



MORPHOLOGICAL STATUS OF ADOLESCENT STUDENTS OF SCHOOLS WITH OR WITHOUT SPORTS INFRASTRUCTURE

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Abstract

Physical activity is an excellent medium for the children to stay healthy. The present study was aimed to investigate the selected morphological differences among adolescent students of schools with and without infrastructure facilities. Two hundred male adolescence students were selected through purposive random sampling technique from Ferozpur district (Punjab) India. Descriptive design was applied in which the subjects were divided into two groups. All those subjects who were studying in the schools those who have sports infrastructure were taken in group A and those who do not have sports infrastructure were taken in group B. Findings of the study showed significant difference among the variables i.e. Height, Weight, BMI and Body Surface. No significant difference was observed on height.

Keywords: Morphological, Adolescent, Students and Sports Infrastructure.

Introduction

Health is a multidimensional concept because it is shaped by biological, social economic and cultural factors. Health is not merely the absence of disease but is influenced and shaped by the access to basic needs like food security, safe water supply, sanitation and health services. Within this broader definition of health, individual health is intrinsically interrelated with social factors. Therefore while

individual health is important it is necessary to delineate its linkages with the physical social and economic environment in which people live. Children's health is an important concern for all societies since it contributes to their overall development. Health nutrition and education are important for the overall development of the child and these three inputs need to be addressed in a comprehensive manner. While the relationship between health and education is seen more in terms of the role that the latter plays in creating health awareness and health status improvements which is not adequately represented in the debates is the reciprocal relationship between health and education especially when it comes to children. The concerns related to health nutrition and other inputs that contribute to the overall development of the child therefore needs to be part of the curriculum on health and physical education at the primary secondary and senior secondary schools.

Objective

To examine the difference between the variable body mass index of adolescent subjects studying in the schools with or without sports infrastructure.

To state the difference between the variable body surface area of adolescent subjects studying in the schools with or without sports infrastructure.



Methodology

Two hundred students were taken as sample for the present study. Hundred students were from those schools that have sports infrastructure and hundred were from those schools that do not have sports infrastructure. Name of Group A and Group B were given to these schools. In group A those schools were involved who have sports infrastructure and where as in Group B those school were involved who do not have sports infrastructure. The subjects were selected from different public schools of District Ferozpur (Punjab) only. The investigator used purposive random sampling technique for the selection of sample.

Test items

- Weight
- Standing Height
- Body Mass Index
- Body surface

Statistical Technique

t-test was to find out difference between selected morphological status of adolescent students of schools with or without sports infrastructure.

Results

TABLE NO 1.1
SIGNIFICANT DIFFERENCE IN MEAN SCORE OF GROUP A AND GROUP B ON THE VARIABLE BMI.

Group	Mean	SD	df	t-value	P-value
Group A	19.38	2.40	198	2.91**	P <.05
Group B	18.66	2.39			

**Significant at 0.01 level

Table and figure 1.1 reveals that the mean score of group A and group B was found to be

19.38 and 18.66 respectively, whereas standard deviation was 2.40 of A group and 2.39 of B group. The t- value 2.91 was found to be statistically significant at 0.05 level of significance. The result indicates that students with sports infrastructure facilities have a healthy body mass index as compared to those who are without sports infrastructure facilities.

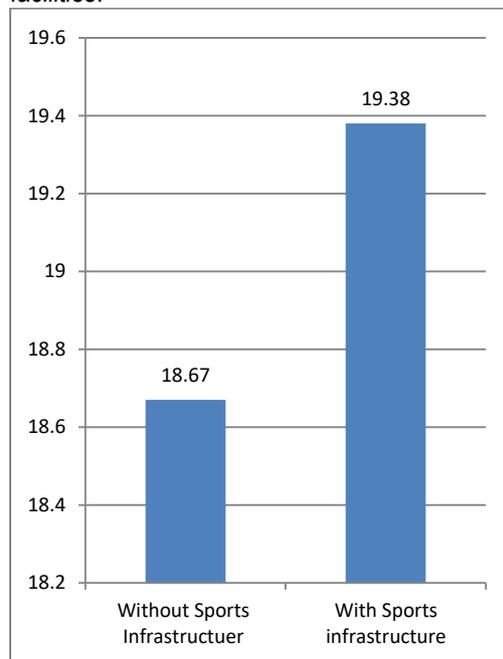


Figure1.1: Show the Comparison of BMI between with and Without Sports Infrastructure male Adolesences students.

TABLE NO 1.2
SIGNIFICANT DIFFERENCE IN MEAN SCORE OF GROUP A AND GROUP B ON THE VARIABLE BODY SURFACE AREA.

Group	Mean	SD	df	t-value	P-value
Group A	1.62	0.14	198	3.29**	P <.05
Group B	1.57	0.15			

**Significant at 0.01 level



Table and figure 1.2 reveals that the mean score of group A and group B was found to be 1.62 and 1.57 respectively whereas standard deviation was 0.14 of A group and 0.15 of B group. The t- value 3.29 was found to be statistically significant at 0.05 level of significance. The result was indicates that the subjects of Group A found better in comparison to Group B on the variable body surface area.

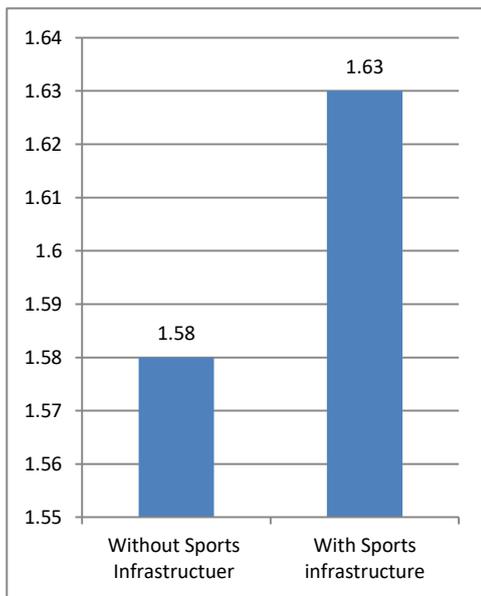


Figure 1.2: Show the Comparison of Body Surface between with and Without Sports Infrastructuer male Adolescences students.

Conclusion

Significant difference was analyzed between the Group A and Group B on the variable Body Mass Index. Group A subjects were found better on this component.

Significant difference was evaluated between the Group A and Group B on the variable Body

surface Area. Group A subjects were found better on this component.

Reference:

- Arroyave, G. (1974). Effect of exercise and physical fitness on serumlipid and lipoproteins. *Journal of the European Atherosclerosis Society* 20(1),1-9.
- Donn, M. (2003). Effect of Erythropoietin on Exercise Capacity in students with Moderate to Severe Chronic Heart Failure. ©2003 American Heart Association, Inc.
- Dunn, (2010). The Effect of Exercise on Mental Health. *Current Sports Medicine*, 9(4), 202-207.
- Eszter, V. (2010). Bone, fat and muscle gain in pubertal girl-effect of physical activity. *Journal of Bone and Mineral Research* ,39(1),371-376.
- Goran, Ml. (1999). Role of physical activity in the prevention of obesity in children. *International Journal of Obesity*, 3(12), 815-823.
- James, O. (2006). Role of physical activity in preventing and treating obesity. *Journal of applied physiology*, 29(8), 894-902.