagins [22] found that high school students perceived the benefits to yoga as increased self-regulation, mindfulness, self-esteem, physical conditioning, academic performance, and stress reduction.

Yoga/mindfulness activities may facilitate stress management among higher secondary school students and may be added as a complement to social and emotional learning activities.

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