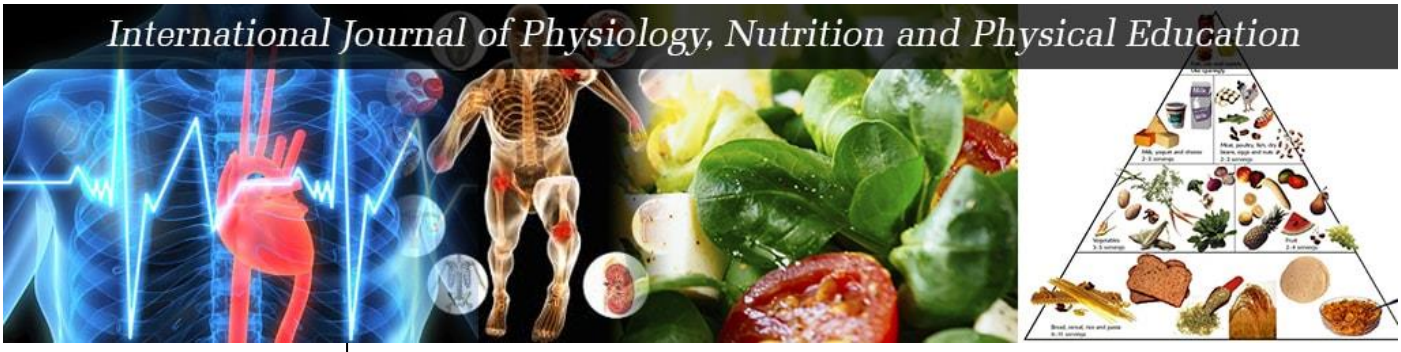

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A diagnostic study of cardiovascular fitness between rural and urban college girls of physical education classes

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Abstract
The purpose of present study was to find out the significant difference between cardiovascular fitness of the rural and urban college girls who opted physical education as an elective subject. 200 college level female girls of four colleges from Kurukshetra University, Kurukshetra two colleges of Rural Area and two colleges of Urban Areas were selected as the subjects for study. The age of subjects ranged from 17 to 25 year. Cardiovascular fitness were measured with the help of twelve minute run and walk test constructed by Cooper in 1968. After the collection of relevant data, it was processed and analyzed with descriptive statistics. The study conducted on the cardiovascular fitness of rural and urban college girls provided valuable information about the relative health of rural and urban girls as it disproved the widely held nation that rural girls are in general fitter than their urban counterpart. The study showed that urban girls have on the average higher endurance levels than rural girls.

Keywords: diagnostic, cardiovascular, urban college, physical education classes

Introduction
Physical fitness is essential for every sphere of human life. In the field of physical education and sports, Physical fitness is key point or considered as axis around which all physical education and sports programme revolve. Physical fitness consist of five major components, speed, strength, flexibility, agility and endurance. Endurance plays a major role in every outdoor activity. To measure endurance the different test were adopted from time to time by eminent physical educationist and sports scientists. Cardiovascular test have generally been considered useful in the field of physical education and sports for the purpose of evaluating physical fitness of the participants. Muscular efficiency is known to be modified by circulation, nutrition and fatigue, likewise, it has been established that the normal cardiovascular system gradually adjusts itself to increased amounts of strenuous muscular activity. The world's greatest thinkers have stressed upon the importance of physical fitness in living beings to ensure a productive and a meaningful life. The Greek philosopher Aristotle states, "The body is the temple of the soul, and to reach harmony of body, mind and spirit, the body must be physically fit." Fitness of man has always been a concern of mankind. Physical fitness from prehistoric times to the present day has been equated with survival and power. The earnest human being were dependent mainly upon their individual strength, vigor and vitality for survival. Cardiovascular fitness come under health related physical fitness.
The cardiovascular fitness deals with physiological aspects of fitness and is particularly related with the fitness of heart and circulatory system and its adjustments to stress conditions. Cardiovascular fitness is defined as the ability to perform large muscle or vital activities continuously for a sustained period. A number of factors contribute to efficient cardiovascular functioning, including the ability of the heart to pump blood, the ability of the veins and arteries to carry blood, the ability of the muscles to utilize the oxygen delivered by the blood.

Methodology and procedure
Objective of the study was to find out the significant difference between cardiovascular fitness of the rural and urban college girls who opted physical education as an elective subject.

200 college level female girls of four colleges from Kurukshetra University, Kurukshetra two colleges of Rural Area and two colleges of Urban Areas were selected as the subjects for study. The age of subjects ranged from 17 to 25 year. Cardiovascular fitness were measured with the help of twelve minute run and walk test constructed by Cooper in 1968.

To determine the significance between the means of rural and urban college of rural and urban college girls students of physical education classes on cardiovascular fitness t-test was employed and the level of significance was set at 0.05 level.

Statistical analysis

After the collection of relevant data, it was processed and analyzed with descriptive statistics.

Table 1: Significance of difference between the rural and unban girls students

Groups	N	Mean	S.D.	M.D.	S.E.	T
Rural	100	1434	94.02	0.263	12.78	2.057*
Urban	100	1460	86.66			

* Significance at 0.05 level of confidence i.e. (N_1+N_2-2)= 1.96.

The above table indicates that there is a significant differences in the means of cardio-vascular fitness, between rural college girl students (1434) and urban college girl students (1460), as the calculated t-value 2.057 is greater than tabulated t-value (1.96) at 0.05 level of confidence.

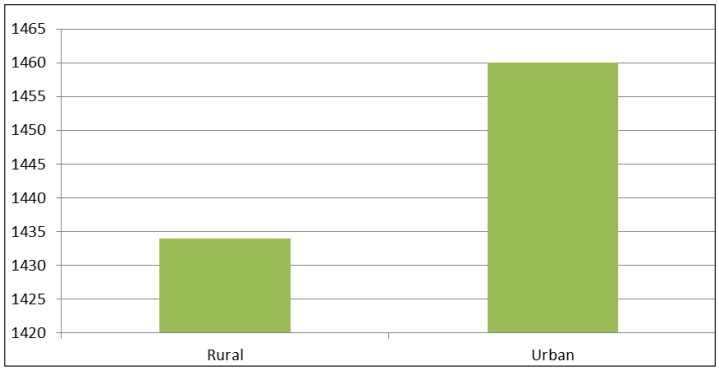

Fig 1: Comparison of mean of cardiovascular fitness

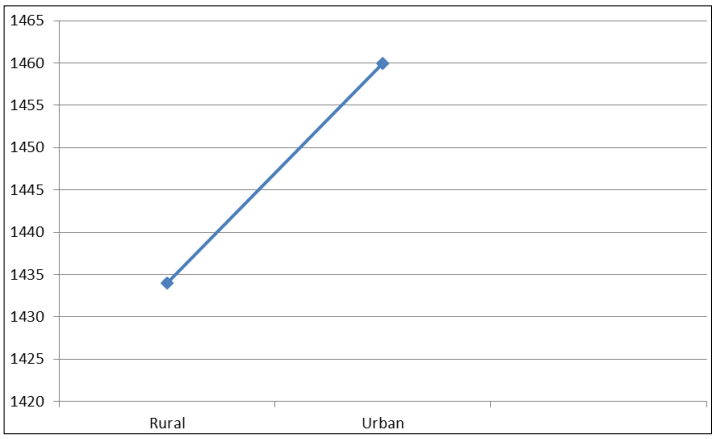

Fig 2: Comparison of mean of cardiovascular fitness

Discussion of findings

The results of above mentioned table revealed that cardiovascular fitness of urban college girls was greater than the rural college girls because they cover maximum distance in 12 minutes. The reason for these findings may be attributed to the fact that the urban college girls have better playing facility and were more exposed to physical activity than rural college girls. The urban college girls were more health conscious and regular in their daily exercise programme in comparison to rural college girls.

Conclusions

The study conducted on the cardiovascular fitness of rural and urban college girls provided valuable information about the relative health of rural and urban girls as it disproved the widely held nation that rural girls are in general fitter than their urban counterpart. The study showed that urban girls have on the average higher endurance levels than rural girls.

References

1. Arthur Keller I Jr. An attempt to determine, through the use of the Mccloy Cardiovascular Test, The Present Health Of Students, Recovering From Illness, Thesis, State University Of Lowa, 1932.
2. Christle Samuel G, Saccone Peter P. An Evaluation of the Fitness, Academic, and Self Esteem Training Program at Meridian Schoo, 1982.
3. Darwin Hindman A. Homographs for Interpolating Scores on the Schneider Test, Resh. Q, 1930.
4. Barach JH. The Energy Index. Journal of the Medical Association. 1914.
5. Milner Evgeny G, Volkov Vladmir M. Man and Running. Russia's Best-Selling Book on Exercise, Health, and Medicine. A Worldwide Literature Search, 1983.