

Studying the Cognitive and Personality Aspects of Yoga

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ABSTRACT

Yoga is a Sanskrit word meaning union or join. But it has been used with different connotations in different contexts. As Iyengar (1993) notes historically in Indian culture the term has been used in different ways over a period of time. In Kathopanisad, it refers to a state in which all the indriyas (sensory organs) are in the controlled level. In Manu smrti, it is considered as a tool from which one can realize the subtleness of Paramatma. In Bhagavad Gita, it is regarded as the state which is free from the contact of sorrow in the transmigration. According to Patanjali Yoga Sutra, it is restraining mind stuff from taking vrittis (modifications). Many spiritual masters, philosophers, and scholars view yoga as a way of living developed thousands of years ago in ancient India. The different ways in which yoga has been understood and defined have led to a fourfold classification of yoga viz., jnana yoga, bhakti yoga, raja yoga and karma yoga. Many other types of yoga are also distinguished such as hatha yoga, kundalini yoga, swara yoga, laya yoga, and so on.

Keyword: Sanskrit, Yoga Sutra, Jnana Yoga, Bhakti Yoga, Raja Yoga

INTRODUCTION

People's lifestyles have altered dramatically during the previous few decades. Around the world, people's lifestyles and other social institutions have changed dramatically. In today's world, there is a lot of competition for survival. In a materialistic sense, everyone is at their height. Our current educational system has failed to accomplish education's ultimate goal. The primary goal of today's students is to obtain degrees and diplomas.

Because of various living and job conditions, the majority of teenagers and children have become patients. They are not immune to life's stresses and difficulties. They live in a fast-paced world of harried parents, never-ending lessons, computer games, and erratic eating habits. They are oblivious to their mental and physical health. Due to a slew of issues in everyday life, staying healthy is quite challenging.

We are all seeking to yoga for solutions to numerous health issues that are prevalent in today's world. As a result, yoga is a blend of discipline and art that has a direct impact on man's existence at every level. As a result, yoga's value and necessity must be felt in all aspects of life. It shapes an individual's entire personality, including physical, mental, moral, and intellectual aspects.

As a result, this study was carried out to determine the effects of hatha yoga on school-aged kids' physical fitness, physiological, and haematological characteristics.

Yoga is a very old discipline. It is regarded as one of India's most prominent traditions. Yoga is a path to wisdom that is also healthy and satisfying. Yoga assists in making one's life useful and noble (the consequence of actively preparing and trying something). Yoga's remuneration benefits all aspects of each stage. „Silence of the mind's activities that leads to total realisation of the Supreme Being's natural nature (Ross, 1993).

Yoga has a long history of being a basis for good health and pleasure. It is really beneficial to mental and physical harmony. Yoga is a method for achieving physical and mental well-being. It brings the function of the muscle and the intellect up to date. It's a road that can take us to better health (Batch, 1987).

1.1 IMPORTANCE OF THE PRESENT STUDY:

Because of the rapid advancement of science and technology, man's life has become highly fast-paced, busy, and stressful. The machines have basically taken away our physical labour. However, as a result of technological advancements, the pressure on the nerves has dramatically grown. The body's physical, physiological, and psychological functions are disrupted. It is caused by a lack of regular physical activity as well as mental stress. The organs and glands suffer greatly as a result of this scenario. Our true foundation on this planet is physical; if we are

physically weak, we will be unable to deal with life's challenges.

Students at the secondary level are the bedrock of our society. They, too, are confronted with the problem of inaction. They spend the most of their time on computers, studying, and playing video games. We need an instrument for them that will allow them to properly develop and enrich their personalities.

Yoga is the most effective method for keeping kids active and healthy. It is one of the most effective strategies for improving physical and mental wellness. As a result, there is an urgent need to teach yoga and yogic exercises to students. It aids in the treatment of physical, physiological, and haematological issues.

REVIEW OF LITERATURE

Ray et al. (2001) found that yogic practises had a good effect on young trainees during the training period. The study included a total of 54 young trainees. Their ages varied from 20 to 25. They were randomly assigned to one of two groups: yoga training or control. For the first 5 months of the course, the yoga training group (23 males and 5 females) received yogic activities, while the control group (21 males and 5 females) did not receive any. Both groups participated in yoga practises from the sixth to the tenth month of training. Heart rate, blood pressure, mouth temperature, skin temperature in the resting state, reactions to maximal and submaximal exercise, and body flexibility were all chosen and recorded. Personality, learning, arithmetic, and psychomotor abilities, as well as mental well-being, were all recorded for evaluation. Selected parameters were measured before, during, and after the fifth and tenth months of training. Due to the novel work/training setting and conditions, both groups had relatively increased sympathetic activity at first. Later in the study, the experiment group (Yoga) had lower sympathetic activity than the control group at the 5th and 10th month. The yoga group demonstrated significant increase in performance at submaximal levels of exercise and in anaerobic threshold, according to the study's findings. In the yoga group, shoulder, hip, trunk, and neck flexibility increased. After participating in yoga training, different psychological variables such as anxiety and depression decreased, and mental function improved significantly.

The benefits of hatha yoga practise on health-related components of Physical Fitness were investigated by **Tran et al. (2001)**. Ten (N=10) healthy, untrained volunteers (nine females and one male) were chosen as the study's subjects to achieve the study's goals. Their ages varied from 18 to 27. They were tested to see how hatha yoga training affected the health-related aspects of physical fitness, such as muscular strength, endurance, flexibility, cardiorespiratory fitness, body composition, and pulmonary function. Participants were required to attend at least two yoga training sessions each week for a total of eight weeks. 10 minutes of pranayamas (breathing exercises), 15 minutes of vigorous warm-up activities, 50 minutes of asanas (yoga postures), and 10 minutes of supine relaxation in savasana were included in each yoga session (corpse pose). Before and after the 8-week yoga training programme, the participants were assessed. Isokinetic muscular strength rose by 31%, 19%, and 28% (p0.05) for elbow extension, elbow flexion, and knee extension, respectively, but isometric muscular endurance increased by 57% (p0.01) for knee flexion. Ankle flexibility, shoulder elevation, trunk extension, and trunk flexion all improved by 13% (p0.01), 155 percent (p0.001), 188 percent (p0.001), and 14% (p0.05), respectively. Maximum absolute and relative oxygen intake both increased by 7% and 6%, respectively (p0.01). The study's findings show and support the fact that regular hatha yoga practise improved health-related components of physical fitness.

3. OBJECTIVES OF THE STUDY:

The main objectives of the study are as follows:

1. Studying the cognitive and personality aspects with reference to:
 - a. Chitta bhumike
 - b. Klesha
 - c. Ahamkara
 - d. Triguna
 - e. Yama Niyama.

RESEARCH METHODOLOGY

To meet the goal of this study, 100 male pupils from Govt. Sr. Sec. School Ugalan, District Hisar (Haryana) were recruited as subjects using purposive sampling (non-probability sampling). They were randomly separated into four equal groups, each of which had 25 subjects. Experiment Group I received yoga asana training (AT), Group II received pranayamas training (PT), and Group III received a yoga asana and pranayamas combination training for 12 weeks, five days a week, while Group IV was monitored as a control group. The control group did not take part in any type of training. A certified physician checked the subjects' fundamental health and determined that they were healthy enough to participate in the study. The goal and scope of the study were explained to all subjects in great detail. Because the majority of the pupils were under the age of 18, consent was acquired from their parents.

The information was gathered twice during the research. For a total of twelve weeks, asana training (AT), pranayama training (PT), and asana & pranayama combined training (APT) were undertaken. Test observations were taken prior to treatment and at the end of the twelve-week training period. The subjects were given important instructions. Before administering the tests, the tester demonstrated and explained each test item, as well as giving each subject one trial to familiarise them with the testing technique. The tests were designed to capture data on physical fitness, physiological, and haematological characteristics at a time that was convenient for both the organisation and the subjects, with the purpose of not disrupting their regular schedule.

During the pre-test, the study sample was tested for homogeneity using Levene's test between four groups. To determine if training had a meaningful effect, each group was examined and compared using a paired sample t-test on pre- and post-test data. Uni-variate analysis of covariance was used to determine the best successful training programme for each and every parameter related to physical fitness, physiological, and haematological well-being (ANCOVA). The analysis of covariance was the next step in a one-way analysis of variance (ANOVA) that included the covariate and was used to eliminate the effects of the third factor's covariance on the dependent variable. The impacts of the training on the interaction of the groups were also monitored in order to examine the effects of given training on the interaction of the groups. For all inferential statistics, the level of significance was set at 95%.

5. ANALYSIS OF THE DATA AND RESULTS

TABLE 5.1 MEAN SPEED FOR 50 M DASH (SECOND) RUN AMONG GROUPS IN PRE-TEST

Group	N	Mean	Std. Deviation	Levene Statistic	p-value
Group A	25	8.13	0.74	1.751	0.163 ^{NS}
Group B	25	8.45	1.14		
Group C	25	8.14	0.59		
Group D	25	8.18	0.75		
Total	100	8.22	0.83		

During the pre-test, the descriptive statistics of groups in terms of mean and standard deviation are shown in Table 5.1. Group A (Yoga Asana) had a mean and standard deviation of 8.13 ± 0.74 during the pre-test, while Group B (Pranayama) had a mean and standard deviation of 8.45 ± 1.14 .

Group C (Asana and Pranayama Mixed Group) had a mean and standard deviation of 8.14 ± 0.59 , while Group D (Control group) had a mean and standard deviation of 8.18 ± 0.75 . For the 50 meter dash, a total of 100 kids took an average of 8.22 ± 0.83 seconds. According to Levene Statistic (1.751), Homogeneity of Variances was not significant (0.163 ; $p > 0.05$), indicating homogeneity among students from diverse groups when running the 50 meter dash.

The pre- and post-test comparison for speed via a 50-meter dash is shown in table 5.2. The pre-test mean (M-8.13) in group A was greater than the post-test mean (M-8.13) (M-7.66). The SD before the test was 0.74, and the SD after the test was 0.73. The mean difference and t value, respectively, were 0.475 and 9.190. The significance of the p value was discovered ($p < 0.000$). The pre-test mean (M- 8.45) in group B was marginally higher than the post-test mean (M- 8.45) (M- 8.13). The mean difference and t value, respectively, were 0.321 and 6.965. The significance of the p value was discovered ($p < 0.000$). For group C, the pre-test mean was 8.13 while the post-test mean was 7.63. 8.660 was the t value. The significance of the p value was established ($p < 0.000$). The pre-test mean (M-8.18) in Group D was greater than the post-test mean (M-8.18) (M- 8.12). The SD before the test was 0.75, while the SD after the test was 0.77.

Table 5.2: Pre And Post-Test Comparison For Speed Through 50 MTS Dash (Seconds)

Group		N	Mean	SD	Mean difference	t	Df	p-value
Group A	Pre Test	25	8.13	0.74	0.475	9.190	24	0.000 ^S
	Post Test	25	7.66	0.73				
Group B	Pre Test	25	8.45	1.14	0.321	6.965		0.000 ^S
	Post Test	25	8.13	1.10				
Group C	Pre Test	25	8.13	0.59	0.503	8.660	0.000 ^S	
	Post Test	25	7.63	0.57				
Group D	Pre Test	25	8.18	0.75	0.067	1.710	0.100 ^{NS}	
	Post Test	25	8.12	0.77				

S- Significant ($p < 0.05$) NS- Non-Significant ($p > 0.05$)

0.067 and 1.710 were the mean difference and t value, respectively. The p-value was insignificant statistically ($p = 0.100$). Although both training programs (Yoga asana and Pranayama) reduced the time for the 50 meter sprint, the combination of the two was shown to be the most effective, with the greatest mean difference (0.503) in comparison to the pre-test No single training group (control) failed to produce a meaningful difference between pre- and post-test results. The graph depicts the average speed of the various groups in terms of a 50 mts dash. The pre-test mean for group A was 8.13, and the post-test mean was 7.65. The SD for the pre-test was 0.73, and the SD for the post-test was 0.73. In group B, the pre-test mean was 8.45 while the post-test mean was 8.13. SD was 1.14 during the pre-test and 1.10 during the post-test. In group C, the pre-test mean was 8.13, while the post-test mean was 7.63. During the pre-test, the SD was 0.59, and during the post-test, it was 0.57. For Group D, the pre-test mean was 8.18 while the post-test mean was 8.12. During the pre-test, the SD was 0.75, and during the post-test, it was 0.77.

Table 5.3 Descriptive Statistics of Groups without Adjustment of Mean Speed

Dependent Variable : Speed(50m dash run(Seconds))			
Group	Mean	Std. Deviation	N
Group A	7.66	0.73	25
Group B	8.13	1.10	25
Group C	7.64	0.57	25
Group D	8.14	0.77	25
Total	7.88	0.84	100

The descriptive data for speed (50m dash run) during post-test without adjusted covariate are shown in Table 5.3. Group A(Yoga Asana) had a mean and standard deviation of 7.66 ± 0.73 , Group B(Pranayama) had an average of 8.13 ± 1.10 , Group C(Asana and Pranayama Mixed Group) had an average of 7.64 ± 0.57 , and Group D(Control group) had an average of 8.14 ± 0.77 . The average speed of the hundred students was 7.88 ± 0.84 .

Table 5.4 Levene's Test of Equality of Error Variances

Dependent Variable: Speed(50m dash run(Seconds))			
F	df1	df2	Sig.
0.692	4	96	0.561 ^{NS}

NS- Non-Significant($p > 0.05$)

The equality of variance among the groups is depicted in Table 5.4. $F_{3,96} = 0.692$ which is not statistically significant at the 0.05 level of Alpha.

Table 5.5 Analysis of Covariance for Post Intervention Speed (50 Meter Dash Run)

Dependent Variable: Speed(50m dash run(Seconds))						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	63.792	4	15.949	272.463	0.000	0.921
Intercept	0.021	1	0.021	0.340	0.563	0.005
Fifty mts. dash(pre)	58.013	1	58.013	988.477	0.000	0.913
Group	3.052	3	1.018	18.310	0.000 ^S	0.354
Error	5.582	95	0.060			
Total	6276.135	100				
Corrected Total	69.373	99				

a. R Squared = .921 (Adjusted R Squared = .917)

S- Significant($p < 0.05$)

Table 5.5 shows whether the various interventions were statistically significant after controlling for covariate. At the 0.05 level of alpha, the computed value of F for group interaction was 18.310, which was statistically significant. After adjusting the covariate pretest of the corresponding variable, the F value shows a significant difference in post intervention 50 meter dash run between the selected groups. As a result, following covariate the pretest, the corrected mean differs significantly between the groups. With regression ($R^2 = 0.921$), the association between various training programs and student speed was shown to be very strong.

CONCLUSION

Yoga is a spiritual, mental, and physical practise or tradition that can be traced back to ancient India. According to prior study, yogic practise has a significant impact on physical and physiological markers. In the topic of Yoga, there is a lot of room for research with many aspects.

In this investigation, four groups were generated at random. There are 25 people in each group. The first group did yoga asana training, the second group did pranayama training, the third group did a blend of yoga asana and pranayama training, and the fourth group was the control group that did not do any training. All groups, including the control group, were given a pre- and post-test before and after the training. Analysis of co-variance was utilised as part of the general liner modal to determine the optimal training strategy in relation to the control group. The pretest was included as a covariate in this study. Physical, Physiological, and Hematological characteristics were chosen as dependent variables in the study, whereas the various training programmes were chosen as independent variables.

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