

Effect of Brisk Walking on physical Fitness and Physiological Fitness Variables of Obese Indian Citizen

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Abstract:

The researcher selected study for research entitle “Effect of Brisk walking on Physical fitness and physiological fitness variables of obese Indian Citizen” for the study the researcher selected 50 obese citizens from Amravati city and given them 5 kilometres brisk walking for 5 month.

Before starting the brisk walking practice of obese citizen the physical fitness and physiological fitness variable were tested and scores were collected and means and standard deviations were calculated. After brisk walking practice for 5 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 brisk walking on obesity of obese citizen.

Keywords: - Obese Citizen – Fat or overweight citizens ,Brisk walking – Fast walking, Physical fitness- Fitness of speed, Agility, flexibility, legs Strength.Physical fitness variables: - Body weight, Body mass Index (BMI), Waist Hip Ratio (WHR), breath holding capacity, lung capacity.

Introduction:-

The researcher observed that the percentage of obese people is increasing due to poor eating habits and sedentary life style of people. When researcher asked the some questions to the people who are working in offices and institution about their exercises schedules. The answered in the following way.

- (i) I can’t find time.
- (ii) It’s all I can do when I get home, to get the supper watch TV.
- (iii) I am two old now.
- (iv) I am always on my feet any way I certainly don’t need to do more.

These types of answers are given by these people who gained body weight and fat due to their static life style.

Methodology:-Therefore researcher decided to take a study entitled “Effect of Brisk walking on Physical Fitness and Physiological Fitness, Variables of obese local citizen” for this study researcher met the obese people of Amravati and told them the benefits of the physical fitness and health and disadvantages obesity and some disease related to obesity. Therefore some obese people became ready to co-operate the researcher for his study.

The researcher designed the study of Brisk walking of 5 kilometres distance starting from the one Kilometre in the beginning and gradually increasing up to 5 kilometres in 5 months of brisk walking of obese people in the morning time 7.00 am. to 8 am.

Hypothesis :-

The researcher hypothesized that the brisk walking increases the physical fitness and physiological fitness of the obese citizen.

For the study researcher before starting the practice of brisk walking of 50 obese citizen the scholar tested the physical fitness of physiological fitness variables and scores are collected and the calculated means and standard deviation of the 50 obese citizen. Which are given in the following table no. 1 and 2.

Table No. 1:- Means and standard deviation of physical fitness variable and physiological variable of the 50 obese citizen.

S.N.	Physical Fitness Variables	Means Mn	Standard deviation Sd.
1	30 mtrs Run, for Speed	12.3	1.8
2	500 mtrs Run & Walk, endurance	5min 40 sec	2.1
3	10 ruts shuttle run,	59.4	2.2

	Agility		
4	Standing brad Jump, Leg Lower	3.2	1.1
5	Sit and reach, Flexibility	3.4	1.2

Source: from the scores of physical fitness variables

For the physiological fitness variables the scholar selected, blood sugar, body weight, Body Mass Index (BMI) Waist Hip Ration (WHR), Breath Holding Capacity (BHC), pulse rate and blood pressure.

The researcher tested these variables before starting the brisk walking practice and collected the scores and calculated the means and standard deviation which are given in the following table number 2 fitness variable of obese citizen means and standard deviation.

S.No.	Variables	Means Mm	Standard Deviants SD
1	Body Weight	97.3	3.2
2	Body Mass Index, BMI	30.5	2.5
3	Waist Hip Ratio, WHR	2.1	1.3
4	Blood Sugar	220	3.2
5	Breath Holding Capacity BHC	30.2	2.6
6	Pulse Rate	98.2	3.5
7	Blood Pressure	98-140	

Source: - From the first test scores of physiological variables of obese citizen.

The Researcher gave the practice of 5 kilometre brisk walk to the obese citizen daily from 7.00 am to 8.30 p.m. The researcher himself was walking with the obese citizen.

After the 5 month of Brisk walking the researcher himself tested the physical fitness variables of obese citizen and collected the scores and calculated means and standard deviations, which are given in the below table No. 3.

Table No. 3:- Means and standard deviations of the physical fitness variables after 5 months practice of brisk walking of obese citizen.

S.No.	Physical Fitness Variables	Means Mm	Standard Deviations Sd.
1	30 mtrs Run	11.1	1.2
2	600 mtrs Run and Walk Endurance	5.1 m	1.1
3	10 mtrs shuttle run Agility	57.2	2.2
4	Standing Broad Jump Leg Power	4.5	1.2
5	Sit & Reach Felicity	4.9	1.1

Source :- From the scores of physical fitness variables after 5 months brisk walking of obese citizen.

The researcher had given 5 kilometre practice of brisk walking to the obese citizen and then after 5 months practice of brisk walking researcher conducted final test of physiological variables of obese 50 citizen. The scores of physiological fitness variable were collected by the researcher and calculated of means and standard deviation which and given in the following table No. 4

Table No. 4 :- Means and standard deviations of physiological fitness variables of obese citizen after 5 months brisk walking practice.

S.No.	Physiological Fitness Variables	Means Mm	Standard Deviations Sd.
1	Body Weight	89.29	2.2
2	Body Mass Index (BMR)	27.3	2.3
3	Waist Hip Ratio (WHR)	1.1	0.6
4	Blood Sugar	165	3.1
5	Breath Holding capacity	34.2	2.1
6	Pulse Rate	92.1	2.6
7	Blood Pressure	90-130	-

Source: - From the final test after 5 month brisk walking practice of physiological fitness variables test scorer.

To find out the effect of brisk walking of 5 kilometres on the obese citizen the scholar calculated 't' value between the 1st test scores means and standard deviation and final test means and standard deviation of physical fitness variables and physiological variables of obese citizen. In the following table No.5 the means and standard deviation of 1st test and final test and calculated 't' value values and tabulated 't' value are indicated.

Table No. 5 :- Means standard deviation of 1st test and final tests and calculated 't' value and tabulated 't' value :-

S.N	Physical Fitness Variable	1 st Test		Final Test		Cal 't'	Tab 't'
		Mn	Sd	Mm	Sd		
1	30 mtrs Run	12.3	1.8	11.1	1.2	6.0	2.67 at degree of freedom 0.01 and level of significance 49.
2	600 mtrs Run & Walk	5.5	2.1	5.1	1.1	3.1	
3	10 mtrs Shuttle Run	59.4	2.2	57.2	2.2	5.0	
4	Standing Board Jump	3.2	1.1	4.5	1.2	6.6	
5	Sit & Reach	3.4	1.2	4.9	1.1	6.2	
Physiological Variables							
1	Body Weight	97.3	3.2	89.2	2.2	14.7	
2	Body Mass Index	30.2	2.3	27.3	2.3	6.2	
3	Waist Hip Ratio	2.1	1.3	1.2	0.6	4.5	
4	Breath Holding capacity	30.2	2.6	34.2	2.1	8.5	
5	Pulse Rate	98.2	3.5	92.1	2.6	9.8	
6	Blood Sugar	220	3.2	165	3.1	3.1	
7	Blood Pressure	98	14	90	13	0	

Source: - Physical fitness variable and physiological variables first tests and final test means and standard deviation and calculated 't' and tabulated 't'.

Discussion :-

The above tables number 5 indicates that the calculated 't' value is greater than the tabulated 't' from the table at 0.01 degree of freedom and 49 level of significance that proved and accepted the hypothesis that the brisk walking of 5 kilometre improved the physical fitness and physiological fitness of obese citizen. Hence it is concluded that the obese citizen for their health and physical fitness they should adopt simple brisk walking exercise which is beneficial for them. Hence this research is useful for the Indian Society.

References

1. **Bob Carlson** , WALKING FOR HEALTH FITNESS and sport Jaico Publicing house ISBN 978-81-7992-723-6, first jaico impression :2007.
2. **Louis Bherer, Kirk I. Erickson, and Teresa Liu-Ambrose** A Review of the Effects of Physical Activity and Exercise on Cognitive and Brain Functions in Older Adults” Journal of Aging Research Volume 2013 (2013), Article ID 657508, 8 pages
3. **Krishna Kant** “The Effect of Six Weeks of Brisk Walking on Aerobic/Cardiovascular Function of Sedentary College Students” Indian journal of applied research Volume : 4 | Issue : 9 | September 2014 | ISSN - 2249-555X
4. **Tiago V. Barreira, David Rowe, Minsoo Kang** “ Parameters of walking and jogging in healthy young adults” ABSTRACT Int J Exerc Sci 3(1): 4-13, 2010.
5. **Suzanne Audrey, Sunita Procter, Ashley R Cooper** “The contribution of walking to work to adult physical activity levels: a cross sectional study” *International Journal of Behavioral Nutrition and Physical Activity* 2014, **11**:37 doi:10.1186/1479-5868-11-37
6. **Parise C, Sternfeld B, Samuels S, Tager** Brisk Walking Speed in Older Adults Who Walk for Exercise. Journal of the American Geriatrics Society (Impact Factor: 4.22). 04/2004; 52(3):411-6. DOI: 10.1046/j.0002-8614.2003.52114.xPubMed