

## ROLE OF HATHA YOGA AND AEROBIC TRAINING ON PERSONALITY TRAITS ON TRIBAL YOUTHS

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### Abstract

The Cattell's 16 Personality Factors Questionnaire (Form-A) was administered on 100 undergraduate college tribal students of Seva Bharati Mahavidyalaya, Kaggari, Paschim Medinipur and Panskura Banamali College, Panskura, Purba Medinipur of the state of West Bengal. The objective of the study was to investigate the effect of yoga asanas training and aerobic training on tribal students. To analysis the data analysis of covariance was employed to know the training effects. It was found after the statistical analysis that there was significant difference in all the personality traits after the ten weeks training programme.

**Keywords:** Environment, Asana, Breathing and Personality traits.

### Introduction

The human personality is a marvellously intricate structure, delicately woven of motives, emotions, habits, and thoughts into a pattern that balances, however precariously, the pulls and pushes of the world outside. Personality is the total sum of his 'being' and includes physical, mental, social, emotional, and holiastic aspects. One's personality reflects his perception, imagination, attitude, instincts, habits, values, interests, and sentiments about himself and his self-worth. Intelligence, achievement, motivation, modes of adjustmen etc, all these and much more constitute human personality. Personality is a product of biological and cultural heritage. A child is born with some biological heritage, while the cultural environment moulds and shapes his personality. Personality is infact a product of the interaction of a biological organism with the social environment. In other words, personality is the way an individual adjusts with his external environment, it is the way of responding to the environment. Therefore, the key to personality development is socialization where biology and culture merge.

Now a days we can observe a lot of personality related problems among the youth. These problems are mainly due to ever growing demand for this materialistic world. Whatever these problems may be related to, but these problems, no doubt, are leaving bad affect on mind and body and over the personality of an individual.

As the entire world have started experiencing some or other problems among the youth which may hamper the future

human resource, yogis from different part of the world are suggesting to give yoga practices to the youths. Hatha yoga a type of yoga has actually concentrated mainly on two of the eight paths, breathing and posture. Yogis believe breathing to be the most important metabolic function; we breathe roughly 23,000 times per day and use about 4,500 gallons of air, which increases during exercise. Thus, breathing is extremely important to health, and *prana*, or life-force, is found most abundantly in the air and in the breath. If we are breathing incorrectly, we are hampering our potential for optimal health. Pranayama, literally the "science of breathing" or "control of life force," is the yogic practice of breathing correctly and deeply.

In addition to breathing, hatha yoga utilizes asanas, or physical postures, to bring about flexibility, balance and strength in the body. Each of these postures has a definite form and precise steps for achieving the desired position and for exiting it. These yogis have scientifically developed to increase circulation and health in all parts of the body, from the muscular tissues to the glands and internal organs. Yogis claim that although hatha yoga can make the body as strong and fit as any exercise program, its real benefits come out because it is a system of maintenance and balance for the whole body.

On the other hand aerobic fitness is a complex component of physical fitness. It involves the interaction of numerous physiological processes in the cardiovascular, respiratory, and muscular system, including the capacity of the lungs to take up oxygen, the capacity of the blood in the lungs to pick up oxygen, the capacity of the heart to pump this oxygenated blood to the muscle tissues, and the capacity of the tissues to extract the oxygen from the blood and use it to generate energy in the form of ATP via the oxygen system. Thus, the combined cardiovascular and respiratory system is the oxygen supply mechanism for the muscles. As the energy demands increases in the muscles, so do the demands on the cardiovascular and respiratory system.

Tribal in India are still facing a lot of problem due to socio economic condition. Though the government has been doing a lot to uplift this community but still a lot of work needs to be done for this community. In general the tribal of India in general and of West Bengal in specific have been living in the either rural area or in jungle area where the projects of development have hardly reached. This has played a great role in the personality of these people. They feel shy to mix up with the people of other community. The scholars tried to put these

people in different environment, convinced them to practice yoga and aerobics to find some change in their characteristics. The purpose of the study was to investigate the effect of aerobic training and hatha yoga training on the personality traits of tribal youths.

#### Hypothesis

It was hypothesized that the effect of ten weeks' hatha yoga training, aerobic training and combination of hatha yoga and aerobic training programmes would not show significant differences on any of the Personality traits.

#### **Procedure**

Hundred (100) male students of Seva Bharati Mahavidyalaya, Kapgari, Dist- Paschim Medinipur and Panskura Banamali College, Panskura, Purba Medinipur of the state of West Bengal, were randomly selected as the subjects for this study. The average age of the subjects was 18 years to 23 years. The subjects participated voluntarily in the programme and before the commencement of the programme, all of them were examined by the physician to ascertain that they were free from any type of medical problems and were fit enough to go through Aerobic training, Hatha yoga training and combination of Aerobic and Hatha yoga training programmes for ten weeks. After that they were divided into four equal groups on random basis (Groups A, B, C & D) consisting of 25 subjects in each group. Three out of the four groups were given experimental treatments i.e. Aerobic training, Hatha yoga and combination of hatha yoga and aerobic training and thereafter the groups A, B, C were designated as Aerobic training group, Hatha yoga group and combination of hatha yoga and aerobic training groups respectively. While the remaining one group (Group- D) was designated as control group which were not given any experimental treatment.

#### Personality

The Cattell's 16 Personality Factors Questionnaire (Form-A) developed by Raymond. B. Cattell and Herber. W. Eber was supplied by Psycho-centre, New Delhi that was employed to evaluate personality characteristics of the subjects. The 16 P.F. Questionnaire was selected because it is an objective test and employs simple means based upon research in psychology. It measures the personality characteristics of an individual in an extensive manner and is economical in time. The test was administered strictly in accordance with the prescribed procedures.

All the respondents were called into a class room when they had enough time to answer the questionnaire. The scholars motivated the respondents to reply all the questions sincerely. It was assured to them that their responses would be kept confidential and therefore they could give honest responses without any sense of fear or apprehension. After that, one

questionnaire along with an answer sheet was given to the respondents. Following the instructions they answered all the 187 statements.

#### Scoring of the Questionnaire:

The score of completed answer-sheets was done according to the method described in the manual. Two card board stands scoring keys were used, one covered factors (traits) A, C, F, H, L, N, Q1 and Q3 and other factors B, E, G, I, N, Q, Q2 and Q4. Sixteen Personality trait factors.

Before using the scoring stencils each answer sheet was checked to ensure that there were no odd, unscramble responses. After checking stencil it was made to fit over the answer sheet and the scores visible through holes were counted as indicated by numbers printed adjacent to the hole. These scores were summed up and total score was entered in the space indicated by the arrow on the stencil for each factor. The raw score were converted into 'stens' with the help of norms in the test -manual.

#### Method used to Plot profiles

The Red, Black, Green and Blue colours were used to represent group -A (Aerobic training), group- B (hatha yoga training), group- C (combination of hatha yoga and aerobic training) and group- D (control group) respectively. While circle symbol (o), star symbol (\*) and star around the circle symbol (+) were used to represents the pre, post and adjusted post-test phases respectively.

#### Statistical Analysis

The statistical analysis of data of personality factors (16 P.F) among aerobic training group, hatha yoga training group, combination of hatha yoga and aerobic training group and one control group of college Tribal male students were computed by applying analysis of co-variance.

#### **Finding**

In order to identify the significant differences among three groups on selected variables, collected pre and post data were analyzed using the analysis of covariance. The findings of the study are as follows.

##### 16 Personality Factors

The statistical analysis of data of personality factors (16 P.F) among aerobic training group, hatha yoga training group, combination of hatha yoga and aerobic training group and one control group of college male students were computed by applying analysis of co-variance statistics, which is presented in Table1.

**TABLE -1**  
ANALYSIS OF CO-VARIANCE OF (16) PERSONALITY FACTORS OF THREE EXPERIMENTAL GROUPS AND ONE CONTROL GROUP (D)

Personality Traits	Mean	Group A	Group B	Group C	Group D		Sum of Square	d.f	Mean Sum of Square	F-Ratio
Reserved Vs Out Going	Adjusted Post Test	6.82	6.17	6.72	5.77	A	18.16	3	6.05	
						W	115.52	95	1.21	4.98*
Bless Intelligent Vs More Intelligent	Adjusted Post Test	4.4	4.83	4.09	3.83	A	9.8	3	3.26	
						W	117.42	95	1.23	2.64
Affected Feeling Vs Emotionally Stable	Adjusted Post Test	4.16	4.95	4.86	3.75	A	24.59	3	8.19	
						W	169.49	95	1.78	4.59*
Humble Vs Assertive	Adjusted Post Test	5.71	5.56	5.61	4.92	A	9.49	3	3.16	2.72*
						W	110.27	95	1.16	
De-surgency Vs Surgency	Adjusted Post Test	4.38	4.13	3.89	3.79	A	5.17	3	1.72	1.74
						W	93.75	95	0.98	
Weaker Supergo Vs Stronger Supergo	Adjusted Post Test	4.87	5.32	5.24	5.17	A	2.75	3	0.91	0.91
						W	95.79	95	1.08	
Shy Vs Venturesome	Adjusted Post Test	5.59	5.46	5.36	5.2	A	3.15	3	1.05	1.578
						W	63.22	95	0.66	
Tough – Minded Vs Tender – Minded	Adjusted Post Test	6.11	6.48	6.26	6.32	A	1.76	3	0.58	0.66
						W	84.36	95	0.88	
Trusting Vs Suspicious	Adjusted Post Test	6.34	5.89	5.96	6.15	A	3.17	3	1.05	0.744
Practical Vs Imaginative	Adjusted Post Test	6	5.67	5.59	5.69	A	2.45	3	0.81	0.66
						W	116.61	95	1.22	
Forthright Vs Shrewd	Adjusted Post Test	5.91	6.56	6.31	6.31	A	5.44	3	1.87	1.25
						W	136.89	95	1.44	
Placid Vs Apprehensive	Adjusted Post Test	7.19	6.64	6.48	6.61	A	7.38	3	2.46	2.77*
						W	84.31	95	0.88	
Conservative Vs Experimenting	Adjusted Post Test	6.18	5.69	5.87	5.68	A	4.22	3	1.46	1.216
						W	109.95	95	1.15	
Group Dependent Vs Self Sufficient	Adjusted Post Test	5.14	5.69	5.56	5.5	A	4.07	3	1.35	1.02
						W	125.73	95	1.32	
Un. Self-Conflict Vs H.Self-Concept Control	Adjusted Post Test	4.56	5.13	5.13	4.64	A	8.64	3	2.88	2.85*
						W	96.01	95	1.01	
Low Ergic Tension Vs H. Ergic Tension	Adjusted Post Test	4.46	5.06	4.98	4.64	A	5.95	3	1.98	1.96
						W	96.11	95	1.01	

\* Significant at 0.05 level F .05 (3, 96) =2.72 F.05 (3, 95) =2.71

## Results and Findings

Significant difference was found in personality traits i.e. Factor- A (Reserved v/s Out-going), Factor-C (Affected by feelings v/s Emotionally Stable), and Factor-Q<sub>3</sub> (Undisciplined Self-conflict v/s High Self-concept control) only. Whereas, in case of adjusted post test phase out of sixteen personality factors significant differences were noticed in Factor-A (Reserved v/s Out-going), Factor- C (Affected by feelings v/s Emotionally Stable), Factor-E (Humble v/s Assertive), Factor-O (Placid v/s Apprehensive) and Factor-Q<sub>3</sub> (Undisciplined Self-conflict v/s High Self-concept control) only. Further it was seen that Aerobic training were found to be slightly more effective in Factor-A (Reserved v/s Out-going), Factor-E (Humble v/s Assertive), Factor-F (Desurgency v/s Surgency), Factor-O (Placid v/s Apprehensive), Factor-Q<sub>1</sub> (Conservative v/s Experimenting), in comparison to the hatha yoga training and combination of hatha yoga and aerobic training, whereas the hatha yoga training was found to be slight more effective in personality Factor-B (Less Intelligent v/s More Intelligent), Factor-C (Affected by feelings v/s Emotionally Stable), Factor-G (Weaker Superego strength v/s Stranger Superego strength), Factor-I (Tough-Minded v/s Tender-Minded), Factor-N (Forthright v/s Shrewd), Factor-Q<sub>2</sub> (Group dependent v/s Self-sufficient), Factor-Q<sub>3</sub> (Undisciplined Self-conflict v/s High Self-concept control) and Factor-Q<sub>4</sub> (Low ergic tension v/s High ergic tension) in comparison to the aerobic training and combination of hatha yoga and aerobic training.

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