

STUDY ON PHYSICAL FITNESS STATUS OF BACHELOR OF PHYSICAL EDUCATION STUDENTS WITH AND WITHOUT SPORTS BACKGROUND

Sourav Dutta*

souravrajesh073@gmail.com

Arup Mahato**

Arupmahato2012@gmail.com

Abstract

The main aim of this study is to find the physical fitness level of with and without sports background male B.P.Ed. students of West Bengal state. 70 with sports background and 70 without sports background male students of B.P.Ed. studying in different universities of West Bengal were selected as subject for this study. The AAPHER youth fitness test was selected for testing the physical fitness ability of students include Muscular strength of shoulders, Muscular strength and endurance (Trunk), Agility, Leg explosive strength, Speed and Endurance. The data collected was analyzed statistically to find out the mean differences scores of the with and without sports background subjects. The mean, standard deviation and t-test were use for analyze the data. The difference test was at the 0.05 level of significance. The result of the study shows that there is significance difference between with sports background and without sports background male B.P.Ed. students in Muscular strength of shoulder, Leg explosive strength, speed and no significance difference between with sports background and without sports background male B.P.Ed. students in Muscular strength and endurance (Trunk), Agility and Endurance.

Key Words: Physical Fitness, B.P.Ed, Profile

*M.P.Ed. Student, Dept. of Physical Education, Mugberia Gangadhar Mahavidyalaya, Purba Medinipur, India

**State Aided College Teacher, Dept. of Physical Education, Mugberia Gangadhar Mahavidyalaya, Purba Medinipur, India.

INTRODUCTION

Fitness may be defined as the successful adaptation to the one's strenuous lifestyle. It enables us to our potential. It's the ability to endure, to bear up, to withstand stress, to carry on at all circumstances.

Physical fitness refers to the organic capacity of an individual to perform the normal task of daily living without under tiredness or fatigue having reserves of strength and energy available to meet satisfactorily any emergency demands, suddenly placed upon him (**Bucher and West, 1987**).

Physical fitness refers to the Organic capacity of an individual to perform the normal task of daily living without under tiredness or fatigue having reserves of strength and energy available to meet satisfactorily only emergency demands, suddenly placed upon him. (**Edvin A. Fleishman. 1985**)

Physical fitness makes one feel mentally sharper, physically comfortable and more with the body and better able to cope with the demands that everyday life makes upon us. Increased physical fitness not only improves health but improves a performance at work. Hundreds of American companies have backed this idea financially by employing full time directors of fitness for the work (**Bucher, 1978**).

Physical fitness includes Speed, flexibility, power, strength, co-ordination, muscular endurance, cardiovascular endurance and agility. These characteristics are all equalized with the health, functioning of the body. Another but a different and important component of Physical fitness is the athletic skill. The various aspects of physical fitness and the skills are interrelated.

The American alliance for health, physical Education and recreation AAPHER has defined physical fitness as follows. Fitness is that state, which characterizes the degree to which a person is able to function. Fitness is an individual matter; it implies the ability of each person to live most efficiently with his potential. Ability to function depends upon physical, mental, emotional, social and spiritual components of fitness all of which are related to each other and are naturally interdependent (**Jackson, 1985**).

PURPOSE OF THE STUDY

To find out the Physical Fitness status of B.P.Ed students of sports group and without sports group.

HYPOTHESIS

The study was based on following hypothesis:

H1 Sports group and without sports group of B.P.Ed students may have a better level of physical fitness.

H0 There would be no significant difference in physical fitness level between sports group and without sports group of B.P.Ed students.

METHODOLOGY

SELECTION OF THE SUBJECT

Researcher select the sample, considering purposive sampling method from all male B.P.Ed. students studying in different universities of West Bengal were selected as subjects. Two groups consider for the present study was sports group and without sports group 140 male B.P.Ed students in total (70 students for each group). Initial tests were conducted using AAHPERD physical fitness test to measure their physical fitness.

The male B.P.Ed. students for the study were selected from the following universities in West Bengal State.

1. Vidyasagar University
2. Kalyani University
3. North Bengal University

CRITERION MEASURE

Name of the variable	Measurement of the test	Unit
Muscular Endurance of Shoulders	Pull ups (boys)	Number
Muscular Endurance (Trunk)	Bent-knee sit ups	Number
Agility	Shuttle Run (10X4 yards)	Second
Leg Explosive Strength	Standing Broad Jump	Meter
Speed	50 Yard Dash	Second
Endurance	600 yards Run-walk	Minute

STATISTICAL PROCEDURE

The obtain data in form of digital score will be treated statistically to get results and to draw conclusions. The Mean and SD will be considered as descriptive statistic and t-test was employed, the level of significance difference to assess the statistical value obtain was said 0.05 level confidence.

For statistical calculation Statistical Procedure for Social Sciences (SPSS) Version-23 was used.

RESULT AND DISCUSSION

Table-1: Mean difference and t-values of Muscular Endurance of Shoulders(number) of without sports background and sports background B.P.Ed male students

Groups	Mean	SD	Std. Error Mean	Mean Difference	t-value
without sports back ground	7.04	±2.98	0.35	1.54	3.28*
Sports background	8.58	±2.56	0.30		

*Significant at 0.05 level (table value 1.96, df-138)

It appears from table no. 1 that the mean difference between without sports background and sports background was 1.54 and the obtained t-value was 3.28 which was statistically significant. The difference was significant at 0.05 level since the table value 1.96 for the df 138 which was lower than the obtained value.

Table-2: Mean difference and t-values of Muscular Endurance(number) of without sports back ground and sports background B.P.Ed male students

Groups	Mean	SD	Std. Error Mean	Mean Difference	t-value
without sports back ground	36.14	±7.88	0.94	2.94	1.88 ^{NS}
Sports background	39.08	±10.37	1.24		

^{NS} Not Significant at 0.05 level (table value 1.96, df-138)

It appears from table no. 2 that the mean difference between without sports background and sports background B.P.Ed students was 2.94 and the obtained t-value was 1.88 which was not statistically significant. The

difference was not significant at 0.05 level. Since the table value 1.96 for the df 138 which was greater than the obtained value.

Table-3: Mean difference and t-values of agility(second) of without Sports background and Sports background B.P.Ed male students

Groups	Mean	SD	Std. Error Mean	Mean Difference	t- value
without sports back ground	10.84	±0.57	0.06	0.08	0.80 ^{NS}
Sports background	10.76	±0.65	0.07		

^{NS} Not Significant at 0.05 level (table value 1.96, df-138)

It appears from table no. 3 that the mean difference between without sports background and sports background B.P.Ed students was 0.08 and the obtained t-value was 0.80 which was not statistically significant. The difference was not significant at 0.05 level. Since the table value 1.96 for the df 138 which was greater than the obtained value.

Table-4: Mean difference and t-values of Leg Explosive Strength(meter) of without sports back ground and sports background B.P.Ed male students

Groups	Mean	SD	Std. Error Mean	Mean Difference	t-value
without sports back ground	2.24	±0.18	0.02	0.17	3.21*
Sports background	2.41	±0.41	0.04		

*Significant at 0.05 level (table value 1.96, df-138)

It appears from table no. 4 that the mean difference between without sports background and sports background was 0.17 and the obtained t-value was 3.21 which was statistically significant. The difference was significant at 0.05 level since the table value 1.96 for the df 138 which was lower than the obtained value.

Table-5: Mean difference and t-values of speed(second) of without sports back ground and sports background B.P.Ed male students

Groups	Mean	SD	Std. Error Mean	Mean Difference	t-value
without sports back ground	7.83	±0.66	0.07	0.24	2.39*
Sports background	7.58	±0.52	0.06		

*Significant at 0.05 level (table value 1.96, df-138)

It appears from table no. 5 that the mean difference between without sports background and sports background was 0.24 and the obtained t-value was 2.39 which was statistically significant. The difference was significant at 0.05 level since the table value 1.96 for the df 138 which was lower than the obtained value.

Table-6: Mean difference and t-values of Endurance(minute) of without sports background and sports background B.P.Ed male students

Groups	Mean	SD	Std. Error Mean	Mean Difference	t-value
without sports back ground	1.87	±0.34	0.04	0.08	1.40 ^{NS}
Sports background	1.79	±0.34	0.04		

^{NS} Not Significant at 0.05 level (table value 1.96, df-138)

It appears from table no. 6 that the mean difference between without sports background and sports background B.P.Ed students was 0.08 and the obtained t-value was 1.40 which was not statistically significant. The difference was not significant at 0.05 level. Since the table value 1.96 for the df 138 which was greater than the obtained value.

RESULTS

The sports background group was found to be significantly better muscle Endurance of shoulder than without sports background group. Similar result also suggested by **Firdous Ahmad Bhat and Dr. Rakesh Pathak (2018)**. this may be due to fact the muscle Endurance of shoulder most dominant physical fitness in pull-ups.

The sports background group was found to be significantly better leg explosive strength than without sports background group. Similar result also suggested by **Mohd Iqbal Dar (2021)**. this may be due to fact the Leg explosive strength most dominant physical fitness in standing broad jump.

The sports background group was found to be significantly better sprinting ability than the without sports background group. Similar result also suggested by **Mohd Iqbal Dar (2021)**. this may be due to fact the speed most dominant physical fitness in 50-yard dash.

The sports background group was found to be slightly higher muscular endurance (trunk) than without sports background group.

The sports background group was found to be slightly higher agility than without sports background group.

The sports background group was found to be slightly better endurance than without sports background group.

CONCLUSION

1. Muscle endurance of shoulder of with sports background students was significantly higher than without sports background students.
2. Muscular endurance (trunk) of with sports background students were slightly higher than the without sports background students.
3. Agility of with sports background students were slightly better than the without sports background students.
4. Leg explosive strength of with sports background students was significantly higher than without sports background students.
5. Speed of with sports background students was significantly faster than without sports background students.
6. Endurance of with sports background students were slightly better than the without sports background students.

REFERENCES

Books:

Hareold M. Barrow and Rose Mary Mc. Gee, Practical Approach of Measurement in Physical Education, (Philadelphia: Lea and Febiger, 1979)

A.K Uppal, Physical Fitness, (Delhi: Friends Publications, 1992)

H.Harrison Clarke and David H. Clarke, Advanced Statistics with applications to Physical Education, (New Jersey: Prentice Hall, Inc, 1972)

Applied Statistics in Physical Education and Sports (M.P.Ed. NCTE New Syllabus) - Dr. Kulbir Singh

Journal:

AHAMED AND C.P. SINGH (August, 2010), Comparison of selected physical fitness variables of 18-year-old male cricket Players, International Journal of Physical Education.

International Journal Of Physical Education, Vol. 3 No. 1&2 (April & October, 2010): 50-52

SUMA HASALKAR, RAJESHWARI SHIVALLI AND SHILPA NANDI (February, 2010), Body composition and physical fitness of farm women.

International Journal of Physical Education, Vol. 3 No. 1&2 (April & October, 2010): 5-8

Parveen Dhayal and Dr. Ashok Kumar (2018) Study of motor fitness components of rural and urban school going students.

International Journal of Physiology, Nutrition and Physical Education 2019; 4(1): 245-247

Koebel, Camille Ireland; Swank, Ann M.; Shelburne, Linda (may 1992), Fitness Testing in Children A Comparison Between PCPFS and AAHPERD Standards.

Journal of Strength and Conditioning Research 6(2): p 107-114, May 1992.

Aejaz Ahmad Bahar, DR.Manoj Kumar Pathak ,DR.Suhail Yaqoob Bhat (2021) A Study on Health Related Physical Fitness of school students in Bandipora District.

© 2021 IJCRT | Volume 9, Issue 2 February 2021 | ISSN: 2320-2882