

## **STUDY OF THE INFLUENCE OF PHYSICAL FITNESS OF SENIOR SECONDARY STUDENTS ON THEIR ACADEMIC ACHIEVEMENT AND ATTITUDE TOWARDS PHYSICAL EDUCATION**

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### **Introduction**

Physical fitness increased academic performance, assertiveness, confidence, emotional stability, independence, memory, perception, body image, self-control, work efficiency, hostility, psychotic behaviour, tension and work errors, keeping in view, the importance of attitude and aptitudes, interest, and abilities, innate or acquired, have their significant roles to play in life. Attitude has the basic characteristic valence; it can be either positive, which is the representation of favourable attitude, or negative, representing an unfavourable attitude. Attitudes affect the entire person, his well being, his thinking, his emotions, and his behaviour as influenced by his feeling tones.

### **Objectives of the study are as follows**

- 1- To study present status of physical fitness of the students by classifying them into three categories namely, students with good, average and poor physical fitness.
- 2- To study influence of physical fitness on academic achievement in order to achieve objective.

This objective has been divided in to three subdivisions, They are mentioned below-

- To compare the academic achievement of good and poor physical fitness category students.
- To compare the academic achievement of good and average physical fitness category students.
- To compare the academic achievement of poor and average physical fitness category students.

3- To find out the relationship between physical fitness and academic achievement in order to achieve objective.

### **Method of the study**

As the present study is designed to test the influence of physical fitness of Senior Secondary Student on academic achievement and attitude towards physical education, it involves physical fitness test, academic achievement, marks obtained in class X and attitude scale. Ex post Facto method of research is employed in the study.

### **Sample of the study**

One school from each zone and a section was taken as sample of the study. 28 schools were included in the sample of the study. One school was excluded in the sample on the grounds that the schools authorities had not allowed conducting the test and only one boy's school was in concerned zone. Two schools were replaced by the nearby schools due to non availability of play ground.

Thus, 828 students from 27 schools constituted the sample of the study.

### **Tools used**

The following tools have been used in the study-

American Association for Health Physical Education, Recreation and Dance (AAHPERD) youth fitness test has been used for measuring the physical fitness. The test comprised of six items sit ups, standing broad jump, shuttle run, 50 yard Run, chin ups and 600 yards run/walk to measure the overall physical fitness of the students.

### **Statistical technique used**

Mean, Standard Deviation, 'T' score, 't' test, and Pearson Product Moment correlation, were the statistical techniques used in this study.

### **Findings of the study**

The study reveals the classification of students in terms of physical fitness i.e. good, average and poor category.

In a sample of 828 Mean, the physical fitness score of the students was found to be 298.38 and the Standard Deviation was 25.38. Students obtaining a score above Mean+ standard deviation i.e.  $298.23+25.38=323.61$  were identified as those belonging to good category of physical fitness. 121 students i.e. 14.62% of the total were found as those of good category of physical fitness and 113 students scored below 272.84. (Mean, standard deviation i.e.  $298.23-25.38= 272.84$ ). They were put in poor physical fitness category of students i.e. 13.65% (113) of the total sample. The number of students between good physically fit and poor physically fit was 594 i.e. 71.74% (in between Mean + S.D. & Mean-S.D. i.e. 326.61 & 272.84) of the total sample.

### **Conclusion**

- The status of the physical fitness of students is average physically fit. Out of 828 students 594 (71.74%) students constituted the average physical fitness category.
- Neither physical fitness as a whole nor any components of physical fitness influences academic achievement of students.
- When above finding was crosschecked by calculated correlation between academic achievement and physical fitness it showed significant and positive correlation between physical fitness and academic achievement of the students.
- Dimensions of physical fitness namely 600 yards run/walk have significant correlation with academic achievement of total sample, average and poor category students.
- Shuttle run and 50 yards run have significant correlation, whereas standing broad jump was significantly but negatively correlated to academic achievement of the students having excellent physical fitness.
- 50 yards run has significant but negative correlation with academic achievement of average category students.

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