

## Proportional study of selected anthropometric variables between physical education and engineering students of Bhopal

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### Abstract

The purpose of the study was to find out the significant difference of waist –hip ratio between physical education and Engineering students. The researcher collected the data on total 200 professional students 100 in each profession as subjects between the age group of 22-24 years. After the collection of related data, it was processed and analyzed with descriptive statistics and unpaired t-test was employed. The level of significance was set at 0.05 percent. The results of the waist-hip ratio variable shows that there are significant differences between physical students and Engineering students.

**Keywords:** Waist-hip ratio, engineering, physical education etc

### Introduction

Physical wellness or well-being is an ideal concept of physical fitness and includes both external as well as internal component of a person's fitness. The external factors of fitness may be misleading because a person may not be as fit as appears to be outwardly. In some cases, persons having some mental problems appear to be very healthy. Similarly, the achievement of a particular task may not reveal the real status of his health. In this study, BMI & WHR were used to assess body fat distribution. BMI is a height dependent measure of weight often used as a measure of whole body size & the degree of fatness within populations. Obesity increases the likelihood of various diseases, particularly heart disease, type 2 diabetes, obstructive sleep apnea, certain types of cancer, and osteo The World Health Organization (WHO) predicts that overweight and obesity may soon replace more traditional public health concerns such as under nutrition and infectious diseases as the most significant cause of poor health. Obesity is a public health and policy problem because of its prevalence, costs, and health effects. Public health efforts seek to understand and correct the environmental factors responsible for the increasing prevalence of obesity in the population. Solutions look at changing the factors that cause excess food energy consumption and inhibit physical activity. Efforts include government standard meal programs in schools and limiting direct junk food marketing to children. When constructing urban environments, efforts have been made to increase access to parks and to develop pedestrian routes arthritis.

### Material and Methods

The subjects for the present study were selected male students of two different professions i.e. Physical education and engineering students of Bhopal collages. Total 200 students were selected 100 from each profession and age ranging b/w 22 to 24 years.

### Selection of Variable

Following Anthropometric variables were selected for the study:

1. Waist –Hip ratio

### Administrations of the Tests

#### Waist-Hip Ratio (WHR)

- **Aim:** The purpose of determining waist girth is to gain a measure of the amount of abdominal fat (visceral fat), which has been linked to increased risk of coronary heart disease and diabetes.
- **Equipment required:** Flexible metal tape measure and pen for marking the skin. If a plastic or cloth tape is used, it should be checked regularly against a metal tape as others may stretch over time.
- **Procedure:** The waist measurement is taken at the narrowest waist level, or if this is not apparent, at the mid-point between the lowest rib and the top of the hip bone (iliac crest). If you are unsure if this measurement was taken at the narrowest level, take several measurements at different levels and take the lowest measurement. Some procedures measure abdominal circumference at the level of the umbilicus (belly-button), such as for the Navy PRT. When recording, you need to make sure the tape is not too tight or too loose, is lying flat on the skin, and is horizontal.
- **Scoring:** Waist circumference was measured in centimeters.

### Statistical Technique

To compare the obesity among the students of different professions t-test was employed. The level of Significance was chosen at 0.05.

**Table 1:** Descriptive Statistics related to W/H ratio among selected professional students

Group	N	Mean	Standard deviation	t-value
Physical education students	100	.8713	.04268	6.2981*
Engineering students	100	.9156	.05591	

\*t<sub>0.05(198)</sub>= 1.9720

Table (1) statistically shows that the Mean and standard deviation of both physical education students.8713 and.04268 where in case of engineering students mean.9156 and SD is.05591Respectively. The results of the waist-hip ratio variable shows that there are significant differences between physical students and Engineering students.

**Discussion**

The result of the study shows that there is significant difference between waist-hip ratio of physical students and Engineering students.

**Conclusion**

it was observed that there is significant difference between waist-hip ration of physical students and engineering students.

**References**

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