



## ATTITUDE TOWARDS PHYSICAL EDUCATION BETWEEN UNDERWEIGHT AND NORMAL ADOLESCENTS

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### Abstract

The purpose of the present investigation was to examine the differences in attitude towards physical education between underweight and normal adolescents attending Government and Aided schools of Karnataka. Eight hundred Male and female students attending government and aided high schools in the state of Karnataka during 2021-22 were selected as subjects for the present study. Subjects from two educational regions of Karnataka i.e Bangalore and Mysore were included in the study. An attitudinal scale was specifically constructed for assessing the attitude of high school students towards physical activity and sports in particular and Physical Education in general. Body Mass Index was calculated using the Formula  $\text{Weight in Kilograms} / \text{Height in meters}^2$ . Height and weight were measured through standard procedure. Mean, Standard Deviation and 't' test for independent samples were used in the present investigation. Underweight Girls were significantly better in Attitude towards Physical Education scores as compared to Healthy Girls in Government schools. Underweight Girls were significantly better in Attitude towards Physical Education scores as compared to Healthy Girls in both type of schools wholly.

**Keywords:** Attitude, Physical education, Underweight, Healthy, Body Mass Index and Scale.

### Introduction

Physical Education has become one of the most inseparable part of Education system across the Globe. It has been proved in recent times that participation in physical activities and sports helps in achieving higher grades in exams, relieving stress and keeping in good health. Education System should enable Physical Education to play its rightful role in the development of the motor skills needed to enjoy participating in physical and sports activities, in promoting fitness maintenance and in encouraging a positive outlook towards active lifestyles (Allensworth, et. al., 1997).

It is well accepted that doing sport is associated with an improvement in health, well-being and quality of life. Recent epidemiological studies have demonstrated that

a large number of adolescents and youth tend to remain inactive and do not attain the recommended physical activities (Pate et al., 1995; U.S. Dept. of Health, 1996; Dishman et al., 2004; Ramos & Gonzalez, 2005). Physical inactivity has been associated with a wide range of chronic diseases including coronary heart disease, stroke, breast cancer, colorectal cancer and diabetes.

Rate of participation in physical and sports activities in girls in their free time starts to decline after the age of ten and, by about age 14, the number is reduced to half. From this age onwards, differences in aspects associated with physical activity and sports become progressively greater between boys and girls, as do changes in the perception boys and girls have of aspects concerning their fitness, health and lifestyle: compared to boys, girls feel that their overall health, regular exercise routine and level of fitness are significantly lower (Gonzalez, 2005).

Although school-based health and physical education is seen as a promising setting to encourage adolescents to begin and maintain a physically active lifestyle, historically it has come under severe scrutiny for its inability to provide meaningful learning experiences for students (Graham, 1990; Siedentop, 1987; Stroot, 1994).

Among many factors, children's attitudes are considered to be a key element influencing participation in physical activity (Subramaniam & Silverman, 2007). The formation of positive attitudes toward physical activity in physical education is essential given the decrease in physical activity among youth internationally (Silverman & Subramaniam, 2007). Investigating attitudes toward physical activity and perceptions about physical education classes are a good way to understand physical activity intentions as they can influence an individual's decision to begin or to continue participation in an activity (Martin, Oliver, & McCaughtry, 2007; Shen, Rinehart-Lee, McCaughtry, & Li, 2012). Student attitudes toward physical education and other physical activity contexts become increasingly negative as students become older (Silverman & Subramaniam,



2007). Positive attitudes formed toward physical activity in physical education may play an important role in maintaining an active lifestyle outside school (Silverman & Subramaniam, 2007), as individual psychosocial variables can prevent declines in physical activity among adolescence (Duncan, Duncan, Strycker, & Chaumeton, 2007).

Numerous social-psychologists have tried to define and explain attitudes, which is noteworthy and indispensable for psychology (Fazio & Olson, 2003; Kağıtçıbaşı, 2010). The attitude is a positive or negative assessment of an object (Zanna & Rempel, 1988). While it is generally thought that attitude has to be studied as a whole in terms of emotions, ideas, past experiences and behavioral intentions (Fazio & Olson, 2003; Zanna, 1990), recent studies revealed that the presence of an attitude does not require the simultaneous presence of all the aforementioned elements, causing attitudes to be dealt with as a kind of mental assessment (Kağıtçıbaşı, 2010).

### Methodology

All together 800 students were selected for the present study through purposive random sampling technique. Equal number of male and female students were selected in the present investigation. Male and female students attending government and aided high schools in the state of Karnataka during 2021-22 were selected as subjects for the present study. Subjects from two educational regions of Karnataka i.e Bangalore and Mysore were included in the study. An attitudinal scale was specifically constructed for assessing the attitude of high school students towards physical activity and sports in particular and Physical Education in general. Standard procedure was employed to develop the intended attitude scale. The methodology suggested by Likert and Edward was used in this study for scale construction and for ascertaining the response of the scale. The technique chosen to construct the attitude scale was of "scale Product Method" which combines the technique of Equal Appearing Interval Scale of Thurston for selection of the items and Likert's techniques of summated rating for ascertaining the responses on the scale. The selected subjects were tested in the class room setting after prior permission from the Head of the concerned institution. Body Mass Index was calculated using the Formula Weight in Kilograms divided by Height in meters<sup>2</sup>. Height and weight were measured through standard procedure. The leisure time of selected subjects was made known and

the researcher himself approached all the subjects at their schools personally. Prior to the collection of data, the researcher oriented the subjects on the objectives of the study and sought honest responses. Suitable statistical techniques were employed by the researcher in order to test the duly formulated hypotheses. Mean, Standard Deviation and 't' test for independent samples were used in the present investigation.

### Findings

Mean and standard deviation were calculated for Attitude towards Physical Education for Underweight and Normal category High school boys and girls of Government schools. In male section, 132 were Underweight and 68 were Healthy. In female section, 144 were Underweight and 56 were Healthy. The results are given in table 1.

TABLE 1.  
DESCRIPTIVE RESULTS OF ATTITUDE TOWARDS PHYSICAL EDUCATION IN UNDERWEIGHT AND NORMAL CATEGORY HIGH SCHOOL BOYS AND GIRLS OF GOVERNMENT SCHOOLS

Groups	Male		Female	
	Mean	Std. Deviation	Mean	Std. Deviation
Underweight	147.42	6.10	140.19	11.29
Healthy	147.81	6.75	132.52	14.90

The differences in attitude towards physical education between Government high school boys and girls in Underweight and Healthy category was examined through 't' test for independent variables. The results are provided in table 2.

TABLE 2.  
COMPARISON OF ATTITUDE TOWARDS PHYSICAL EDUCATION BETWEEN UNDERWEIGHT AND NORMAL CATEGORY GOVERNMENT HIGH SCHOOL BOYS AND GIRLS

Groups	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Boys	0.415	198	.678	0.39216	0.94458
Girls	3.931	198	.000	7.67659	1.95263

From table 2 it is evident that there is no significant difference in Attitude towards physical education between Underweight and Normal Category Government school boys. The obtained 't' value -.415 is lower than the tabulated 't' value 1.962 required at .05 levels of significance.

Table 2 further makes it clear that there is significant difference in Attitude towards physical education between Underweight and Normal Category Government school girls under investigation. The obtained 't' value 3.931 is higher than the tabulated 't'



value 1.962 required at .05 levels of significance. Underweight Girls ( $140.19 \pm 11.29$ ) were significantly better in Attitude towards Physical Education scores as compared to Healthy Girls ( $132.52 \pm 14.90$ ) in Government schools.

Mean and standard deviation were calculated for Attitude towards Physical Education for Underweight and Normal category High school boys and girls of Aided schools. In male section 122 were Underweight and 78 were Healthy. In female section 153 were Underweight and 47 were Healthy. The results are given in table 3.

TABLE 3  
DESCRIPTIVE RESULTS OF ATTITUDE TOWARDS PHYSICAL EDUCATION IN UNDERWEIGHT AND NORMAL CATEGORY HIGH SCHOOL BOYS AND GIRLS OF AIDED SCHOOLS

Groups	Male		Female	
	Mean	Std. Deviation	Mean	Std. Deviation
Underweight	147.20	6.14	142.67	8.72
Healthy	148.19	6.50	142.26	10.24

The differences in attitude towards physical education between Aided high school boys and girls in Underweight and Healthy category was examined through 't' test for independent variables. The results are provided in table 4.

TABLE 4  
COMPARISON OF ATTITUDE TOWARDS PHYSICAL EDUCATION BETWEEN UNDERWEIGHT AND NORMAL CATEGORY AIDED HIGH SCHOOL BOYS AND GIRLS

Groups	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Boys	1.056	198	.292	0.98663	0.93472
Girls	0.275	198	.783	0.41788	1.51744

From table 4 it is evident that there is no significant difference in Attitude towards physical education between Underweight and Normal Category Aided school boys. The obtained 't' value -1.056 is lower than the tabulated 't' value 1.962 required at .05 levels of significance.

Table 4 further makes it clear that there is no significant difference in Attitude towards physical education between Underweight and Normal Category Aided school girls under investigation. The obtained 't' value .275 is lower than the tabulated 't' value 1.962 required at .05 levels of significance.

Mean and standard deviation were calculated for Attitude towards Physical Education for High school boys and girls in Underweight and Normal Category of Government as well as Aided schools. In male section

254 were Underweight and 146 were Healthy. In female section 297 were Underweight and 103 were Healthy. The results are given in table 5.

TABLE 5  
DESCRIPTIVE RESULTS OF ATTITUDE TOWARDS PHYSICAL EDUCATION IN UNDERWEIGHT AND NORMAL CATEGORY HIGH SCHOOL BOYS AND GIRLS OF GOVERNMENT AND AIDED SCHOOLS

Groups	Male		Female	
	Mean	Std. Deviation	Mean	Std. Deviation
Underweight	147.31	6.11	141.47	10.11
Healthy	148.00	6.60	136.96	13.81

The differences in attitude towards physical education between Underweight and Normal Category Government as well as Aided high school boys and girls were examined through 't' test for independent variables. The results are provided in table 6.

TABLE 6  
COMPARISON OF ATTITUDE TOWARDS PHYSICAL EDUCATION BETWEEN UNDERWEIGHT AND NORMAL HIGH SCHOOL BOYS AND GIRLS

Groups	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Boys	1.040	398	.299	0.68939	0.66294
Girls	3.529	398	.000	4.51022	1.27795

From table 6 it is evident that there is no significant difference in Attitude towards physical education between underweight and normal high school students. The obtained 't' value -1.040 is lower than the tabulated 't' value 1.962 required at .05 levels of significance. Further, there was significant difference in Attitude towards Physical Education between Underweight and Healthy High School girls of both type of schools totally. Underweight Girls ( $148 \pm 6.60$ ) were significantly better in Attitude towards Physical Education scores as compared to Healthy Girls ( $147.31 \pm 6.11$ ).

## Discussion

DeForche, De Bourdeaudhuij & Tanghe (2006) investigated differences in physical activity and attitude toward physical activity in adolescents with different degrees of overweight and explore whether the prediction of physical activity by attitude is moderated by level of overweight. The study demonstrated that overweight and obese adolescents show lower sport participation and have a less positive attitude toward physical activity. Colquitt, et. al., (2012) explored student attitudes toward physical education among students in Georgia (US) which implemented a policy requiring statewide fitness testing. Student attitudes toward



physical education can serve as a mediating factor for health-related fitness. The effects of parental attitudes on physical education course attitudes were examined by Erbas, Guclu & Zorba (2013) on a group of the adolescents. As a result, it was seen that adolescents display positive attitudes towards the physical education course, that they do not differ in terms of gender.

### Conclusion

There was 'No' significant difference in Attitude towards Physical Education between Under-weight and Healthy High School boys of Government, Aided and both type of schools.

There was significant difference in Attitude towards Physical Education between Under-weight and Healthy High School Students in Female section of Government schools. Under-weight Girls were significantly better in Attitude towards Physical Education scores as compared to Healthy Girls in Government schools.

There was 'No' significant difference in Attitude towards Physical Education between Under-weight and Healthy High School Students in Female section of Aided schools.

There was significant difference in Attitude towards Physical Education between Under-weight and Healthy High School Students in Female section of both type of schools totally. Under-weight Girls were significantly better in Attitude towards Physical Education scores as compared to Healthy Girls in both type of schools wholly.

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