



**ANTHROPOMETRIC PROFILING AND BMI PATTERNS: A HOLISTIC STUDY ON
ANDHRA UNIVERSITY M.P. Ed (2022-2024) STUDENTS**

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Abstract

The study highlights how crucial anthropometric measurements—such as height, weight, age, and BMI—are for comprehending the features and proportions of the human body. The purpose of the study is to address the health risks that M.P. Ed. students may face and to help academic planners customize the physical education curriculum. Thirty students, ages 22 to 32, make up the sample. Age, BMI, weight, and height data are being gathered.

Keywords: Anthropometric profiling, Demographic variables, balanced body composition, wellness trends.

Introduction

Background High body

mass index in midlife is an established risk factor for poor cognition and dementia. Most evidence supporting the association between high BMI and dementia comes from high-income countries. A risk factor model of BMI is an important building block of health simulations aimed at estimating government policy effects on overweight and obesity. Anthropometric measures, which include height, weight, age, and Body Mass Index (BMI), are essential for determining the physical characteristics and dimensions of the human body. These quantitative methods provide information about an individual's growth, development, and health. Measurements of height indicate nutritional and genetic factors, which help monitor changes over time. As a mass metric, weight is essential for assessing general health and nutritional status and identifying changes in eating and lifestyle choices. Age-specific norms are frequently employed in paediatric and geriatric examinations, providing context for the observed growth patterns in height and weight. A composite measure called BMI divides people into weight status groups and directs actions in clinical and public health contexts. When combined, these anthropometric traits offer a thorough framework for evaluating health, supporting scholars, medical practitioners, and decision-makers in comprehending demographic patterns, spotting hazards, and creating focused well-being treatments.

Literature

The analysis of the literature highlights how anthropometric measurements are complex and can offer important new perspectives on human health. Anthropometric parameters are essential in determining research, medical procedures, and policy, ranging from assessing nutritional conditions and forecasting adult health risks to comprehending childhood growth patterns. To provide thorough health insights, researchers are working to improve methods, include various population viewpoints, and increase the accuracy of anthropometric evaluations as this body of knowledge continues to develop. The present study has sought to investigate the relationship between demographic variables, and anthropometric indices

OBJECTIVES: -

- 1) Collecting Anthropometric measures and analysing the parameters can address the potential health risks among M.P. Ed students of Andhra University

- 2) Collecting Anthropometric measures and analysing the parameters can be helpful for academic planners and educators in tailoring the physical education curriculum

METHODOLOGY: -

A total of 30 Master of Physical Education (M.P. Ed) students were selected, ranging in age from 22 to 32. We gathered information on age, BMI, weight (in kilograms), and height (in centimetres). Using conventional classifications, the individuals' BMI was used to divide them into several health status categories.

RESULTS: -

Table 1. Statistical data

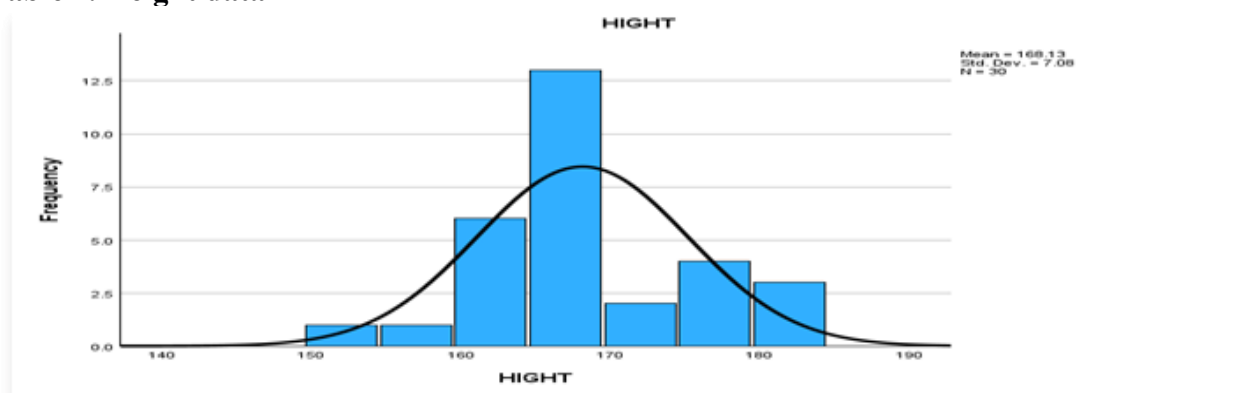
Statistics

		HIGHT	WEIGHT	BMI	AGE
N	Valid	30	30	30	30
	Missing	0	0	0	0
Mean		168.13	63.73	22.6873	25.63
Median		168.00	61.00	22.4500	26.00
Mode		169	60	21.60	26
Std. Deviation		7.080	7.211	1.54343	2.251
Range		31	30	5.80	10

A descriptive explanation of the statistical data

The M.P. Ed students' age and anthropometric statistics provide a thorough picture of their physical attributes. The students' average weight is 63.73 kg, their average height is 168.13 cm, and their average BMI is 22.6873, indicating a balanced body composition. The observed central trends are strengthened by the tight alignment of the means and median values, which represent the middle points in the distributions. The mode values—169 cm for height, 60 kg for weight, and 21.60 for BMI—highlight typical or often occurring measurements. The sample's height (7.080), weight (7.211), BMI (1.54343), and age (2.251) all show substantial variability, according to the standard deviations. The height (31 cm), weight (30 kg), BMI (5.80), and age (10 years) all show significant variability, as do the ranges, which show the spread between the highest and minimum values.

Table 2. Height data

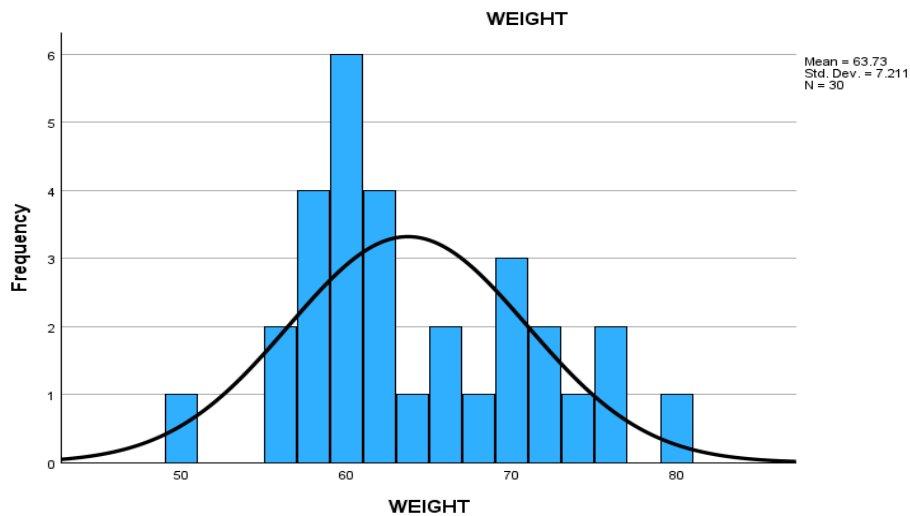


Means: The M.P.Ed. students are 168.13 centimetres tall on average

Medians: The middle value in the height distribution is 168.00 cm, which is the median height.

Modes: The sample appears to have a common height value, as indicated by the mode height of 169 cm.

Table 3. Weight data

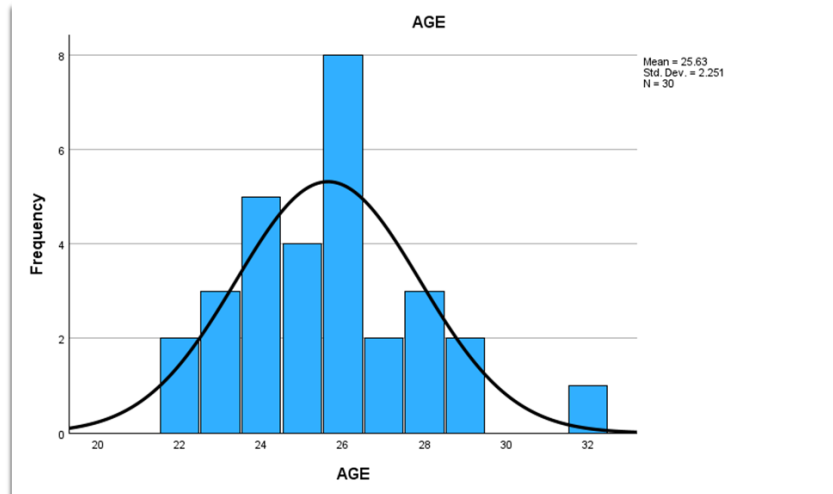


Means: The participants weigh an average of 63.73 kilograms.

Medians: The medium weight value is shown by the median weight of 61.00 kg..

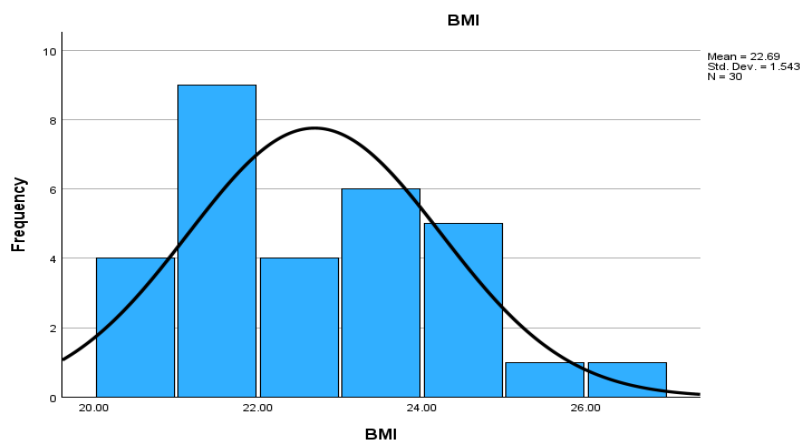
Modes: The weight value that occurs the most commonly is indicated by the mode weight of 60 kg.

Table 4. Age data



The age that occurs the most commonly is 26, which is the mean age

Table 5. BMI data





Means: The average body composition is indicated by the mean BMI of 22.6873.

Medians: The middle BMI number is indicated by the median BMI, which is 22.4500.

Modes: The BMI value that occurs most commonly is 21.60, which is the mode BMI.

CONCLUSION

The M.P.Ed students' anthropometric and demographic information provides a thorough overview of their physical attributes. The average height, weight, and BMI show a balanced body composition within the sample, with a majority falling into the "Normal" BMI group. The central tendency (mean, median, mode) and measures of variability (standard deviations, ranges) provide insights into the distribution and diversity of these parameters. The results indicate that there is a moderate degree of heterogeneity in the anthropometric features and age of the students. The goal of the thorough health assessment is to direct focused therapies and lifestyle encouragement. Furthermore, knowledge of the anthropometric profiles aids in the creation of customized academic physical education programs, enabling the creation of individual exercise regimens that take into account the wide range of features found in the M.P.Ed student body. This dataset provides a significant basis for future study, providing a deeper knowledge of health and wellness trends among persons obtaining a Master's in Physical Education, and helps to compare these trends with other master's level students.

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