
Barriers for Physical Activity between Indian and Foreign Male Students of Delhi State

Dr. Thingnam Nandalal Singh¹,

Associate Professor,

Department of Physical Education,

Panjab University, Chandigarh

Dr. Naveen Kumar²

Physical Education Teacher,

RPVV Civil Lines, Department of Education, NCT of Delhi

ABSTRACT

The purpose of the study was to compare the barriers for physical activity 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. 'Barriers to Being Active Quiz (BBAQ-21)' constructed by United States Development of Health and Human Service (USDHHS, 1999) was used to assess barriers for physical activity of students. To determine the significant difference between the mean scores of Indian and Foreign male students on physical activity barriers '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 were significant differences found on barriers for physical activity between Indian female and foreign male students of Delhi state except fear of energy. However, foreign male students faced less barrier of physical activity on all aspects than Indian male students. The study was also indicated that students did not have any perfect obstacles for involving in physical activity on mean basis.

Keywords: Physical Activity Barriers, Indian Student, Foreign Student and Delhi State

INTRODUCTION

Fitness is a reversible adaptation. The body adjusts to lower levels of physical activity the same way it adjusts to higher levels. This is the principle of reversibility. When a person stops exercising, up to 50% of fitness improvements are lost within 2 months. However, not all fitness levels reverse at the same rate. Strength fitness is very resilient, so a person can maintain strength fitness by doing resistive exercise as infrequently as once a week. On the other hand, cardiovascular and cellular fitness reverse themselves more quickly - sometimes within just a few days or weeks. Thus, if a training schedule must be curtailed temporarily, fitness improvements are best maintained if exercise intensity is kept constant and frequency and/or duration is reduced (American College of Sports Medicine, 2001).

Suggestions for Overcoming Physical Activity Barriers:

Lack of time: Identify available time slots. Monitor your daily activities for a week. Identify at least three 30 minute time slots you could use for physical activity. Add physical activity to your daily routine. For example, walk or ride your bike to work or shopping, organize social activities around physical activity, walk the jog, exercise while you watch TV, park farther from your destination, etc. Make time for physical activity. For example, walk, jog. Take fitness breaks instead of coffee breaks. *Social Influence:* Explain your interest in physical activity to friends and family. Ask them to support your efforts. Invite friends and family members to exercise with you. Develop new friendship with physically active people. Join a group, such as the YMCA or a hiking club. *Lack of Energy:* Schedule physical activity for times in the day or week when you feel energetic. Convince yourself that if you give it a chance, exercise will increase your energy level; then, try it. *Lack of Willpower:* Plan ahead. Make physical activity a regular part of your daily or weekly schedule and write it on your calendar. Invite a friend to exercise with you on a regular basis. Join an exercise group or class. *Fear of Injury :* Learn how to warm up and cool down to prevent injury Learn how to exercise appropriately considering your age, fitness level, skill level, and health status. Choose activities involving minimal risk. *Lack of Skill:* Select activities requiring no new skills, such as walking, climbing stairs, or jogging. Exercise with friends who are at the same skill level as you are. Find a friend who is willing to teach you some new skills. Take a class to develop new skills. *Lack of Resources:* select activities require minimal facilities or equipment, such as walking, jogging, jumping rope, or calisthenics. Identify inexpensive and convenient resources available in your community (USDHHS, 1999).

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. "Barriers to Being Active Quiz (BBAQ-21)" constructed

by United States Development of Health and Human Service (USDHHS, 1999) was used to measure physical activity barriers 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 barriers. The level of significance was set at 0.05.

RESULTS AND DISCUSSION

Comparison of scores on Physical Activity Barrier (Lack of Time) between Indian and Foreign male students of Delhi State is presented in Table 1.

TABLE-1
COMPARISON OF SCORES ON LACK OF TIME BETWEEN INDIAN AND FOREIGN MALE STUDENTS OF DELHI STATE

Variable	Group	N	Mean	SD	SEM	MD	SED	t-value
Lack of Time	Indian Male	200	4.65	1.98	.14	.73	.18	3.88*
	Foreign Male	200	3.92	1.77	.12			

**Significant at .05 level*

t'.05 (398) = 1.96

It is evident from table-1 that Indian male had mean score of 4.65 with S.D=1.98 and S.E.M=.14. Foreign male had mean 3.92 with S.D=1.77 and S.E.M .12. Mean difference and S.E.D were .73 and .18 respectively. t-value was found to be statistically significant as the value obtained was 3.88 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 Barrier of Physical Activity (Lack of Time) is depicted graphically in figure-1.

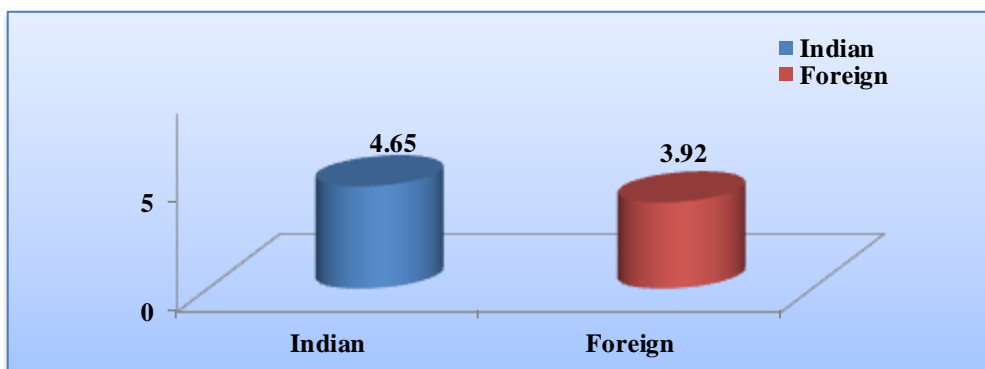


FIGURE-1

Mean Scores of Indian and Foreign Male Students of Delhi State on Barriers of Physical Activity (Lack of Time)

Comparison of scores on Physical Activity Barrier (Social Influence) between Indian and Foreign

male students of Delhi State is presented in Table 2.

Table-2

COMPARISON OF SCORES ON SOCIAL INFLUENCE BETWEEN INDIAN AND FOREIGN MALE STUDENTS OF DELHI STATE

Variable	Group	N	Mean	SD	SEM	MD	SED	t-value
Social Influence	Indian Male	200	4.07	1.72	.12	.41	.16	2.48*
	Foreign Male	200	3.66	1.61	.11			

**Significant at .05 level*

$$t_{.05} (398) = 1.96$$

It is observed from table-2 that Indian male had mean score of 4.07 with S.D=1.72 and S.E.M=.12. Foreign male had mean 3.66 with S.D=1.61 and S.E.M .11. Mean difference and S.E.D were .41 and .16 respectively. t-value was found to be statistically significant as the value obtained was 2.48 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 Barrier of Physical Activity (Social Influence) is depicted graphically in fig.2.

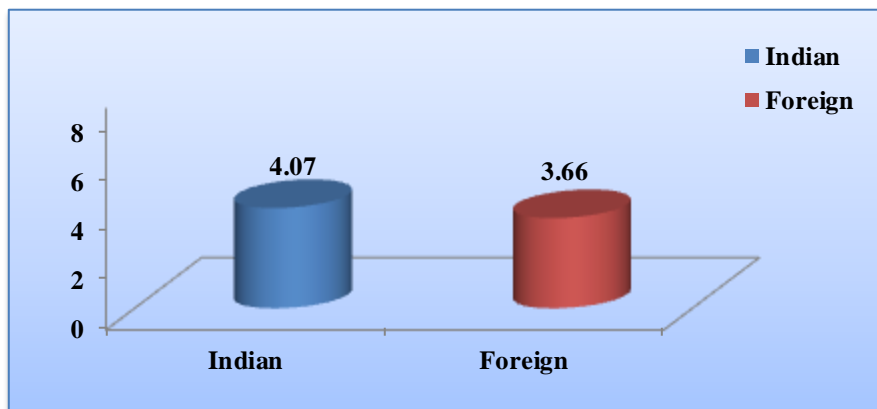


Figure-2

Mean Scores of Indian and Foreign Male Students of Delhi State on Barriers of Physical Activity (Social Influence)

Comparison of scores on Physical Activity Barrier (Lack of Energy) between Indian and Foreign male students of Delhi State is presented in Table 3.

TABLE-3

COMPARISON OF SCORES ON LACK OF ENERGY BETWEEN INDIAN AND FOREIGN MALE STUDENTS OF DELHI STATE

Variable	Group	N	Mean	SD	SEM	MD	SED	t-value
Lack of Energy	Indian Male	200	4.12	1.80	.12	.48	.17	2.74*
	Foreign Male	200	3.64	1.68	.11			

**Significant at .05 level*

$t_{.05} (398) = 1.96$

It can be ascertained from table-3 that Indian male had mean score of 4.12 with S.D=1.80 and S.E.M=.12. Foreign male had mean 3.64 with S.D=1.68 and S.E.M=.11. Mean difference and S.E.D were .48 and .17 respectively. t-value was found to be statistically significant as the value obtained was 2.74. 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 Barrier of Physical Activity (Lack of Energy) is depicted graphically in fig.3.

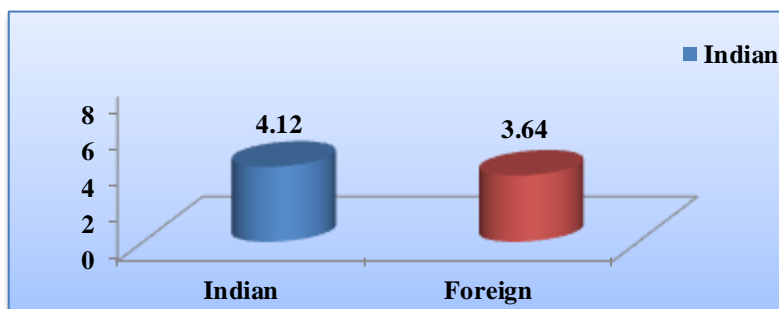


Figure-3

Mean Scores of Indian and Foreign Male Students of Delhi State on Barriers of Physical Activity (Lack of Energy)

Comparison of scores on Physical Activity Barrier (Lack of Will Power) between Indian and Foreign male students of Delhi State is presented in Table 4.

TABLE-4

COMPARISON OF SCORES ON LACK OF WILL POWER BETWEEN INDIAN AND FOREIGN MALE STUDENTS OF DELHI STATE

Variable	Group	N	Mean	SD	SEM	MD	SED	t-value
Lack of will Power	Indian Male	200	3.72	1.96	.13	.50	.18	2.76*
	Foreign Male	200	3.21	1.67	.11			

**Significant at .05 level*

$t_{.05} (398) = 1.96$

A perusal of content of table-4 on lack of will power would shown that Indian male had mean score of 3.72 with S.D=1.96 and S.E.M=.13. Foreign male had mean 3.21 with S.D=1.67 and S.E.M=.11. Mean difference and S.E.D were .50 and .18 respectively. t-value was found to be statistically significant as the value obtained was 2.76 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 Barrier of Physical Activity (Lack of Will Power) is depicted graphically in fig.4.

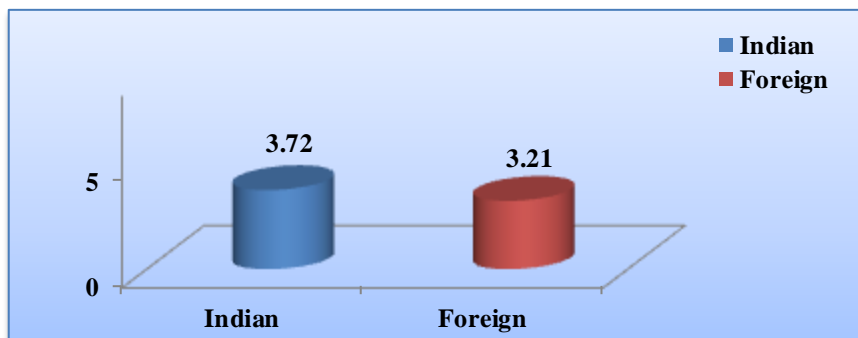


Figure-4

Mean Scores of Indian and Foreign Male Students of Delhi State on Barriers of Physical Activity (Lack of Will Power)

Comparison of scores on Physical Activity Barrier (Fear of Injury) between Indian and Foreign male students of Delhi State is presented in Table 5.

TABLE-5

COMPARISON OF SCORES ON FEAR OF INJURY BETWEEN INDIAN AND FOREIGN MALE STUDENTS OF DELHI STATE

Variable	Group	N	Mean	SD	SEM	MD	SED	t-value
Fear of Injury	Indian Male	200	4.59	2.08	.13	.34	.20	1.67
	Foreign Male	200	4.25	1.95	.14			

**Significant at .05 level*

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

A glance at table-5 showed that Indian male had mean score of 4.59 with S.D=2.08 and S.E.M=.13. Foreign male had mean 4.25 with S.D=1.95 and S.E.M .14. Mean difference and S.E.D were .34 and .20 respectively. t-value was not found to be statistically significant as the value obtained was 1.67 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 Barrier of Physical Activity (Fear of Injury) is depicted graphically in fig.5.

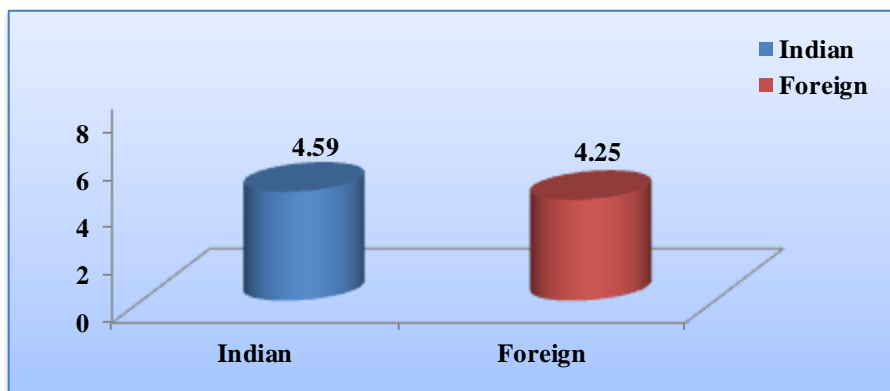


Figure-5

Mean Scores of Indian and Foreign Male Students of Delhi State on Barriers of Physical Activity (Fear of Injury)

Comparison of scores on Physical Activity Barrier (Lack of Skill) between Indian and Foreign male students of Delhi State is presented in Table 6.

**TABLE-6
COMPARISON OF SCORES ON LACK OF SKILL BETWEEN INDIAN AND FOREIGN MALE STUDENTS OF DELHI STATE**

Variable	Group	N	Mean	SD	SEM	MD	SED	t-value
Lack of Skill	Indian Male	200	4.20	1.65	.11	.58	.16	3.41*
	Foreign Male	200	3.62	1.74	.12			

**Significant at .05 level*

t_{.05} (398) = 1.96

From result entered in table-6 showed that Indian male had mean score of 4.20 with S.D=1.65 and S.E.M=.11. Foreign male had mean 3.62 with S.D=1.74 and S.EM .12. Mean difference and S.E.D were .58 and .16 respectively. t-value was found to be statistically significant as the value obtained was 3.41 whereas; the tabulated value was 1.96 on 398 degree of freedom at .05 level of significance. Mean scores of Indian and Foreign male students of Delhi State on Barrier of Physical Activity (Lack of Skill) is depicted graphically in fig. 6.

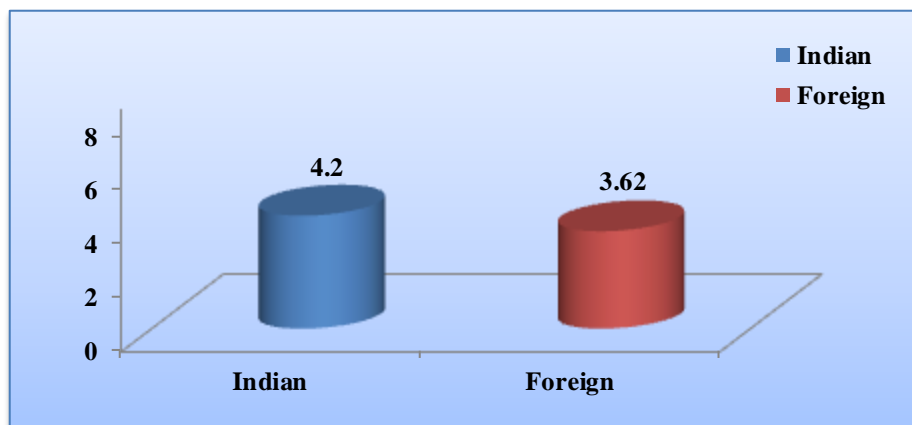


Figure-6

Mean Scores of Indian and Foreign Male Students of Delhi State on Barriers of Physical Activity (Lack of Skill)

Comparison of scores on Physical Activity Barrier (Lack of Resources) between Indian and Foreign male students of Delhi State is presented in Table 7.

TABLE-7

COMPARISON OF SCORES ON LACK OF RESOURCES BETWEEN INDIAN AND FOREIGN MALE STUDENTS OF DELHI STATE

Variable	Group	N	Mean	SD	SEM	MD	SED	t-value
Lack of Resources	Indian Male	200	4.44	1.64	.11	.83	.17	4.87*
	Foreign Male	200	3.61	1.75	.12			

**Significant at .05 level*

t'.05 (398) = 1.96

A perusal of content of table-7 on lack of resources would show that Indian male had mean score of 4.44 with S.D=1.64 and S.E.M=.11. Foreign male had mean 3.61 with S.D=1.75 and S.E.M =.12. Mean difference and S.E.D were .83 and .17 respectively. t-value was found to be statistically significant as the value obtained was 4.87 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 Barrier of Physical Activity (Lack of Resources) is depicted graphically in fig.7.

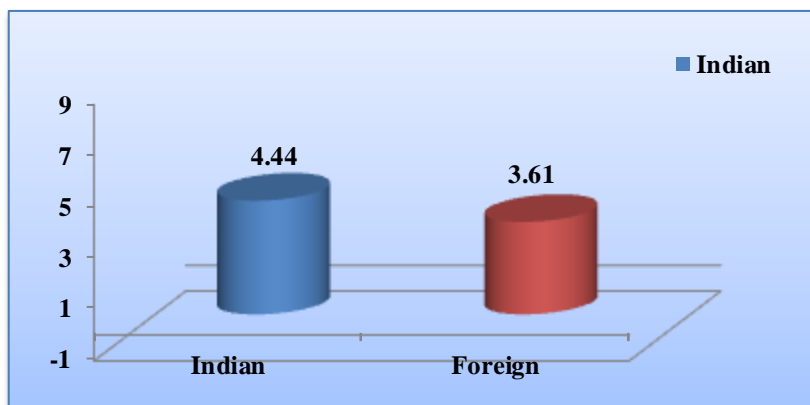


Figure-7

Mean Scores of Indian and Foreign Male Students of Delhi State on Barriers Of Physical Activity (Lack of Resources)

CONCLUSIONS

In the light of findings of present study the following conclusions were drawn.

- There were significant differences found on lack of time, social influence, and lack of skill, lack of will power, lack of energy and lack of resources between Indian male and foreign male students of Delhi state.
- There were no significant differences between Indian male students and foreign male students of different Universities and colleges of Delhi State only on fear of injury.
- Foreign male students faced less barrier of physical activity on all aspects than Indian male students. The study was also indicated that students did not have any perfect obstacles for involving in physical activity on mean basis.

REFERENCES

1. **American College of Sports Medicine (2001)**. ACSM Resource Manual for Guidelines for Exercise Testing and Prescription. 4th Ed .Philadelphia.
2. **Ball, T.J. (2009)**. Selected barriers and incentives to participation in University wellness programme. All Graduate Thesis and dissertation paper. Retrieved from <http://digitalcommons.usu.edu/ed/si5> Utah State University US.
3. **Fahey, D.T., Insel, M.P., & Roth, W.T. (2004)**. Fit & Well: core concept and labs in physical fitness and wellness. MC GRAW HILL (VI EDITION) pp. 2-3. New York.
4. **Kumar, N. (2009)**. Barriers for physical activity among Panjab University students, masters Dissertation, Panjab University, and Chandigarh.
5. **Mahta, M., Maryam, N., Kangane, S.E., Masomeh, H. (2012)**. Barrier towards Physical activity in University students in Tehran city of Iran. Shodh Sangam, Special Issue Jan. 2012.ISSN 2249-717x,125-130

6. **United State Department of Health and Human Service (1999)**. Promoting physical activity: a guide for community action. Retrieved from [hp://www.cdc.gov/ncc.dphp/dnpa/physical/life/barrier quiz.pdf](http://www.cdc.gov/ncc.dphp/dnpa/physical/life/barrier_quiz.pdf).
7. www.mhhe.com/fahey2004