# A COMPARATIVE STUDY OF YOGASANAS AND GYMNASTIC

# **ACTIVITIES ON SELF-CONCEPT OF SCHOOL BOYS**

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### ABSTRACT

Purpose of the present study is to find out the effects of yogasanas and gymnastic activities on self-concept among school boys. The Investigator have also made an attempt to asscess the superiority among the groups. One hundred and fifty (N=150) school boys of District Howrah, West Bengal State were randomly selected as subjects for the present study. The age limit of the subjects was 10-12 years. All the subjects were divided into three equal groups such as Gr. Y (n=50), Gr. G (n=50) and Gr. C (n=50). Gr. Y and Gr. G were experimental groups and Gr. C was control group. Initially self-concept inventory scale was employed to all the subjects of each group and thereafter specific yogic treatment and gymnastic activities were given to Gr. Y and Gr. G respectively for four days in a week and continued the period of one year and finally the subjects were retested on criterion measures. The data were analyzed by t-ratio to find out the effects of the treatment. The investigator has also made an attempt to assess the superiority among experimental groups. The results of the study showed that Yogasanas and gymnastic activities were improved significantly at .05 level of confidence after one year treatment. Yogasanas was superior to gymnastic activities in self-concept of school boys.

Key Words: Yogasanas, Gymnastics and Self-concept.

**INTRODUCTION:** 

Man is a union of body and mind. They are an integral unity and inseparable. One can not function without other and one affects the efficiency of the other. In the field of games and sports, a sportsman can not execute any performance or skill without their sound combination. On the other hand, man's life is a continuous flow of activities. Psychology discusses about mind - self-concept is complex component of mind. Self-concept may be explained as a person's perception about him or himself. It is a highly complex component of behaviour. Jadhav (2006) investigated the impact of yoga practices on self-concept among fifty naturopathy and yogic science college students both male and female. Result revealed that naturopathy and yogic science college students have better self-concept than MBBS students.



In the studies concerning the impact of high and low sports performance on the self-concept of the athletes, Morrison and Ibrahim (1981) conducted a study on 100 athletes representing high school and college and 100 non-athletes. They found that male high school athletes differed from non-athletes in self-concept and self-actualization. Deshpande, Nagendra and Raghuram (2009) studied the practice of integrated yoga module consisted of asanas, pranayama, meditation, notional correction and devotional session on personality and self-esteem in normal adult, compared with the mild moderate physical exercise group. The result of the study showed that yoga group was greater than physical exercise group in personality and self-esteem. Considering the role of self-concept on human activities the investigators intended to find out the change of the self-concept of yogasanas practitioners and gymnasts. In this study, the investigators have made an attempt to assess the self-concept on yogasanas practitioners and gymnastic activities on self-concept of school boys".

### METHODOLOGY:

One hundred fifty (N=150) male school children of District Howrah, West Bengal State were randomly selected as subjects for the present study. The age limit of the subjects was 10-12 years. All the subjects were divided into three equal groups such as Gr. Y (n=50), Gr. G (n=50) and Gr. C(n=50). Gr. Y and Gr. G were experimental groups and Gr. C was control group. Initially Self-concept Inventory scale was employed to all the subjects of each group and thereafter specific yogic treatment and gymnastic activities were given to Gr. Y and Gr. G respectively for four day in a week and continued one year and finally the subjects were retested on criterion measures. The data were analyzed by t–ratio to find out the effects of the treatment.

TREATMENT CONSISTS OF FOLLOWING ASANAS-Padmasana, Vajrasana, Ardhasalavasana, Bhujangasana, Supta Vajrasana, Gomukhasana, Purnasalavasana, Viparitakarani Mudra, Shashankasana, Tadasana, Triyaka Tadasana, Sarvangasana, Halasana, Matsyasana, Padahastasana, Ardha Chandrasana, Baddha Padmasana, Dhanurasana. Paschimottanasana, Janusirasana, Ekpada Uttanasana, Uttanapadasana and Makarasana were considered as element of the treatment. The subjects of Gr. Y were practiced savasana before and



after practiced each asana during treatment season. Duration and repetation of asanas were increased gradually at four phases during the treatment season.

TREATMENT CONSISTS OF FOLLOWING GYMNASTIC ACTIVITIES- Rolling- forward and backward, cart wheel, front turn and back turn, split sitting, handstand, handspring, round-off, back flip, front and back salt. Prior to gymnastic activities all the subjects of Gr. G performed warm up exercise for 15 minutes. Gymnastic activities were assigned according to degree of difficulty in four phases. Subjects performed ten repetitions every activity.

### **RESULT AND DISSCUSSION:**

Self-concept scores were analyzed by t-ratio and level of significance was set up at .05 level of confidence.

Group means increase in self-concept among Gr. Y, G and C after one year treatment					
		Self-concept			
Group	Type of	Mean	S.D	t	
	Test	XO			
	PRE-TEST	86.86	10.25		
Gr. Y	POST-	111.74	14.71	10.12*	
(N=50)	TEST				
	PRE-TEST	88.24	9.36		
Gr. G	POST-	105.34	10.82	7.4*	
(N=50)	TEST				
	PRE-TEST	86.56	9.51		
Gr. C	POST- TEST	98.04	11.73	-0.08	
(N=50)					

TABLE-I Group means increase in self-concept among Gr. Y. G and C after one year treatment

\*Significant at .05 level of confidence



Table-I, represents the mean values of pre and post test for self-concept of all the groups, i.e. Gr. Y, Gr. G and Gr. C. The t-values of self-concept of Gr. Y and Gr. G and Gr. C were 10.12, 7.4 and -0.08 respectively. To be significant at .05 level of confidence the t-value should be greater than 2.01. The t-values of Gr. Y and Gr. G were significant at .05 level of confidence. But the t-value of Gr. C in self-concept was insignificant.

Before coming to the main discussion part, a point of discussion about the result showed in the point of study should be discussed. A significant result in the post test data has been found in self-concept in each group in the pilot study. The pilot study has been made about six hundred school children. The investigators revealed that this has been focused due to the factors underlying such as peer group, school curriculum and teaching learning process, socio-economic status, cognitive and effective domain, family environment and others factors behind the aspect of self-concept which were beyond the control of the investigators. After due to consultation with the field of experts in psychology and statistics, the mean values of the post test data of self-concept variables has been considered as 'Hypothesized values'.

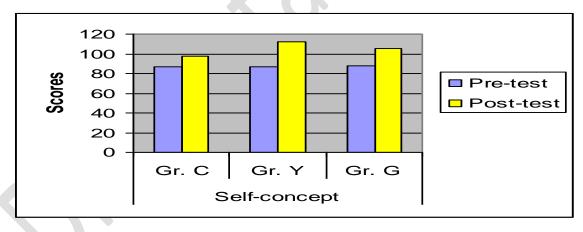


Fig. - 1, Comparison between the means of pre and post test on self-concept among Gr. Y, G and C.

School going boys were involved in school curriculum and within the teaching-learning situation. The self-concept of Gr. Y and Gr. G were improved significantly but Gr. C was not significantly improved in the present study because self-concept is a person's perception about himself. It includes physical; psychological and social attributes, which can influence individual's attitudes,



habits, belief and ideas. Yogasanas and gymnastic activities contribute a great deal to development of self-concept utilized by an individual to understand himself and other, to direct his own behavior.

### TABLE-II

Comparison of mean gains in self-concept of Gr. Y, G and C of one year treatment:

	Self-concept				
Group	Mean	S.D	t		
Gr. C	11.48	5.38	0		
Gr. Y	24.88	9.32	8.81*		
Gr. C	11.48	5.38			
Gr. G	17.1	5.31	5.25*		
	X	0			
Gr. Y	24.88	9.32			
Gr. G	17.1	5.31	5.13		

\*Significant at .05 level of confidence

Table-II represents the comparison of mean gains in self-concept among Gr. Y, Gr. G and Gr. C after one year treatment. The t-values between Gr. C & Gr. Y, Gr. C & Gr. G and Gr. Y & Gr. G in self-concept were 9.27, 8.38 and 3.80 respectively. All the t-values were significant at .05 level of confidence.



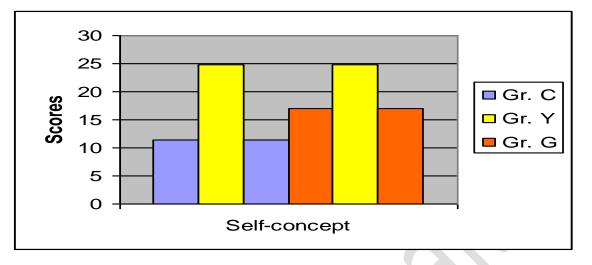


Fig.-2, Mean difference of self-concept among Gr. Y, G and C.

From the findings of the present study it can be stated that Gr. Y was superior to Gr. G and Gr. C for improving self-concept among school going boys. The finding also says that Gr. G was superior to Gr. C for improving self-concept among school going boys.

Yogic asanas play great role for the improvement of self-concept which has been reported by Anderson and Freshman (1982), Bhole and Karambelkar (1971), Deshpande, Nagendra and Raghuram (2009), Morison and Ibrahim (1981) and Yadhav (2006). In this study Yogic asana group was superior to Gymnastics group and Control group. Yogic asanas have a greater impact on the mind and the senses than other exercises with the result that yogic exercises help to develop one's physical and mental powers to make the mind clam and control the emotion. Yoga involves and includes eight paths (i.e. astanga yoga – yama, niyama, asana, pranayama, pratyahara, dharana, dhyana and Samadhi.). The astanga yoga based on idealistic approach, a real road to attain god consciousness, self-consciousness and self-concept. The mean gains show the superiority of Gr. G over Gr. C in self-concept scores. Gymnastics activities not only develop the physical fitness, but also make a sense of fair play and develop individual esthetic values and mental alertness. It also helps to develop mental state. Figure-2 showed that the self-concept was also improved among control group. The investigators did not gave neither yoga asanas nor gymnastics as a treatment to control group but the investigators could not control other variables such as teaching-learning



process, school curriculum, family environment, peer group, socio-economic status and cognitive and effective domain etc.

With in the limitation of the present study the following conclusions may be drawn-

- i) Yogic asanas improved the self-concept of school going boys.
- ii) Gymnastic activities improved the self-concept of school going boys.
- iii) Yogic asanas group was superior to gymnastics group and control group in selfconcept.
- iv) Gymnastics group was superior to control group in self-concept.

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