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COMPARISON OF PHYSICAL FITNESS LEVEL AMONG NEWLY ADMITTED STUDENTS IN TEACHERS TRAINING COURSE

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ABSTRACT

The purpose of this study was to determine and to compare the individual student's functional physical fitness levels measured by Modified AAPHER test item individually. For the purpose (N= 56) students from the teachers training courses i.e. B.P.Ed & M.P.Ed, age ranges in between 18 and 25 years purposively selected from the Department of Physical Education, C.S.J.M.U., Kanpur. Data was collected during Physical Fitness test by administering the Modified AAHPER Youth Fitness Test during the Session 2017-17. The test was administered as per the guidelines provided in Test manual. To check the difference of mean scores between the groups Independence Sample t-test was applied at 0.05% level of significance, descriptive statistics in which, mean, standard deviation and mean differences were obtained through (SPSS 20) software. The results revealed that the students of B.P.Ed courses had significantly superior in arms and shoulders strength, speed, explosive legs strength, abdominal muscular strength, agility and cardiovascular endurance as compared to the students of M.P.Ed courses. Results illustrate current problem areas and provide useful data for future investigators. Further investigations are also being needed on the above studied components along with body composition to differentiate between the students of B.P.Ed and M.P.Ed courses.

Keywords: Physical Fitness, Teachers Training Courses and Modified AAPHER Youth Fitness Test

INTRODUCTION

Physical fitness testing has endured several evolutionary changes, historical account of youth fitness testing, provide insight into the attitudes, problems and controversies that have encompassed this subject, and demonstrate how these have influenced the rationale of the tests. The most recent trend is to use health-related rather than motor-performance test items. Physical fitness is currently described in terms of cardiorespiratory endurance, body composition, muscular strength, muscular endurance and flexibility. Physical fitness has three basic components i.e. muscular endurance, muscular strength and circular-respiratory endurance, whereas motor fitness includes four additional components i.e. muscular power, agility, flexibility and speed. Along with these physical variables, physiological and psychological components also play an important role in the execution of the performance. The physical characteristics of body building in the sportsmen are advantages in one way or another during game. To excel in sports one must possess such typical characteristics, lack of which is likely to affect one's performance (Barrow, H.M., 1972). Different sports require different

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fitness components. During a game the exercise intensity varies continually thus fitness training should be as realistic as possible. Training should not only develop the specific muscles involved in match play, but also improve technical and tactical skills and help keep players interested. People were defining physical fitness in different ways. This is because people have different body types, different fitness goals, different health goals, and have different daily demands on their body (Clarke, H. M., 1971). Physical educators have begun to expand the scope of fitness testing, and recognize the need for programs that teach children the basic concepts of health and fitness and how to influence present and future health status through physical activity. AAHPER (1965), Medicine Ball Throw Test was considered to determine arm and shoulder strength; Sit Ups Test for measuring muscular endurance; Shuttle Run Test was conducted to measure the agility; the explosive powers of legs were tested through Standing Broad Jump; for measuring speed, 50 meters Dash Run was employed; and to measure cardiovascular endurance 600 yards Run/Walk test was used. The use of criterion-referenced standards that specify the acceptable level of fitness conducive to health has been proposed. And, to assess the effectiveness of individual physical fitness level, Modified AAPHER youth Fitness Test is the best to assess the relationships between functional fitness levels and activities of daily living, particularly those involving cognitive and social abilities (Hebbel Neck, Marcel, 1984).

METHODOLOGY

Selection of the Participants: The purpose of this study was to find out difference among individual players physical fitness. For the present investigation top scorer (N=56) newly admitted male students from teachers training courses i.e. B.P.Ed and M.P.Ed, age ranges in between 18 to 25 years; purposively selected from the Department of Physical Education, C.S.J.M. University. Selection of the Test: To measure the physical fitness of selected subjects, a modified version of the Youth Fitness Test (AAHPER, 1965) was selected, keeping in mind its wider range of application and its nature as well as its administrative feasibility (Buzahora, 1970). To find out the difference among individual students physical fitness Independent 'T' Test was applied at 0.05% level of significance.

FINDINGS

Table 1 showing the descriptive statistics in which, mean and standard deviation, mean difference and t-value of each components of Modified AAHPER Youth Fitness Test were computed for B.P.Ed and M.P.Ed courses.

TABLE1
RESULTS OF MODIFIED AAHPER YOUTH FITNESS COMPONENTS OF B.P.ED AND M.P.ED STUDENTS

Test	Course	Mean	SD	M.D.	t-value
Medicine Ball Throw (MBT)	B.P.Ed	5.57	1.42	0.74	2.10*
	M.P.Ed	4.82	1.22		
Sit Ups	B.P.Ed	50.85	6.64	19.64	9.22*
	M.P.Ed	31.21	9.09		
50 yard Dash	B.P.Ed	7.45	0.81	1.70	4.18*
	M.P.Ed	9.15	1.99		
Standing Broad Jump (SBJ)	B.P.Ed	2.28	0.31	0.42	4.78*
	M.P.Ed	1.86	0.34		
Shuttle Run (10x4)	B.P.Ed	10.10	1.18	1.98	5.58*
	M.P.Ed	12.08	1.45		
600 Yd. Run/Walk	B.P.Ed	1.72	0.38	1.18	7.52
	M.P.Ed	2.90	0.74		

*Significant at 0.05 level, Tabulated $t_{(0.05)\,(54)} = 2.004$

Medicine Ball Throw test indicates that there was a significant difference between the mean scores of B.P.Ed and M.P.Ed courses student's arms and shoulders strength, with

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the mean difference recoded as 0.74 meter. And, the calculated t-value 2.103 was higher than the tabulated t-value 2.004 which was required to be significant at 54 degree of freedom with 0.05 level of confidence. It shows that B.P.Ed students have performed significantly better in arms and shoulders strength than their M.P.Ed counterparts.

In Sit Ups test results shows that there was a significant difference between the mean scores of B.P.Ed and M.P.Ed courses student's abdominal muscular strength component, with mean difference of 19.64 in numbers. And, the calculated t-value 9.22 was higher than the tabulated t-value 2.004 which was required to be significant at 54 degree of freedom with 0.05 level of confidence. It shows that B.P.Ed students having better abdominal muscular strength and endurance than that of M.P.Ed counterparts.

The 50 Yard Dash test shows there was a significant difference between the mean scores of B.P.Ed and M.P.Ed students in speed component with the mean difference -1.70 seconds. And, the calculated t-value -4.177 was higher than the tabulated t-value 2.004 which was required to be significant at 54 degree of freedom with 0.05 level of confidence. It shows that B.P.Ed students have performed significantly better in speed component than M.P.Ed students.

Standing Broad Jump test reveals that there was a significant difference between the mean scores of B.P.Ed and M.P.Ed students in explosive legs strength, with mean difference of 0.42 cm. And, the calculated t-value 4.783 was higher than the tabulated t-value 2.004 which was required to be significant at 54 degree of freedom with 0.05 level of confidence. It shows that B.P.Ed students have performed significantly better in explosive legs strength than that of M.P.Ed students.

The Shuttle Run test depicts that there was a significant difference between the mean scores of B.P.Ed and M.P.Ed students for agility component, with having mean difference of -1.98 second. And, the calculated t-value -5.583 was higher than the tabulated t-value 2.004 which was required to be significant at 54 degree of freedom with 0.05 level of confidence. Therefore, the B.P.Ed students are having better agility and co-ordination than M.P.Ed courses student's counterparts.

600 Yd. run/Walk test reveals that there was a significant difference between the mean scores of B.P.Ed and M.P.Ed students in cardiovascular endurance, with having mean difference of -1.18. And, the calculated t-value -7.516 was higher than the tabulated t-value 2.004 which was required to be significant at 54 degree of freedom with 0.05 level of confidence. It shows that B.P.Ed students have performed significantly better in cardiovascular endurance than their M.P.Ed counterparts.

DISCUSSION OF FINDINGS

Sandhu, (1983) conducted a study on Physical fitness of B.P.Ed and M.P.Ed middle school students of Amritsar district and that result was similar with this finding in relation to arms and shoulders strength component. From the previous and present study revealed that there were significant differences in arms and shoulders strength, speed, explosive legs strength, agility and cardiovascular endurance between B.P.Ed and M.P.Ed students, whereas B.P.Ed students were found superior than M.P.Ed students. Within from the reference too, arms and shoulders strength

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component B.P.Ed students were found much stronger than M.P.Ed students.

The result indicated that in abdominal muscular strength significant difference was found between B.P.Ed and M.P.Ed students, the difference may be due to the fact that M.P.Ed courses students was not practiced specific abdominal exercises in different games and sports.

With reference to speed component B.P.Ed students were much faster than M.P.Ed and this finding is consonance with the study of (Mehtap & Nihal, 2005).

Within the explosive legs strength and agility of B.P.Ed students were much better than M.P.Ed students. The probable reasons for that the B.P.Ed students are more engage with their house related works, cultivation, more distance of educational institution and tutorial places than their M.P.Ed counterparts. These findings supported with the study of (Gill et al., 2010).

The result of this study exhibited that in cardiovascular endurance component B.P.Ed students was well performed than M.P.Ed. The above results are in agreement with the study of (Gill et al., 2010). They found that regular energetic activity improved physical fitness of students of B.P.Ed courses and village life style is more active in nature than the life in M.P.Ed areas which produced high level of physical and physiological functioning during studying in B.P.Ed course. On the other hand mechanization, automation, computerization and engagement in smart phone have minimized the opportunities for regular physical activity to cause physical exertion in M.P.Ed course. The fit citizen is nation's best assets and weak ones are its liabilities.

CONCLUSION

In conclusion the results of the present study confirm that students of B.P.Ed courses were comparatively better than the students of M.P.Ed courses. B.P.Ed students were better in; arms and shoulders strength, speed, explosive legs strength, agility and cardiovascular endurance and abdominal muscular strength too. In this Modified AAHPER youth fitness components, there was a highly significant difference found between the two estimates between the criterion and each of the individual tests, the highest being with the Sit Ups, Shuttle Run, 50 yard dash, 600 Yards, MBT, and SBJ, the individual AAHPER tests were poor in M.P.Ed but good in B.P.Ed students. In general, both courses PE students were fitter but there was no consistent difference found in between the students of both course. The observed differences are probably not due to only studying PE program but to different degrees of physical activity. As its well-known fact that now a day both team and individual players requires similar kind of physical fitness at state, national and international level. Individuals and team both needs more or less same kind of physical fitness to perform daily as well as sporting activities.

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