

**RESEARCH PAPER****Comparative Study of Selected Physiological Parameters of Active and Sedentary Women of Hathras****Swatendra Singh**Department of Physical Education,  
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Email: [swate.singh@gmail.com](mailto:swate.singh@gmail.com)Received: 26<sup>th</sup> July 2017, Revised: 15<sup>th</sup> August 2017, Accepted: 21<sup>st</sup> August 2017**ABSTRACT**

The main aim of the study was to compare the selected physiological parameters of active women and sedentary women. The subjects for active women were 30 women of Hathras city who were involved in some kind of physical activity such as jogging, walking, aerobic exercises, yoga or does workout in gym; whereas for sedentary women 30 house wife women of Hathras city who were either very less or not at all involved in any kind of physical activities were randomly selected. Age of the subjects ranging from 25 to 30 yrs. The selected physiological variables were heart rate, blood pressure (systolic and diastolic), vital capacity and fat percentage. The dependent 't' test was used for computing the data. For testing the hypothesis the level of significance was set at 0.05 level of confidence. The study concluded that the selected variables of subjects of active women and sedentary women differ significantly in vital capacity, heart rate and fat percentage from each other.

**Key words:** Physiological Parameters, Active Women, Sedentary Women

**INTRODUCTION**

Life in our highly mechanized society today requires much less exertion than that demanded of our ancestors in primitive times. As a result of inactivity our body is threatened by earlier deterioration. It is clear and critically important that priority be given to any valid effort, educational and physical program that promises some solution to these health crises. According to Featherstone, 1965- "Modern Civilization has made life soft and luxurious. The diminished physical efforts and artificial life are responsible for a physically weak population. People today lack both strength and endurance. The average man spends more time attending to his automobile than attending to the state of his health".

Today elevators and escalators have replaced stairs just try to find an open stairway in a modern high rise. The walk to the corner market has been replaced by a short drive to the super market in the neighbourhood shopping centre. Physical inactivity and sedentary nature of our daily living habits are a serious threat to the body, causing major deterioration in normal body function. Such common and serious medical problems as coronary heart disease, hypertension, obesity, anxiety and depression and lower back problems have been either directly or indirectly associated with our lack of physical activities.

**METHOD**

The purpose of the study was to compare the selected physiological parameters of active women and sedentary women of Hathras city. There were two groups of 30 women of each group i.e. 30 active women and 30 sedentary women. Age of the subjects was ranging from 25 to 30 yrs. The selected physiological parameters which was assessed to both the group were vital capacity (measured by dry spirometer), heart rate (measured by stethoscope), systolic pressure and diastolic pressure (measured by sphygmomanometer) and fat percentage (measured by skin fold calliper). The dependent 't' test was used for computing the data. For testing the hypothesis the level of significance was set at 0.05 level of confidence.

**RESULT**

There was difference in vital capacity between active and sedentary women. Mean of active women (2.4) was better than sedentary women (1.5). Heart rate of active women (M=72.4) was better than sedentary women (M=80.2). In systolic blood pressure there was not significant difference in the means of active women (M=125.2) and sedentary women (M=127.5). In Diastolic blood pressure also there was not significant difference between active women (M=72.2) and sedentary women (M=76.2). Significant difference was found in the means of fat percentage between active women (18.20) and sedentary women (25.4).

**Table 1:** Comparison of Selected Physiological Parameters of Active Women and Sedentary Women of Hathras City

Physiological Variable	Active Women(Mean)	Sedentary Women(Mean)
Vital Capacity	2.4	1.5
Heart Rate	72.4	80.2
Systolic Blood Pressure	125.2	127.5
Diastolic Blood Pressure	72.2	76.2
Fat%	18.20	25.4

**RESULT AND DISCUSSION**

In this study it is inferred that there was significant difference was found active women and sedentary women in physiological parameters i.e. vital capacity, heart rate and fat percentage, but there was no significant difference in systolic blood pressure and diastolic blood pressure. The vital capacity, heart rate and fat percentage of active women was found to be better as compare to the sedentary women probably because active women were active in physical workout like brisk walk, yoga, jogging, workout in gym along with their household work and working in some or the other office or school. Active women might have taken care of their diet plan too as they possess less fat percentage. No significant difference was found in blood pressure between active women and sedentary women. The study reveals that the blood pressure was more or less the same.

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