



RESEARCH ARTICLE

A COMPARATIVE STUDY OF PHYSICAL ACTIVITY INDEX BETWEEN INDIAN AND FOREIGN MALE STUDENTS OF DELHI STATE

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ABSTRACT

The purpose of the study was to compare the physical activity index between Indian and Foreign male students of Delhi State. To achieve the objective of the study, two hundred (N=200) Indian male students and two hundred (N=200) Foreign male students between 17 to 25 years were selected conveniently and purposely from the regular students of different Universities and colleges of Delhi State as subjects. Physical activity index Questionnaire (*B. Mayfield, Personal Nutritional Department, 2006*) was used to assess physical activity index of students. To determine the significant difference between the mean scores of Indian and Foreign male students on physical activity index, 't' test was employed with the help of SPSS software. The level of significance was set at 0.05. Results of the study revealed that there was no significant difference found on physical activity index between Indian male and foreign male students of Delhi state.

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INTRODUCTION

Physical inactivity, a leading cause of death globally, was responsible for 9% of premature mortality resulting in more than 5.3 million deaths (Lee et al., 2012). Several studies estimated the prevalence of physical activity (PA) among the general population at multiple sites in India has ranged 7.3-93.2% (Swaminahan et al., 2011). Six out of every ten deaths in the world are due to non communicable conditions; three to communicable, reproductive or nutritional condition, and one to injuries (WHO, 2009). Unhealthy lifestyles-Three modifiable lifestyle behaviours- smoking, unhealthy diet, and physical inactivity have been associated with the development of chronic diseases, specifically heart disease, cancer, stroke, and diabetes (Centers of Disease Control and Prevention, 2004) result in chronic diseases such as high cholesterol, osteoporosis, chronic heart disease, hypertension, colon cancer, and psycho social health problems(National Health Committee, 1998). There are many benefits of physical activity for the Individual to protect themselves from acute diseases and improve general health conditions (USDHHS 1998). Epidemiologic research has demonstrated protective effects of varying strength between physical activity and risk for several chronic diseases, including coronary heart disease.

Hypertension, non-insulin-dependent diabetes mellitus, osteoporosis, colon cancer, and anxiety and depression (Physical Activity and Public Health, 1995). Despite the many benefits of an active lifestyle, levels of physical activity have declined in recent years and remain low for all populations of the world. In the summer of 1996, the U.S. Surgeon General published Physical Activity and Health report. Here is a summary of its findings:

- People of all ages benefit from regular physical activity
- People can obtain significant health benefits by including a moderate amount of physical activity on most, if not all, days of the week. Through a modest increase in daily activity, most Americans can improve their health and quality of life.
- Additional health benefits can be gained through greater amounts of physical activity People who can maintain a regular regimen of more vigorous or longer-duration activity are likely to obtain even greater benefits.

Exercise refers to a subset of physical activity—planned, structured, repetitive movement of the body designed specifically to improve or maintain physical fitness. Physical fitness is a set of physical attributes that allows the body to respond or adapt to the demands and stress of physical effort—to perform moderate-to-vigorous levels of physical activity without becoming overly tired.

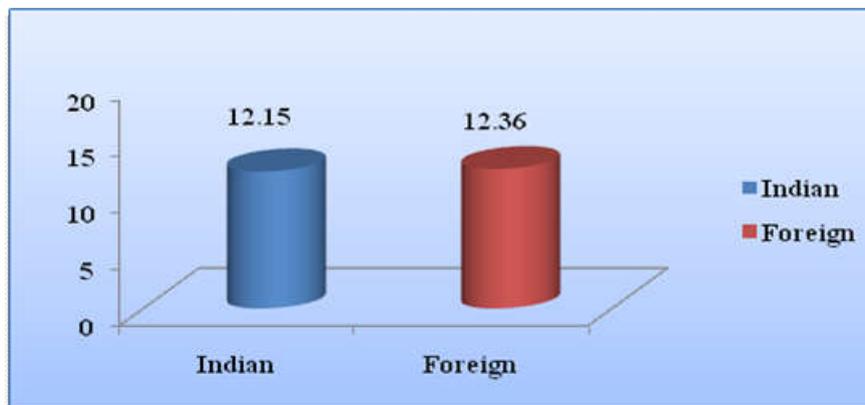
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**Table 1. Comparison of scores on physical activity index between Indian and foreign male students of Delhi state**

Variable	Group	N	Mean	SD	SEM	MD	SED	t-value
Physical Activity Index	Indian Male	200	12.15	14.79	1.04	.21	1.42	.148
	Foreign Male	200	12.36	13.62	.96			

\*Significant at .05 level

$t'_{.05(398)} = 1.96$

**Figure 1. Mean scores of Indian and foreign male students of Delhi state on physical activity index**

Levels of fitness depend on such physiological factors as the heart's ability to pump blood and the size of muscle fibers. To develop fitness, a person must perform enough physical activity to stress the body and cause long-term physiological changes. Only exercise will significantly improve fitness. Knowing this is important for setting goals and developing a program.

## MATERIALS AND METHODS

To achieve the objective of the study, two hundred (N=200) Indian male students and two hundred (N=200) Foreign male students were selected conveniently and purposely from the regular students of different Universities and Colleges of Delhi State as subjects. The age of the subjects ranged between 17 to 25 years. Physical activity index Questionnaire (B. Mayfield, *Personal Nutrition Department USA, 2006*) was used to measure physical activity index of students. In order to examine the hypothesis of the present study Mean, SD and Independent sample 't' test was applied to compare the mean scores of Indian and Foreign male students on Physical Activity Index. The level of significance was set at 0.05.

## RESULTS AND DISCUSSION

Comparison of scores on Physical Activity Index between Indian and Foreign male students of Delhi State is presented in Table 1. It is observed from table-1 that Indian male had mean score of 12.15 with S.D=14.79 and S.E.M=1.04. Foreign male had mean 12.36 with S.D=13.62 and S.E.M .96. Mean difference and S.E.D were .21 and 1.42 respectively. t'-value was not found to be statistically significant as the value obtained was .148 whereas; the tabulated value was 1.96 with 398 degree of freedom at .05 level of significance. Mean scores of Indian and Foreign male students of Delhi State on Physical Activity Index is depicted graphically in Fig.1. The finding of the study showed that there was no significant difference between Indian male students and foreign male students of different Universities and Colleges of Delhi State

on physical activity index. Foreign female students have shown higher mean value than Indian male students.

## CONCLUSIONS

In the light of findings and limitations of present study the following conclusions were drawn. There was no significant difference between Indian male students and foreign male students of different Universities and Colleges of Delhi State on physical activity index. Foreign male students were found higher mean value as compare to Indian male students, but both categories found in sedentary lifestyle.

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