

Study on the Impact of Gender on Academic Achievement of Underweight College Students

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ABSTRACT

Physical and mental health are interrelated. They have direct or indirect impact on the individual. Daily life style to academic achievement, interpersonal relationship to adjustment everywhere the close relation between physical and mental health can be seen. Health issues in any one of them can affect the other one. BMI is related to the physical health of an individual. It is the ratio of height and weight. BMI indicates whether a person is underweight, normal weight, overweight or obese. Many think that underweight students are poor performers and she is an underweight female student, her health condition would negatively affect her academic achievement. This study aims to find out if gender has any significant impact on the academic achievement of underweight college students. For this study, only second semester male and female B.A. General students from colleges have been taken into consideration.

INTRODUCTION

Our physical health and mental health are closely related to each other. Any interruption in any of them, will surely affect the other one. For this reason, healthy body has always been associated to healthy mind. Physical health affects daily routine of an individual and can have impact on the achievements, too. There is belief that poor physical health may lead to poor academic achievement.

The Body Mass Index is a statistical measure to compare a person's weight to height. Belgian anthropologist Adolphe Quetelet has introduced this term in the late 19th century. Now it is a well-known concept to almost everyone. With the help of proper equipment, any person can measure their BMI with reasonable accuracy. As per the CDC, there are several sub-divisions of BMI:

BMI <18.5= underweight, BMI 18.5- 24.9=normal weight, BMI 25-29.9= overweight and BMI>30=obese. BMI more than 40 or higher is regarded to be morbidly obese. despite the presence of adequate food resources, if a person has BMI less than 18.5, then he or she labelled as underweight. Poor eating habit leading to malnutrition, chronic metabolism error, failure to replenish important nutrients and other chronic health problems are some of the reasons of being underweight.

Academic achievement is defined by Simpson and Weiner (1989) as measurable behaviour in a standardized series of tests. Kumar et al.(2014) has described academic achievement as multidimensional and related to human growth and cognitive, emotional, social and physical development. Crow and Crow have seen academic achievement from a learner's perspective while defining it as the extent to which a learner is profiting from instruction in a given area of learning.

College students refer to undergraduate students who have got admission to colleges for obtaining bachelor's degree. This is post higher secondary stage. Currently, in general degree colleges undergraduate courses are for three years including six semesters. There are different streams in these colleges, such as Arts, Science, Commerce. Different universities have different examinations modules and the full marks of each examination varies among streams and universities as well.

Society often tends to think that female are poor achievers and when they are suffering from any kind of health problems, their achievement score become poorer. It is strongly believed that underweight students are poor achievers and when it comes to female, it is taken as proven fact that due to several health problems related to their weight, they are far behind the male students in terms of academic achievement. Hence it is really important to know if really gender can impact the academic achievement of underweight college students.

Objective: Gender has no significant impact on the academic achievement of underweight college students.

Sample

purposive sampling method has been followed to collect the data. Initially 450 sample were selected randomly. But after checking minute details related to BMI, 350 sample were rejected and the finally data have been collected from 200 college students, among which there were 50 underweight male students and 50 underweight female students.

At first measurements have been done in terms of height and weight of the second semester B.A. General students. After determining their BMI, only 50 undergraduate male and 50 underweight female students were taken for the study and other 350 sample were nullified. First semester university results along with class attendance of the selected 200 students were collected from the college authorities. Class attendance were taken to determine the regularity of class attendance.

Delimitation

The study is limited to the students of B.A. sem 2 only, who have appeared and received sem 1 examination. Since the full marks and score pattern is different in different streams, only B.A. General Arts students have been taken into consideration. The study has been done only with the students of colleges under the University of Calcutta.

Independent t test analysis on the impact of gender on the academic achievement of underweight students

	Gender	N	Mean	Std Deviation	Df	t
Academic achievement	Boys	50	209.30	44.78258	98	-.686
	Girls	50	215.20	41.08180		

N=number, df=degree of freedom, t=t calculated value

Calculated value of t=-.686

Critical value of t at 0.05 level=1.9845, at 0.01 level= 2.6269

Interpretation

Calculated value < critical value at 0.01 and 0.05 level. Therefore, null hypothesis is accepted at both levels. Therefore, gender has no significant impact on the academic achievement of underweight college students.

FINDINGS

It was found that gender had no significant impact on academic achievement of underweight undergraduate students. The mean score for underweight boys was 209.30 and SD 44.78258, whereas the mean score of achievement for girls was 215.20 and SD 41.08180. This showed that underweight girls deviate less from their mean score than the boys. Though the girls were more regular in class than the boys, all of them irrespective of their gender scored in the same manner in the examination. No significant impact related to gender was observed among the underweight students towards academic achievement.

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