

Effect of Yogasan & Pranayam on Physiological Variables (Bmi, Whr Cardiovascular Endurance) on Teenage Boys Students

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Abstract –

The study is designed to see the effect of yogasan and pranayam on Physiological Variables (BMI, WHR CARDIOVASCULAR ENDURANCE) on teenage boys students teenage boys, 13 to 16 years of age group , 6week yoga and pranayam training were given to them to , pre test scores of BMI, WHR and cardiovascular endurance were recorded before imitation of program, post test were made after completion of program and both the scores were analyzed and compared there was positive significant of yogasan and pranayam on teenage college students.

Many exercises we do always have some beneficial impact on health and fitness similarly Yoga benefits us in both flexibility and strength along with cardiovascular health. Waist hip ratio and Body mass index affects ones strength and flexibility. Yoga also has significant impact on mental health, focus and emotional balance. Yoga is found safe for all ages and body types. It is a wonderful way to create wellness. Yoga is a form of exercise that gives you everything: strength, endurance, does it all good. Indeed, yoga is more than stretching and relaxation it is the ultimate mind body challenge. Yoga is perhaps the only form of activity which massages all the internal glands and organs of the body in a thorough manner, yoga is beneficial for maintaining BMI and WHR, where as pranayama increases the lung capacity and helps aid lung capacity heart rate ,

The scholar selected the study titled **Effect of yoga on physiological variables (BMI, WHR & Cardiovascular Endurance) of Teenage boys Students**, for that he selected 50 students to teenager of the age of 13-16 years from nearby school of his locality, for the study he designed Yogasanas and pranayam schedule of 6weeks, one hour daily in the morning excluding Sundays.

At the beginning of the yoga session the pre test data of BMI, HER and Cardiovascular endurance was collected, and the chart was prepared.

Instruments and method, to measure BMI, WHR Measuring tape , Weighing scale were used for Cardiovascular Endurance: - 600 Yard Run and Walk Test Purpose to measure the Cardio Vascular Endurance. 400 mt tracks marked with 600 yard.

Table number 1- Shows the Means standard deviations, of Pre test t scores of Physiological Variables and Physical fitness Variables

No.	Physiological Variables	Pre test	
		Mean	SD
1.	Body Mass Index (BMI)	2.20	1.5
2.	Waist Hip Ratio (WHR)	1.9	1.5
3.	Cardiovascular endurance	72.8	2.1

Source: - From the Pre test Data .

After 6 weeks Yogasanas program the post tests were conducted and the result were calculated stat statically for analysis which are given in table no 2

Table number 2- Shows the Means standard deviations, of Pre test t scores of Physiological Variables and Physical fitness Variables

No.	Physiological Variables	Post test	
		Mean	SD
1.	Body Mass Index (BMI)	1.0	1.7
2.	Waist Hip Ratio (WHR)	0.98	1.2
3.	Cardiovascular endurance	69.9	2.0

Source: - From the Post test Data .

The above tables , table 1 and 2 depicts the Mean and Sd of pre test and post test scores

Further the ‘t’ values are calculated to compare the pre and post test scores to make the comparison and draw the conclusion

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For drawing the conclusion the tow test score pretest and post test were compared, and from sd calculated’t’ values were calculated and for comparison which are given in following table no 3

Table number 3- Means ; standard deviations, of Pre test and Post test scores of Physiological Variables and Physical fitness Variables and calculated ‘t’ Values and Tabulated ‘t’ Value

N o.	Physiolog ical Variables	Pre test		Post test		C al ‘t’	Tab ‘t’
		Me an	S D	Me an	S D		
1.	Body Mass Index (BMI)	2.20	1.5	1.0	1.7	4.5	2.63
2.	Waist Hip Ratio (WHR)	1.9	1.5	0.98	1.2	5.0	At0.011 level of significant and 49 df
3.	Cardiovas cular endurance	72.8	2.1	69.9	2.0	10.2	

Source: - From the compilation of Pre test and Post test Data .

Discussion –

The above table number 3 shows the means, standard deviations and calculated’t’ Values of physiological Variables and physical fitness Variables. The means and standard deviations of body Mass Index (BMI) of Pretest and Post test scores are 2.20 ; 1.5 and 1.0 ; 1.7 respectively and the calculated ‘t’ Value is 4.5 where as the tabulated Value at 0.01 level of significance and 49 degree of freedom is 2.63 that proves that the calculated ‘t’ is

greater than tabulated ‘t’. Hence it is proved that there is Positive significant effect on Body Mass Index of teenage students. The means and standard deviations of Pre test and Post test scores of waist Hip Ratio (WHR) are 1.0; 1.7 and 0.98 and 1.2 respectively. The calculated’t’ Value is 5.0 where as tabulated Value is 2.63 at 0.01 level of significance and 49 degree of freedom. Hence it is proved that there is positive significant effect on WHR teenager students. The mean and standard deviations of Pre test and Post test scores of Cardiovascular endurance are 72.8 and 2.1 and 69.9 and 2.0 respectively and the calculated’t’ is 10.2 and calculated ‘t’ is 2.63 at 0.01 level of significant and 49 degree of freedom the calculated’t’ is greater than tabulated ‘t’ Hence it is Proved that there is Positive significant effect of Yogasanas and Pranayam on the Cardiovascular endurance of teenage students

Conclusion-

The above study shows that there is positive significant effect on (BMI) body mass Index , (WHR) Waist hip ratio and cardiovascular endurance of teenage students who performed yogaasan and pranayam for six week, the results are above satisfactory level and hence the study and result desired is significant.

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