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## Association between physical fitness and frustration tolerance capacity of class XII students: A correlational research

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### Abstract

The objective of the present study was to examine the association between physical fitness with frustration tolerance capacity of class XII students. To conduct the study 80 male students studying in Class XII were selected. The sample was selected from government and private schools from Nagpur. Physical fitness of the subjects was assessed with the help of Cooper's JCR test while frustration tolerance was assessed by FRTO standardized by Rai (1988). To find the association between study variables Pearson correlation coefficient was computed. Analysis showed strong relationship between physical fitness and frustration tolerance capacity of male students from Class XII. It was concluded that ability of Class XII male students to cope with frustrating situations is related to their physical fitness hence physical fitness of class XI male students needs to be evaluated and taken care by effective physical education curriculum.

**Keywords:** Association, physical fitness, frustration tolerance capacity, correlational

### Introduction

In students life 12th standard is an important landmark. In this period student needs to focus on studies so that future education is possible in good educational institutions. Apart from board exams student also required to appear in competitive exams so as to get admission in quality educational institutions. During this period students are heavily stressed because of hectic demands of studies coupled with problems in day-to-day life. This is physically exhausting also for students. They also encounter several obstacles in study topics. So it is essential for students to tolerate frustrating situations and focus on studies only. In this scenario it is essential to know the impact of physical fitness on frustration tolerance capacity of students of class XII. In exercise psychology a strong association has been observed between physical fitness and psychological wellbeing. Physical fitness can be improved with variety of physical activities and exercises. According to Kramer *et al.* (2006) physical fitness is indispensable for optimal physical and mental health, including cognitive function. Haskell *et al.* (2007) reported a strong and significant association between physical activity and enhanced health and quality of life. Guskowska (2004) [3] and Peluso and Andrade (2005) [4] reported the beneficial effect of exercise in reducing anxiety, mood, depression while enhancing and maintaining positive mental health. Although numerous studies in the past have documented the benefits of physical fitness towards psychological wellbeing, association between frustration tolerance and physical fitness of class XII adolescent male students has not been analysed. Hence the present study was planned.

### Hypothesis

It was hypothesized that physical fitness will show significantly strong association with frustration tolerance capacity of class XII students.

### Methodology

The following methodological steps were taken while conducting the present research work.

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**Sample**

To conduct the study 80 male students studying in Class XII were selected. The sample was selected from government and private schools from Nagpur. The sample was selected randomly.

**Tools**

- a. **Physical Fitness:** Cooper’s JCR test (1963) was used to evaluate physical fitness. The JCR test is a three item test consisting of the vertical jump, chin-up and 100 yard shuttle run in which the subject covers a ten yard course ten times. It involves the basis element of elements of power, strength, speed, agility and endurance.
- b. **Frustration Tolerance:** The Frustration Tolerance (FRTO) constructed and standardized by S.N. Pai (1984) was used to assess frustration tolerance capacity of class XII male students. Higher the score, higher the tolerance towards frustrating situations, is the direction of test.

**Procedure**

Frustration Tolerance (FRTO) prepared by Rai (1984) was administered to selected subjects according to standard research protocol. Number of attempts by the subject on two insoluble puzzles, i.e., puzzle number I and III are summed and mean number of attempts are calculated for each subject. Each selected subject performed Cooper’s JCR test items i.e. vertical jump, chin-up and shuttle run. To evaluate physical fitness of selected subjects, Linear Transformation Method was adopted. In this method subjects physical performance was ranked. Hence each individual score on vertical jump, chin-up and shuttle run was ranked in their respective group. The highest scores in vertical jump and chin-up is ranked ‘01’ followed by other scores while the minimum time taken to complete the shuttle run was ranked ‘01’ followed by the ranking of other scores. Equal ranking was given to subjects obtaining the same scores. After ranking of three fitness dimensions, all are added which gives a composite physical fitness score of subjects. Higher the ranking, better the physical fitness is the norm of this method. After tabulation of scores regarding physical fitness and frustration tolerance, Pearson Correlation Coefficient (‘r’) was calculated. The result is presented in table 1.

**Results**

**Table 1:** Correlation between Physical Fitness and Frustration Tolerance of Class XI Male Students

|                  | N   | Frustration Tolerance |
|------------------|-----|-----------------------|
| Physical Fitness | 100 | -0.821**              |

\*\* Significant at.01 level

A perusal of entries reported in table 1 indicates a significant but negative relationship between physical fitness and frustration tolerance capacity of students of class XI. It indicates that decrease in physical fitness also yields in decrease in frustration tolerance. Physical fitness gives person an added energy and good physically conditioning. Due to better physical conditioning a person can work tirelessly and do not get frustrated. Hence the results of the present study advocate the need of physical fitness in class XI students so that they can cope with adverse situations in academics and day to day more effectively by means of good frustration tolerance capacity.

**Conclusion**

The researcher concludes that physical fitness is the plinth of good psychological qualities which also includes frustration tolerance capacity. It is recommended that regular physical education classes is the need of the hour to strengthen psychological capacity of class XII students such as frustration tolerance.

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