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PHYSICAL EDUCATION

ASSESSMENT OF HEALTH RELATED PHYSICAL FITNESS COMPONENTS AMONG UNDERGRADUATE COLLEGE BOYS AND GIRLS

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ABSTRACT

100 boys and 100 girls were randomly selected from four colleges in Kerala. The age groups of the subjects were between 18-25 years with standard deviation ± 2.15. The colleges were located at various places at university of Kerala. Taking in to the consideration the importance, feasibility, criteria, availability of instruments and the relevance of the variable of the present study, dependent variables such as flexibility, muscular strength and endurance, cardio respiratory endurance and body composition were collected by administering AAPHERD Youth Fitness test. The collected data were statistically analysed using 't' test to compare selected groups. In all cases 0.05 level was fixed to test the hypothesis of this study.

Keywords: Health Related Physical Fitness, Boys, Girls.

INTRODUCTION

Physical education can be a major contributing factor in the development of an individual in all aspects of life: physical, emotional, mental and social. The primary aims of physical education vary historically, based on the needs of the time and place. Often, many different types of physical education occur simultaneously, some intentionally and others not. Most modern school systems claim their intent is to equip students with the knowledge, skills, capacities, and values along with the enthusiasm to maintain a healthy lifestyle into adulthood. Some schools also require physical education as a way to promote weight loss in students. Physical fitness is a universally accepted and realised terminology. Physical fitness is a capacity to meet the present and potential physical challenges of life with success. The present concept of physical fitness is not only freedom from disease, but also to gain enough strength, agility, flexibility, endurance and skills to meet the demands of daily life and to build sufficient reserve energy to withstand stress and strain. Physical activity is an important enhancer of academic achievements.

Health and physical fitness have a vital role in the life of men from time immemorial. The progress of the Nation lies in the hands of the people, who are healthy and physically fit. Every individual should develop physical fitness for a happy and effective living. In order to get physical fitness one has to involve in physical activities. Physical activity is essential for the development of wholesome personality of a child which would depend upon the opportunities provided for wholesome development of the mental, physical, social and spiritual aspects. Hence a well organized and properly administered physical education programme for school children is very essential. According to current thinking in the physical education profession, physical fitness is either health related or performance related. In keeping with wellness trend today and an emphasis on all aspects of healthful living in addition to stressing performance or motor skill related to fitness. This aspect of physical fitness concerns the development of qualities necessary to function efficiently and maintain a healthy life style. Each of the components of health related fitness cardio respiratory endurance, muscular strength and endurance, flexibility and body composition

METHOD USED IN THE PRESENT STUDY

The present study was confined to the undergraduate boys and girls from different colleges in Kerala. For this research 100 boys and 100 girls were randomly selected from four professional colleges in Kerala and 100 boys and 100 girls were randomly selected from four non professional colleges. The age group of the subjects were between 18-25 years with standard deviation ± 2.15. The colleges were located at various places at university of Kerala.

RESULTS OF THE STUDY

TABLE I
MEAN, MEAN DIFFERENCE, STANDARD DEVIATION AND OBTAINED'T' RATIO ON FLEXIBILITY BETWEEN UNDERGRADUATE BOYS AND GIRLS

Groups	N	Means	MD	SD	SDM	Obtained 't'
Boys	200	35.15	-3.33	4.41	0.45	7.34*
Girls	200	38.48		4.67		

* Significant at 0.05 level
't' Value Required at (0.05)(1,199) = 1.65

Flexibility mean of boys was 35.15 with standard deviation ± 4.41 and girls was 38.48 with standard deviation ± 4.67 and the mean difference was -3.33. The obtained 't' value of -7.34 was significant at 0.05 as the obtained 't' value was greater than the required 't' value of 1.65 to be significant at 0.05 level. Comparison proved that there was significant difference between boys and girls on health related physical fitness variable Flexibility.

TABLE II
MEAN, MEAN DIFFERENCE, STANDARD DEVIATION AND OBTAINED 'T' RATIO ON MUSCULAR STRENGTH AND ENDURANCE BETWEEN UNDERGRADUATE BOYS AND GIRLS

Groups	N	Means	MD	SD	SDM	Obtained 't'
Boys	200	41.53	9.93	4.96	0.54	18.44*
Girls	200	31.60		5.78		

* Significant at 0.05 level
't' Value Required at (0.05)(1,199) = 1.65

Muscular Strength and Endurance mean of boys was 41.53 with standard deviation ± 4.96 and girls was 31.60 with standard deviation ± 5.78 and the mean difference was 9.93. The obtained 't' value of 18.44 was significant at 0.05 as the obtained 't' value was greater than the required 't' value of 1.65 to be significant at 0.05 level. Comparison proved that there was significant difference between boys and girls on health related physical fitness variable Muscular Strength and Endurance.

TABLE III
MEAN, MEAN DIFFERENCE, STANDARD DEVIATION AND OBTAINED 'T' RATIO ON CARDIORESPIRATORY ENDURANCE BETWEEN UNDERGRADUATE BOYS AND GIRLS

Groups	N	Means	MD	SD	SDM	Obtained 't'
Boys	200	2166.03	256.18	294.84	29.75	8.61*
Girls	200	1909.85		300.08		

* Significant at 0.05 level 't' Value Required at (0.05)(1,199) = 1.65

Cardiorespiratory Endurance mean of boys was 2166.03 with standard deviation ± 294.84 and girls was 1909.85 with standard deviation ± 300.08 and the mean difference was 256.18. The obtained 't' value of 8.61 was significant at 0.05 as the obtained 't' value was greater than the required 't' value of 1.65 to be significant at 0.05 level. Comparison proved that there was significant difference between boys and girls on health related physical fitness variable Cardiorespiratory Endurance.

TABLE IV
MEAN, MEAN DIFFERENCE, STANDARD DEVIATION AND OBTAINED 'T' RATIO ON PERCENT BODY FAT BETWEEN UNDERGRADUATE BOYS AND GIRLS

Groups	N	Means	MD	SD	SDM	Obtained 't'
Boys	200	14.07	9.04	2.48	0.26	34.42*
Girls	200	23.10		2.77		

* Significant at 0.05 level
't' Value Required at (0.05)(1,199) = 1.65

Percent Body Fat mean of boys was 14.07 with standard deviation ± 2.48 and girls was 23.10 with standard deviation ± 2.77 and the mean difference was -9.04. The obtained 't' value of -34.42 was significant at 0.05 as the obtained 't' value was greater than the required 't' value of 1.65 to be significant at 0.05 level. Comparison proved that there was significant difference between boys and girls on health related physical fitness variable Percent Body Fat.

CONCLUSION

Health related Physical Fitness of boys and girls showed significant difference in all the components like Flexibility, Muscular Strength and Endurance, Cardiorespiratory Endurance, Body Composition. In all the cases obtained't' value was greater than the required't' value of 1.65 to be significant at 0.05 level.

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