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**Meenakshi Saini**

TGT (P & HE), Kendriya  
Vidyalaya Sangathan,  
Dharmanagar, Tripura, India

**Dr. Ankan Sinha**

Assistant Professor, GDC,  
Dharmanagar, Tripura, India

**Kabita Sinha**

Student GDC, Dharmanagar,  
Tripura, India

**Mitali Datta**

Student GDC, Dharmanagar,  
Tripura, India

## Comparison of physiological profile among the sedentary, moderate and highly active women of Dharmanagar North Tripura

**Meenakshi Saini, Dr. Ankan Sinha, Kabita Sinha and Mitali Datta**

### Abstract

The purpose of the study was to assess the comparison of physiological profile among the sedentary, moderate and active women of North Tripura. It was hypothesized that there would be no significance differences among the sedentary, moderate and active woman in relation to resting heart rate and blood pressure. For the present study 30 women (10 women each from sedentary, moderate and active lifestyle) have been randomly selected as the subjects from Dharmanagar, North Tripura. The ages of the subject were ranged from 25 to 45 years. After applying ANOVA it was obtained that there were no significant differences as far as resting heart rate and blood pressure is concerned. However, after comparing the mean values of the women of different life style in relation to resting heart rate and blood pressure, we found that active life style women are having better physiological efficiencies than the sedentary and moderate life style women. As the mean values (A-75.6, 118.8, 76.6) of active lifestyle women are lower as well as normal then the mean values of sedentary and moderate life style women (S- 78.8,113.2,74.7) and (M- 76.3, 117.4, 75.1) in relation to resting heart rate, systolic and diastolic blood pressure respectively.

**Keywords:** Resting heart rate, systolic & diastolic blood pressure, sedentary, moderate and active lifestyle

### Introduction

Sedentary lifestyle is an issue of great concern because of its deleterious health implications in developed and developing countries. It is associated with limited physical activity, prolonged sitting at work, in cars, communities, work sites, schools, homes and public places have been restricted in ways that minimize human movement and muscular activities. People sit more and move less. This shift from a physically demanding life to reduced physical activities have exposed people to high risk of developing various health conditions such as obesity, hypertension, lack of fitness, cardiac disorders, vitamin deficiencies, etc. They are associated with unhealthy lifestyles which are preventable.

To find out the exact figure of this burning issue of our localities, the researcher took this present study as an investigation.

### Methodology

For the present study 30 women (10 women each from sedentary, moderate and active lifestyle) have been randomly selected as the subjects from Dharmanagar, North Tripura. The ages of the subject were ranged from 25 to 45 years. The health examination of the subjects have been carried out to ensure that the subjects would be medically fit to undergo different types of data collections

Prior to the collections of data, a meeting of all the selected subjects was held and the tester get explained in details regarding the requirement of the study and the testing procedure so that they may have clear concept regarding the need of the study. To compare the selected physiological profiles among the sedentary, moderate and active women of North Tripura a statistical technique Analysis of variance (ANOVA) was used at 0.05 level of significance.

**Correspondence**

**Meenakshi Saini**

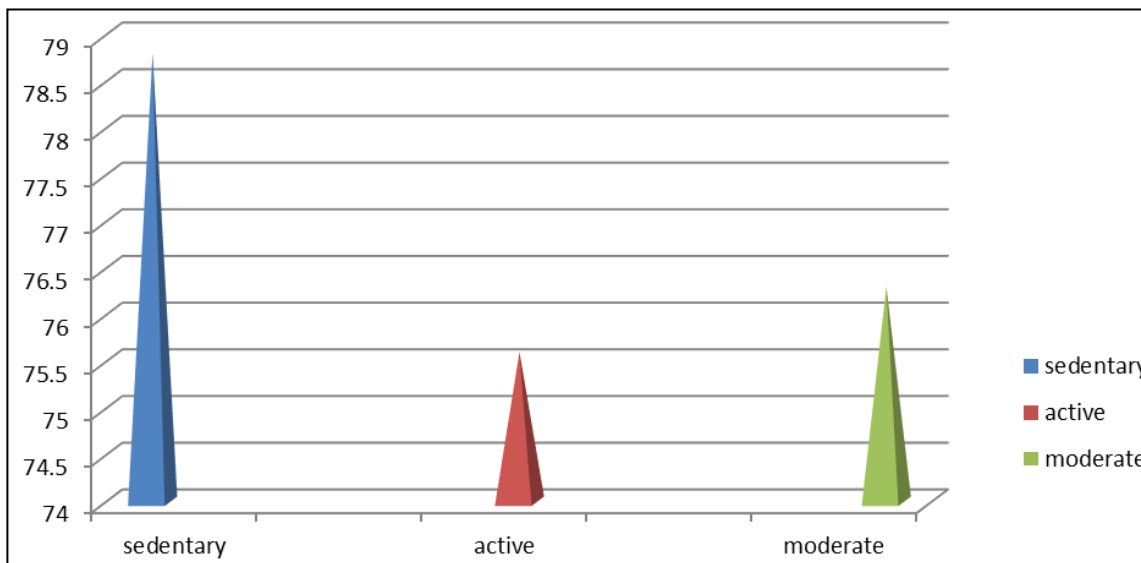
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Vidyalaya Sangathan,  
Dharmanagar, Tripura, India

**Discussion and Findings**

**Table 1: ANOVA**

Source of variation	df	ss	MSS	F- value
Treatment	r-1=2	56.7	28.35	0.375
Error	N-r=27	2039	75.52	

Tab F 05(2,27)=3.35



Active, sedentary and moderate

However, as the mean value of active life style women (75.6) is lower than the mean value of sedentary (78.8) and moderate (76.3) lifestyle women respectively; hence, it was stated that the active lifestyle women may enjoy the life with better fitness efficiency.

**Table 2: ANOVA**

Source of variation	df	ss	MSS	F- value
Treatment	r-1=2	143.87	71.94	0.224
Error	N-r=27	8665	320.92	

Tab F 05(2,27)=3.35

It reveals that as the calculated F-value (0.224) is smaller than the tabulated F-value (3.35) in relation to systolic blood pressure. Hence there was no significant difference among the

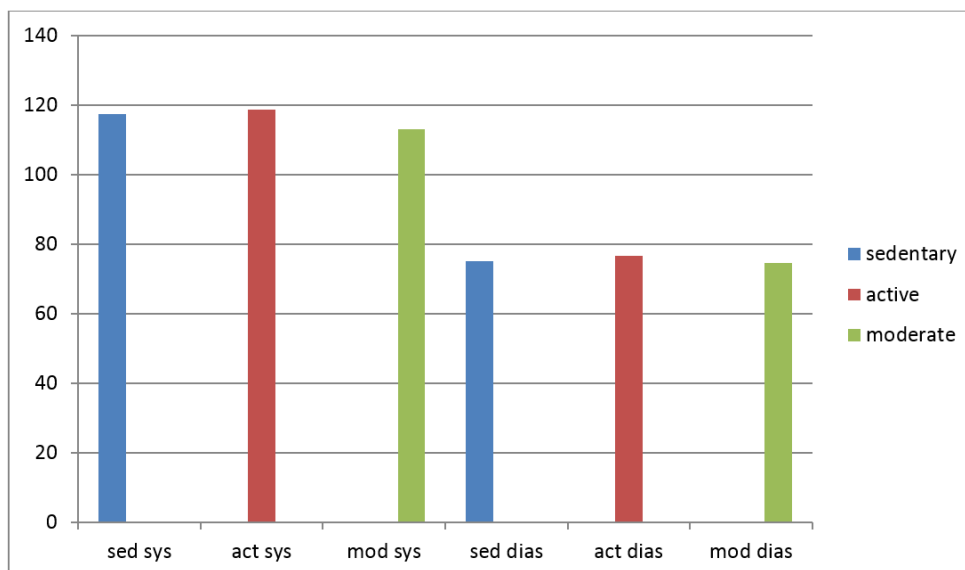
women of different life style i.e., active, sedentary and moderate.

**Table 3: ANOVA**

Source of variation	df	ss	MSS	F- value
Treatment	r-1=2	20.47	10.24	0.08
Error	N-r=27	3456	128	

Tab F 05(2,27)=3.35

It reveals that as the calculated F-value (0.08) is smaller than the tabulated F-value (3.35) in relation to diastolic blood pressure. Hence, there was no significant difference among the women of different life style i.e., active, sedentary and moderate.



Active, sedentary and moderate

However, as the mean value of active life style women (118.8/76.6) is more close to the normal range of blood pressure than the mean value of sedentary (113.2/74.7) and moderate (117.4/75.1) lifestyle women respectively; hence, it was stated that the active lifestyle women may not be suffering from hypertension.

### Conclusions

In case of resting heart rate it was found that there was no significant difference among the different groups as there calculated F value 0.375 is lower than the tabulated value 3.35. However, active lifestyle group is slightly better in fitness proficiency as compared to other groups as its mean value (75.6) is lower than the others.

Secondly, in case of systolic blood pressure it is found that there is no significance difference among the different groups as there calculated F value 0.224 is lower than the tabulated value 3.35. However, active lifestyle group is slightly better in fitness proficiency as compared to other groups as its mean value (118.2) is lower than the others.

3rdly, In case of diastolic blood pressure it was found that there was no significant difference among the different groups as there calculated F 0.08 value is lower than the tabulated value 3.35. However, active lifestyle group is slightly better in fitness proficiency as compared to other groups as its mean value (76.6) is lower than the others.

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