

**COMPARATIVE STUDY OF SELECTED PHYSICAL FITNESS
COMPONENTS OF NORTH AND EAST INDIAN
STUDENTS OF D.C.P.E.**

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ABSTRACT

In the present study, an attempt has been made to compare physical Fitness components of north and East Indian Students Of D.C.P.E. For the purpose of study 50 male students (25 from each region) were selected to serve as the subjects. Their age was ranged between 18 to 28 years. The study was delimited to the six physical Fitness variables namely explosive leg strength, abdominal strength, agility, Flexibility, cardio respiratory endurance and speed. The data was collected by using the measurements of age, height and weight as well as by applications of test like standing broad jump, bent knee sit-ups, shuttle run, sit and reach, 600 Yard run/walk and 50 Yard dash. To find out the significant differences between the physical Fitness components of north and east Indian Students of D.C.P.E. The data was analyzed and compared with the help of statistical procedures in which Mean, standard deviation, standard error deviation (SED) and t-test were employed at 0.05 level of significance. On the basis of results revealed that East Indian students were superior in Physical Fitness than north Indian Students.

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INTRODUCTION

The physical Fitness Test for the community is to set up a database on the physical Fitness of North and East Indian Students; to identify the relationship between the physical exercise pattern and physical Fitness of North and East Indian Students and the Priority measures to enhance the overall physical Fitness of the student; as well as to give the individual participants a general understanding of their own physical Fitness condition. In broad sense, the human body shape, physiological functions, physical quality (or level of physical Fitness), athletic capability, immunity and Psychological quality are all constituents of physical Fitness. Perfect of players in skill and technique are very much dependent on effective was of training, practice and some suitable exercises for the development of general strength, power, flexibility Co -ordination, agility to related games flexibility, co-ordination, agility to related games and sports.

The main purpose of this study was to find out the difference in Physical Fitness Index of the north and East Indian students studying in Degree college of physical education, Amravati. It was also hypothesized that the physical Fitness of east Indian students would be significantly better than physical Fitness of north Indian Students.

METHODOLOGY

Selection of subjects:

Fifty male students from north and east Indian students of D.C.P.E., S.G.B Amravati University were selected as the subjects for the purpose of the study and the age of the subjects was ranged between 18-28 years. Those twenty-five students consisted of fifty Indian students (North Indian =25, East Indian=25). Selected test items were administered to measure physical Fitness. Test was conducted in Morning session. Simple Random Sampling technique was adopted for the selection of subjects for the present study.

Selection of Tests and Criterion measure:

- 1 Standing Broad Jump was measured by explosive leg Strength and Score was recorded in centimeter.
- 2 Bent knee sit-ups was measured by abdominal strength and endurance and score was recorded in numbers.
- 3 Speed of movement was measured by using 50 yard dash and the score was recorded in seconds.
- 4 Shuttle Run was measured by agility and score was recorded in seconds.
- 5 Sit and Reach was measured by Flexibility and Score was recorded in centimeter.
- 6 600 yard Run or Walk was measured by cardio respiratory endurance and Score was recorded in seconds.

Administration of Test & Collection of Data:

The data pertaining to the study were collected, on the basic physical Fitness of all the subjects were tested according to the selected item Test. The scores of each test were recorded and converted into 't' Score and then make them. Before collection of data, the scholars explained the purpose of the study to the subjects so as to they could put their best.

Limitations:

The experience and training background, social and economic status, dietary habits and daily routine activities of the subjects were considered as the limitations for the study. Specific motivational devices were also not adopted for motivating or discouraging the subjects during the experimentation

RESULTS AND DISCUSSION

The statistical analysis of data of selected item test collected on the student of each Indian and north Indian Students of Degree college of Physical Education has been presented in this study. The obtained raw score of each test were converted into standard scores with the help of 't' scale and composite score was formed which were subjected to find out the overall significant difference between two groups i.e East India and North India Students of Degree college of Physical Education. The level of significance to test the hypothesis was chosen as at 0.05 level of confidence and data pertaining to this have been presented in Table 1 and depicted in figure 1.

TABLE -1
COMPARISON OF MEANS OF NORTH INDIA AND EAST INDIA STUDENTS
IN PHYSICAL FITNESS

Group	Mean	SD	MD	SE	DF	t-ratio	Tabulated 't'
East India	325.26	34.21	44.27	10.68	48	4.14*	2.012
North India	280.99	41.03					

*Significant at 0.5 level, $t_{0.05(48)} = 2.012$

The Findings of Table-1 clearly reveals that there was a significant mean difference in physical fitness between the east and north Indian students belong to Degree College of Physical Education, as the calculated t-value 4.14 is greater than the tabulated t- value of 2.012.

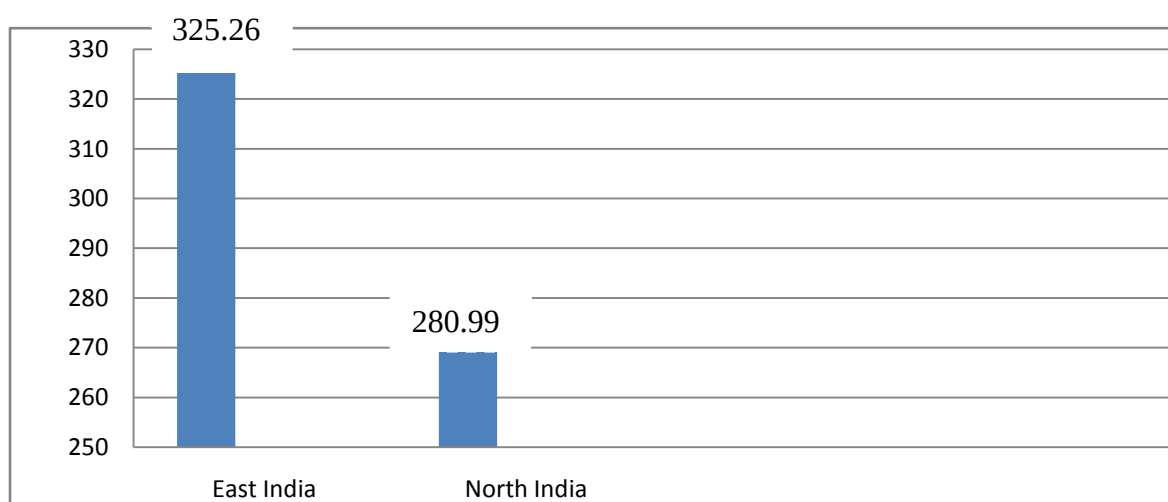


Figure -1: Comparison of Means of Physical Fitness of North India and East India Students

DISCUSSION

To find out the significant differences between the physical Fitness of north and East region of India, t-test was employed of 0.05 level of significance. The statistical analysis of data revealed that the physical Fitness of both the regions had no significant difference in relation with the flexibility. Whereas in terms of Abdominal strength, Explosive leg strength, Agility, cardio-respiratory Endurance and speed significant differences was found. Further it was also found that physical fitness of East Indian Students were much better than the North Indian Students.

CONCLUSIONS

Within the limitations of the present study and on the basis of findings the following conclusions are drawn.

- i) The finding of the study revealed that the physical Fitness of north and east region of India has no significant difference in relation with the flexibility.
- ii) Whereas in terms of Abdominal strength, Explosive leg strength, Agility, cardio-respiratory Endurance and speed significant differences was found.
- iii) East-Indian students were superior in Physical Fitness than North Indian Students.

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