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BMI status of rural high school boys of different academic disciplines of Punjab: A comparative study

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Abstract

Introduction: Body mass index is the scientific formula of individual's which described that the individual is underweight, optimal level of weight, overweight or obese. In this formula the weight of the individual measure in Kilograms and height is measure in CMs. BMI is calculated as weight in kilograms divided by the square of height in meters. It is the inexpensive technique of measuring the fitness level

Purpose: The purpose of the study is to measure the BMI status of rural high school boys among the various school boys of Punjab.

Methodology: In this study the scholar used the random sampling method. 75 students were randomly selected from three districts of Punjab i.e. Gurdaspur, Mohali, Hoshiarpur. These 75 students were from above district's schools which were located in the rural area of Punjab. The age of the students was between the 14 to 16 years.

Result: Null hypothesis was accepted as per the tables degree of freedom between the samples and within the samples shows the result 3.44 the calculated value is less which is not significant.

Conclusion: As per the conclusion of the study the students of Mohali observed healthy weight category with 19.71% where as the students from remaining two district considered as underweight category with the scoring of 18.22% Hoshiarpur and 16.84% Gurdaspur respectively.

Keywords: BMI, high school, rural etc. Punjab

Introduction

In the developing countries the increasing rate of obesity is alarming, particularly in united states and Europe. Due to this reason, obesity has been considered as an epidemic in America. Many studies have been quoted that around the 33% of total population of America are obese. Obesity is defined as excessive body storage of body fat. When a person is 20% more than desirable body weight then the person is called obese. Generally obesity and overweight are synonymously. The obesity is generally classified into two parts. BMI is based on an individual weight and height. BMI does not actually measure the percentage of body fat. It was devised between 1830 to 1850 by the Beigian Polymath, and Adolphe Quetelet during the course of developing social physics. Body mass index is defined as the individual body mass divided by the square of his/her height. The formula universally used in medicine produce a unit of kg/m.

The present study deals with BMI status of Rural High School Boys of Different Academic Disciplines of Punjab: A comparative study.

Objective of the study

1. To evaluate BMI status of three academic discipline i.e. (Gurdaspur, Mohali, Hoshiarpur) of Punjab.
2. To compare the BMI status of three academic discipline i.e. (Gurdaspur, Mohali, Hoshiarpur) of Punjab.

Hypothesis

There exists no significant difference in the BMI status of three academic discipline i.e. (Gurdaspur, Mohali and Hoshiarpur) of Punjab.

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Delimitation

1. The study was confined to 14 to 16 years students only.
2. The study was confined to high school boys only.
3. The present study was purposed to only 75 male students.
4. The subjects were taken from three district of Punjab only.

Definition of Terms

1. **BMI:** BMI is observed as Body Mass Index. It is inexpensive technique and it is not Measure the body fat actually.
2. **High School:** A educational institution where students were taught till 10th standard.
3. **Rural:** The area, in which was located in outside the town.
4. **Punjab:** A state of India and located in northern region of Country.

Research methodology

The present study in hand is a survey type research where

the survey was conducted from the three academics discipline i.e. (Gurdaspur, Mohali, Hoshiarpur, of Punjab.

Samples

The population for the study was 75 students from the three academics discipline i.e. (Gurdaspur, Mohali, Hoshiarpur) of Punjab. The Research scholar collected the data from the school of the concerned district with help of PTI teachers. 25 male students were the samples from the every school.

Tools used

1. Weighing Machine
2. Stediometre

Statistical procedure

Significant differences of BMI status of students were determined through ANOVA (Analysis of Variance) and compare the groups at 0.05 levels of significance.

Results and Discussion

Table 1: One way anova of BMI status of rural high school boys among various

	Sum of Square	Degree of Freedom	Mean Square	F Ratio
Between Groups	103.02	2	51.51	1.40
Within Groups	805.19	22	36.59	
Total	908.21	74		

Significant level at 0.05

It is evident from table. 1 that, F-ratio found to be no significant difference in Body Mass Index among rural high school boys, as obtained F value is 1.40 It is lower than the

table value of 3.44 at 0.05 level of significance. As the F-ratio was found no significant BMI status of Rural High School Boys of Different Academic Disciplines of Punjab

Table 2: Post hoc analysis of BMI status of rural high school boys among various academic divisions

Gurdaspur	Mohali	Hoshiarpur	Mean Difference
16.84	19.71		2.84*
	19.71	18.22	1.49*
16.84		18.22	1.38*

Significant at 0.05 levels

Post hoc test results presented in the table. 2 reveals that, there was a significant difference found in Body Mass Index status among rural high school boys between the Gurdaspur and Mohali division, and Mohali and Hoshiarpur division and Hoshiarpur and Gurdaspur. Mean values depicts that

there was a steady and linear deference in the Body Mass Index status of rural high school boys with respect to the academic division from Gurdaspur, Mohali and Hoshiarpur A comparison of mean of Body Mass Index status of rural high school boys is presented in figure. 1.

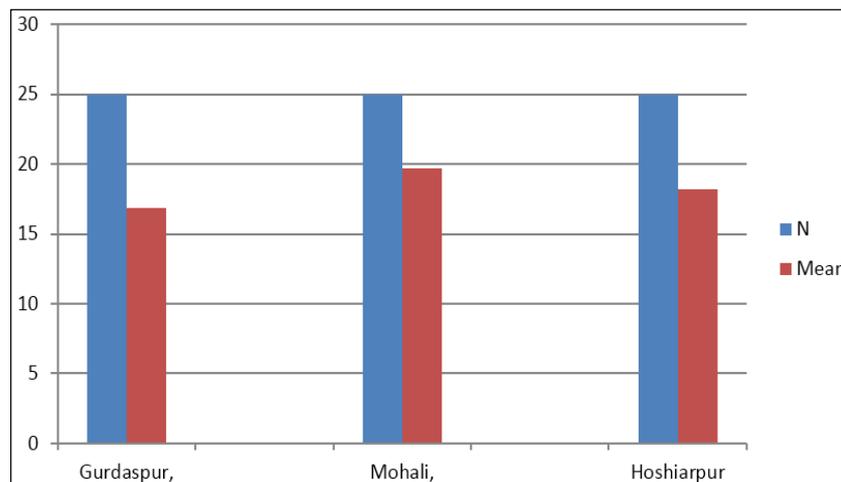


Fig 1

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