

Effect of Yogasanas and Pranayam on the Physiological Fitness of Senior Citizen

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Abstract:

The researcher selected study for research entitle "Effect of Yogasanas and Pranayam on the Physiological Fitness of Senior Citizens". The senior citizen have lot of physiological problems, they try to minimise these problem by walking or doing some exercise, problems like obesity, blood pressure, diabetes, sleeplessness, loss of memory, hearing problems etc. In this study scholar selected 30 senior citizens from Amravati Town. Before starting the pranayama and yogasana physiological fitness variable were tested and scores were collected and means and standard deviations were calculated. After 3 months again the physical fitness and physiological fitness variables were tested and means and standard deviation were calculated and standard deviation were calculated and 't' values were calculated to see the effect. It was found that calculated 't' value are more than tabulated values of 't'. Hence it is concluded that there is positive significant effect of Yogasanas and pranayama on the physiological fitness of senior citizens".

Introduction :-

It is observed that the senior citizen have lot of physiological problems, they try to minimise these problem by walking or doing some exercise, problems like obesity, blood pressure, diabetes, sleeplessness, loss of memory, hearing problems etc.

The scholar being doing yoga and pranayama practices since last more than 10 years and also know Yogasanas and Pranayama decided to take a study of Yogasanas and its effect on the senior Citizen, for this study scholar selected 30 senior citizen from Amravati Town.

The scholar selected 30 senior citizens from the camp area and for the study decided the venue as Officer Club of Amravati. The senior citizens are the club member of the Officer Club Amravati.

The Scholar explained the benefits of Yogasanas and Pranayama to the senior citizen and requested them for their cooperation for the study. These senior citizens showed their positive attitude to participate in the study.

Purpose :- The purpose of the study was to see the effect of Yogasanas and pranayama on the physiological fitness of the senior citizen.

Hypothesis :- The scholar made the hypothesis that the Yogasanas and Pranayam practice improves the Physiological fitness amongst the senior citizens.

Data Collection: -

The scholar selected the following physiological fitness variable were, Body mass Index (BMI), Waist Hip Ratios, Pulse Rate, Flexibility, Breath Holding Capacity, and Diabetes. For collecting the data the scholar conducted the pre-test of physiological fitness variables and after the 3 months of Yogasanas and Pranayama training, again the scholar conducted the post-test of physiological fitness variables.

The scholar prepared two tables for the means and standard deviations table number one indicated the pre-test means and standard deviation of physiological fitness variables scores and table number two indicates the means and standard deviations of protest scores of physiological fitness variables.

Table No. 1 :- Means and standard deviations of pre-test scores of Physiological fitness variables of senior citizen.

Sr. No.	Physiological Fitness variable	Pre- Test	
		Mean	Sd.
1	Body Mass Index BMI	26.4	2.22
2	Waist Hip Ratio WHR	2.00	0.61
3	Pulse Rate	96.8	4.79
4	Sit and Reach Flexibility	2.58	0.61
5	Breath Holding Capacity	24.26	5.68
6	Blood Sugar Diabetes	207.6	43.79

Source: - From the pre-test scores of physiological fitness variables.

Discussion:-

The above table number 1 indicates the pre-test means and standard deviations of physiological fitness variable scores. The mean of Body Mass Index (BMI) is 26.4 and standard deviation is 2.22. The mean of Waist Hip Ratios is 2.00 and standard deviations are 0.61. The means of Pulse Rate is 96.08 and standard deviation is 4.79. The mean of flexibility Sit & Reach is 2.58 of standard deviation is 0.61. The mean of Breath Holding Capacity is 24.26 and standard deviations is 5.68. The mean of Blood Sugar (Diabetes) is 207.6 and standard deviation is 43.79.

Table number 2 indicated the Means and Standard deviation of post-test scores of physiological variables of senior citizen.

Table No. 2:- Mean and standard deviation of Post test scores of physiological fitness variable.

Sr. No.	Physiological variable	Post - Test	
		Mn	Sd.
1	Body Mass Index BMI	22.96	0.94
2	Waist Hip Ratio WHR	0.95	0.08
3	Pulse Rate	77.5	3.41
4	Sit and Reach Flexibility	5.2	0.76
5	Breath Holding Capacity	37.53	5.32
6	Blood Sugar Diabetes	113.4	14.89

Source :- From the post-test scores of physiological.

Discussion:-

The above table No. 2 indicates the post-test means and standard deviations of physiological fitness variable scores. The mean of Body Mass Index (BMI) is 22.96 and standard deviation is 0.94. The mean of waist hip Ratio is 0.95 and standard deviation is 0.08. The means of pulse rate is 77.5 and standard deviation is 3.41. The means of flexibility Sit & Reach is 5.02 and standard deviations is 0.76. The mean of Breath Holding Capacity is 37.53 and standard deviations is 5.32. The mean of Blood Sugar (Diabetes) is 113.4 and standard deviation is 14.89

Discussion:-

The above table No. 2 indicates the post test means and standard deviations of physiological

fitness variable scores. The Body Mass Index means is 22.93 and standard deviation is 0.94. The means of waist HTP Ration (WHR) is 0.08. The means of pulse rate is 77.5 and standard deviation is 3.41. The means of sit and reach flexibility is 5.2 and slandered deviation is 5.32. The mean of blood sugar (Diabetes) is 113.4 and standard deviation is 14.89.

To find out the effect of 3 month training of Yogasanas and Pranayam the scholar calculated the value between pre-test means and standard deviation and post test means and standard deviations and compared the calculated 't' with tabulated 't' from statistical table in the following table No 3 indicates the pre-test means and standard deviation and post test means and standard deviations and calculated 't' and tabulated 't' value.

Table No. 3 Pre-test and Post –test means and standard deviation of the scores of physiological fitness variables and calculated 't' value and tabulate 't' value.

S r. N o.	Physiolog ical variable	Pre-test		Post-test		Calcul ated 't' value	Tabul ated 't' value
		Me an	Sd.	M n	Sd.		
1	Body Mass Index BMI	26.4	2.22	22.96	0.94	6.94	2.81 at 0.07 level of significant and 21 degree of freedom
2	Waist HIP Ratio WHR	2.0	0.61	0.95	0.08	9.54	
3	Pulse Rate	96.08	4.79	77.5	3.41	17.70	
4	Sit and Reach Flexibility	2.58	0.61	5.2	0.76	14.55	
5	Breath Holding Capacity	24.26	5.68	37.53	5.32	8.96	
6	Blood Sugar Diabetes	207.6	43.79	113.4	14.89	10.97	

Source :- From Pre-test and post- test means and standard deviation and calculated 't' value and tabulated 't' value.

Discussion:-

The above table No. 3 indicates the means and standard deviation of pre-test and post test scores

physiological fitness variable and the calculated ‘t’ values and tabulated value. The calculated value of Body Mass Index (BMI) is 6.94 whereas the tabulated value at 0.01 level of significance 29 degree of freedom is 2.67 that indicated that these is positive significant effect of Yogasanas and Pranayam and the body mass index.

The waist ship Ratio calculated value is 9.54 the pulse rate calculated value is 17.70. The sit and reach flexibility calculated value is 14.5. The Breath holding capacity calculated value is 8.96 and the blood sugar diabetes calculated value is 10.97 where as the tabulated value of ‘t’ is 2.67 at 0.01 level of significance and 29 degree of freedom that proved that there is positive significant effect of Yogasanas and Pranayam practice on the physiological fitness variable of senior citizen.

Conclusion:-

The scholar therefore accepted the hypothesis that there is positive significant effect of Yogasanas and Pranayama on the physiological fitness variable of senior citizen. Hence the scholar drew the conclusion that there is positive significant effect of Yogasanas and Pranayam on the physiological fitness variables of senior citizen. This paper is useful for the society for improving the health and fitness of the people of society by prating Yogasanas and pranayama.

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