

INFLUENCE OF PHYSICAL FITNESS ON ACADEMIC ACHIEVEMENTS OF SENIOR SECONDARY STUDENTS

Davender Singh Yadav, Ph. D.

Sr. Lecturer, DIETs, SCERT, DELHI

Abstract

The present study was conducted to investigate the influence of physical fitness on academic achievements. For this, Government Senior Secondary School of Directorate of Education, G.N.C.T. Delhi, comprised the sample of the study. (AAHPERD) youth fitness test has been used for measuring the physical fitness and the marks of five subjects at secondary level verified by the mark sheet were considered as their academic achievement. The study concluded that there is no influence of physical fitness on academic achievements.



Scholarly Research Journal's is licensed Based on a work at www.srjis.com

INTRODUCTION

Today almost every nation in the world attaches great significance to the development of sports in order to improve the nation's health and for the well being of the future generation. Certain nations like former GDR and USSR, had tried to project the superiority of their political ideology and social system through the field of sports. Like them, India is also trying to attain such level of performance in various sports.

Fitness is a broad term denoting dynamic qualities that allow us to satisfy our needs regarding mental and emotional stability, social consciousness and adaptability, and spiritual and moral fiber and organic health consistent with our heredity.

Physical fitness means that the organic system of the body is healthy and functions efficiently so as to enable the fit person to engage in vigorous tasks and leisure activities. Beyond organic development, muscular strength, and stamina, physical fitness implies efficient performance in exercise or work and a reasonable measure of motor skill in the performance of selected physical activities.

The same degree of physical fitness is not essential for everyone. It depends on the factors such as the tasks you must perform and your potential for physical efforts. Physical fitness varies with the individual and with the demands and requirements of specific tasks and also according to the circumstances of a person at different times in his life. Because no set standard of physical fitness applies to all people, an optimal level depends on your age, sex, body type, vocation, or physical limitations such as those associated with diabetes or asthma.

Physical fitness is not entirely dependent on exercise. Desirable health practices also play an important role. The role to physical fitness includes proper medical care, the right kind of food in the right amounts, good oral hygiene, appropriate physical activity adapted to our individual needs, satisfying work and study, healthy play and recreation, and proper amounts of rest and relaxation.

To be successful in a higher educational experience, an optimal level of fitness is necessary. Physical ailments and emotional depression or a lack of stamina that detract from mental effort are drains on the student and can result in decreased functioning or failure in school or college.

Achievement is the accomplishment or proficiency of performance in a given skill or body of knowledge. Academic achievement refers to the progress a child makes in school measured by scores or achievement tests, promotion from grade to grade and development of proper attitude.

The attainment ability degree of competence in school tasks usually is measured by standardized tests and expressed in age or grade units based on norms derived from a wide sampling of pupils performance.

In other words, it is the percentage of aggregate marks scored at the annual examination in the subjects offered by a student for the said examination.

“Achievement is the change in ability attributable to one’s activity”. Academic achievement will therefore mean the acquisition of knowledge, skill and aptitudes, which a person is supposed to gain as a consequence of formal instruction in an academic subject, such as English, Maths, Hindi, etc.

METHODOLOGY

Student (Boys) studying in class XI in the Government Senior Secondary School of Directorate of Education, Govt. of National Capital Territory Delhi, comprised the

population of the study. Thus, 828 students from 27 schools constituted the sample of the study. American Association for Health Physical Education, Recreation and Dance (AAHPERD) youth fitness test has been used for measuring the physical fitness. The students were categories on the basis of physical fitness as good-poor, good-average, and average-poor. In the present study the ‘t’ value was calculated between two categories, which made on the performance of physical fitness of students. The significance of ‘t’ ratio was tested in this study to know whether the mean scores of the two categories are significant to each other or the apparent difference was due to chance error.

RESULT AND DISCUSSION

INFLUENCE OF PHYSICAL FITNESS (IN TERMS OF GOOD, AVERAGE AND POOR CATEGORIES) ON ACADEMIC ACHIEVEMENT

Table – 1.1: Comparison of Academic Achievement of Good and Poor Physical Fitness Category Students

| Physical Fitness and its components | Category | N | Mean | S.D. | S.E.D. | ‘t’ | Level of significance |
|-------------------------------------|----------|-----|--------|--------|--------|-------|-----------------------|
| Total Physical Fitness | Good | 121 | 242.61 | 49.097 | 6.504 | 0.125 | INS. |
| | Poor | 113 | 241.80 | 50.282 | | | |

DISCUSSION: Table 1.1 displays comparison between academic achievement of students belonging to good and poor physical fitness categories. Influence of total physical fitness on academic achievement of two groups on academic achievement of two groups have been presented in the table 1.1

Table displays significant critical ratio of total physical fitness for N of 234 which should be 1.96 and 2.58 at .05 level and .01 level of significance respectively. It shows that the obtained critical ratio is insignificant at .05 level. This indicates that students belonging to good and poor physical fitness categories do not differ significantly in their academic achievement. Though the difference in means of the two groups is in favour of students belonging to good physical fitness category, yet it can be said that observed difference could have arisen due to chance errors. There is no difference in population means.

Obtained critical ratio indicates insignificant difference between two categories of academic achievement of students belonging to good and poor. The finding has proved that physical fitness does not influence academic achievement of students.

Table – 1.2: Comparison of Academic Achievement of Good and Average Physical Fitness Category Students

| Physical Fitness & its components | Category | N | Mean | S.D. | S.E.D. | 't' | Level of significance |
|-----------------------------------|----------|-----|--------|--------|--------|-------|-----------------------|
| Total | Good | 121 | 242.61 | 49.097 | | | |
| Physical Fitness | Average | 594 | 237.66 | 46.383 | 4.852 | 1.020 | INS. |

DISCUSSION: Table 1.2 displays comparison between academic achievement of students belonging to good and average physical fitness categories. Influence of total physical fitness on academic achievement of two groups on academic achievement of two groups have been presented in the table 1.2

Table displays significant critical ratio of total physical fitness for N of 715 which should be 1.96 and 2.58 at .05 level and .01 level of significance respectively. Table 1.2 reveals that the obtained critical ratio is insignificant at .05 level. This indicates that students belonging to good and average physical fitness categories do not differ significantly in their academic achievement. Though the difference in means of the two groups is in favour of students belonging to good physical fitness category, yet it can be said that observed difference could have arisen due to chance errors. There is no difference in population means.

Obtained critical ratio indicates insignificant difference between two categories of academic achievement of students belonging to good and average .The finding has proved that physical fitness does not influence academic achievement of students.

Table – 1.3: Comparison of Academic Achievement of Poor and Average Physical Fitness Category Students

| Physical Fitness & its components | Category | N | Mean | S.D. | S.E.D. | 't' | Level of significance |
|-----------------------------------|----------|-----|--------|--------|--------|------|-----------------------|
| Total | Poor | 113 | 241.80 | 50.282 | | | |
| Physical Fitness | Average | 594 | 237.66 | 46.383 | 5.099 | .811 | INS. |

DISCUSSION: Table 1.3 displays comparison between academic achievement of students belonging to average and poor physical fitness categories. Influence of total physical fitness on academic achievement of two groups on academic achievement of two groups have been presented in the table 1.3.

Table displays significant critical ratio of total physical fitness for N of 707 which should be 1.96 and 2.58 at .05 level and .01 level of significance respectively. It shows that the obtained critical ratio is insignificant at .05 level. This indicates that students belonging to average and poor physical fitness categories do not differ significantly in their academic achievement. Though the difference in means of the two groups is in favour of students belonging to average physical fitness category, yet it can be said that observed difference could have arisen due to chance errors. There is no difference in population means.

Obtained critical ratio value indicates insignificant difference between two categories of academic achievement of students belonging to average and poor. The finding has proved that physical fitness does not influence academic achievement of students.

CONCLUSION:

- It was found that good and poor physical fitness categories student does not influence academic achievement of students.
- It was found that good and average physical fitness categories students does not influence academic achievement of students.
- It was found that poor and average physical fitness categories students does not influence academic achievement of students.

BIBLIOGRAPHY

- Conly, A.G. "A Comparative Study Of The Scholastic Achievememt Of Athletes And Non Athletes Teams At The University Of New Mexico", *Completed Research In Health, Physical Education And Recreation* (1967)7:72.
- Douglas, N.Hasted, Alan C. Lacy, "Measurement And Evaluation In Physical Education And Exercise Science", 2nd Edition, ,Gorsuch carisbrik, Publishers Scottsdale, Arizona. (1994)
- Fahrner, Carl J., "A Comparison Of Physical Fitness With The Out Of School Physical Activity, Academic Achievement And Intelligence Quotient Of The High School Students" *Completed Research In Health, Physical Education And Recreation*, (1960) 2:50
- H.E. Garrett And R.S. Wood Worth *Statistics In Psychology And Education*, Vaklis Feffer And Siomons Pvt. Ltd., Bombay (1971),Pp.99-102.
- Skolnick , Sydney Jay . "The Effect Of Physical Activities On Academic Achievement In Elementary School Children". *Dessertation abstracts International*,Vol. :42:02, (August 1981),P.601A