

## Effect of Eight Weeks Physical Activity Programme on Selected Physical Fitness Variable of B.P.Ed Students

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### Abstract

The study in hand was an attempt to investigate the effect of winter break on selected physical fitness components for this purpose 49 trainees (25 boys and 24 girls) of B.P.Ed course were randomly selected for the study. The age of the selected subjects ranged between 20 to 25 years. The physical fitness components speed, circulatory-respiratory endurance, abdominal/leg strength, arm shoulder muscular endurance, explosive leg strength were measured with the help of 1500mts run for boys, 800mts for girls, long jump for both the sexes, sit-up for girls, 200mts for both the sexes and push up for boys were used to obtain data on physical fitness. This test battery is used by the directorate of youth services and sports Jammu and Kashmir for the admission process in B.P.Ed course at Govt College of physical education Ganderbal Jammu and Kashmir.

### Introduction

Physical fitness is that ability or quality of a human being which can help him to perform various kinds of functions efficiently. It is a state in which an individual can perform various kinds of activities up to his maximum potential. This ability helps an individual in performing his routine tasks alertly and energetically. A physically fit person can enjoy his leisure time by performing various kinds of energetic activities and he can cope with any kind of condition without much problem. Fitness provides an individual with such a power with the help of which, he can tackle difficult problems without becoming worried and tensed. Physical fitness is a pre-requisite for good health and well being of an individual

**Nixon**, Physical fitness is that organic capacity of an individual which help him to perform the normal tasks of daily living without any kind of fatigue or tiredness as he has enough strength and energy to meet any kind of emergency conditions which occurs suddenly upon him.

### Maintaining the General Physical Fitness

In order to improve general physical fitness, one is required to follow a specific kind of programme which should be designed very cautiously. This programme should be constructed while keeping in mind the age and capabilities of the individual for which it is being made. Before implementing the programme, various kinds of factors should be taken into account, which includes health status, interest, chronic disease and aptitude of the individual. Such kind of activities should be included in the programme, by doing which players or individual should not feel bore. Various kinds of activities can be included in the programme for improving general physical fitness, some of the important are: - running, jogging, treadmill, and bicycling etc.

**Material and Methods:-**

A total of 49 trainees (25 boys and 24 girls) of B.P.Ed course were randomly selected for the study. The age of the selected subjects ranged between 20 to 25 years. The physical fitness components speed, circulatory-respiratory endurance, abdominal/leg strength, arm shoulder muscular endurance, explosive leg strength were measured with the help of 1500mts run for boys,800mts for girls, long jump for both the sexes, sit-up for girls,200mts for both the sexes and push up for boys were used to obtain data on physical fitness. This test battery is used by the directorate of youth services and sports Jammu and Kashmir for the admission process in B.P.Ed course at Govt College of physical education Ganderbal Jammu and Kashmir.

The data was collected from the B.P.Ed students at Govt College of physical education Gandebal Jammu and Kashmir who were enrolled for the B.P.Ed course for the session 2013-2014. The pre test data was collected from the authorities who have conducted test for the admission point of view.

In the experimental treatment movement education activities was programmed for eight weeks in such a way that 15 selected activities were practiced in the morning and evening. Every activity was of 40 minutes. At the end of the eight weeks programme subjects were tested on the selected physical fitness test items.

**Results**

**Table No. 1**

Computation of analysis of co variance of Pre Test and Post Test Mean values on speed Scores in Seconds (Female Category).

Variables	Pre-Test		Post-Test		Mean	Sd.Error	D	Obt.'t'	Tabulated 't'	Significance
	Mean	S.D.	Mean	S.D.			.F.			
Speed	41.5283	3.03031	39.9475	2.81829	1.58083	.20447	23	7.731	2.07	P>0.05

\* Significant at 0.05 level  
(Table value required for significance 0.05 level 't' – Test with df 23 is 1.714)

The table no.1 shows the analysed data in speed of B.P.Ed. Students. The Pre-Test and Post Test means of Speed are 41.5283 and 39.9475 respectively. Since the obtained't' Test Value is greater than Table Value 2.07 with df 23 at 0.05 level of confidence. Hence it is significant at 0.05 level of confidence 23.

**Table No. 2**

Computation of analysis of co variance of Pre Test and Post Test Mean values on circulatory and respiratory endurance Scores in Seconds (Female Category).

Variables	Pre-Test		Post-Test		Mean	Sd.Error	D .F.	Obt."t"	Tabulated 't'	Significance
	Mean	S. D.	Mean	S. D.						
Circulatory and respiratory endurance	4.0571	.53129	3.7167	.37457	.34042	.30763	23	5.421	2.07	P>0.05

\* Significant at 0.05 level  
(Table value required for significance 0.05 level 't' – Test with df 23 is 2.07)

The table no.2 shows the analysed data in circulatory and respiratory endurance of B.P.Ed. Students. The Pre-Test and Post Test means of circulatory and respiratory endurance are 4.0571 and 3.7167 respectively. Since the obtained 't' Test Value are greater than Table Value 2.07 with df 23 at 0.05 level of confidence. Hence it is significant at 0.05 level of confidence 23.

**Table No. 3**

Computation of analysis of co variance of Pre Test and Post Test Mean values on explosive leg strength (Female Category).

Variables	Pre-Test		Post-Test		Mean	Sd.Error	D .F.	Obt."t"	Tabulated 't'	Significance
	Mean	S.D.	Mean	S. D.						
Explosive leg strength	10.0750	1.14218	10.7083	.90885	.63333	.77609	23	3.998	2.07	P<0.05

\* Significant at 0.05 level  
(Table value required for significance 0.05 level 't' – Test with df 23 is 1.714)

The table no.3 shows the analyzed data in explosive leg strength of B.P.Ed. Students. The Pre-Test and Post Test means of explosive leg strength are 10.0750 and 10.7083 respectively. Since the obtained 't' Test Value is greater than Table Value 2.07 with df 23 at 0.05 level of confidence. Hence it is significant at 0.05 level of confidence 23.

**Table No. 4**

Computation of analysis of co variance of Pre Test and Post Test Mean values on leg and abdominal muscle strength (Female Category).

Variables	Pre-Test		Post-Test		Mean	Sd.E	D.F.	Obt."t"	Tabulated 't'	Significance
	Mean	S.D.	Mean	S.D.						
leg and abdominal muscle strength	38.8750	50.56630	46.5417	5.17502	7.66667	4.90489	23	7.657	2.07	P<0.05

\* Significant at 0.05 level  
(Table value required for significance 0.05 level 't' – Test with df 23 is 2.07)

The table no.4 shows the analyzed data in leg and abdominal muscle strength of B.P.Ed. Students. The Pre-Test and Post Test means of leg and abdominal muscle strength are 38.8750 and 46.5417 respectively. Since the obtained 't' Test Value is greater than Table Value 2.07 with df 23 at 0.05 level of confidence. Hence it is significant at 0.05 level of confidence 23.

**Table No. 5**

Computation of analysis of co variance of Pre Test and Post Test Mean values on speed scored in seconds. (Males category)

Variables	Pre-Test		Post-Test		Mean	Sd.Error	D.F.	Obt."t"	Tabulated 't'	Significance
	Mean	S.D.	Mean	S.D.						
Speed	31.1856	1.61287	29.9828	1.77041	1.20276	.76224	24	7.890	2.06	P>0.05

\* Significant at 0.05 level  
 (Table value required for significance 0.05 level 't' – Test with df 24 is 2.06)

The table no.5 shows the analyzed data in speed of B.P.Ed. Students. The Pre-Test and Post Test means of speed are 31.1856 and 29.9828 respectively. Since the obtained 't' Test Value are greater than Table Value 2.06 with df 24 at 0.05 level of confidence. Hence it is significant at 0.05 level of confidence 24.

**Table No. 6**

Computation of analysis of co variance of Pre Test and Post Test Mean values on circulatory and respiratory endurance. (Males category)

Variables	Pre-Test		Post-Test		Mean	Sd.Error	D	Obt."t"	Tabulated 't'	Significance
	Mean	S. D.	Mean	S. D.						
circulatory and respiratory endurance	5.8544	.70436	5.4120	.63162	.44240	.43243	24	5.115	2.06	P>0.05

\* Significant at 0.05 level  
 (Table value required for significance 0.05 level 't' – Test with df 24 is 2.06)

The table no.6 shows the analyzed data in circulatory and respiratory endurance of B.P.Ed. Students. The Pre-Test and Post Test means of circulatory and respiratory endurance are 5.8544 and 5.4120 respectively. Since the obtained 't' Test Value are greater than Table Value 2.06 with df 24 at 0.05 level of confidence. Hence it is significant at 0.05 level of confidence 24.

**Table No. 7**

Computation of analysis of co variance of Pre Test and Post Test Mean values on explosive leg strength. (Males category)

Variables	Pre-Test		Post-Test		Mean	Sd.Error	D	Obt."t"	Tabulated 't'	Significance
	Mea n	S.D.	Mea n	S.D.						
Explosive leg	-	.55477	-	.55477	-	.55477	24	-	2.06	P<0.05

strength	14.0 240	1.38 512	14.7 120	1.43 826						
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\* Significant at 0.05 level  
(Table value required for significance 0.05 level't' – Test with df 24 is 2.06)

The table no.7 shows the analyzed data in explosive leg strength of B.P.Ed. Students. The Pre-Test and Post Test means of explosive leg strength are 14.0240 and 14.7120 respectively. Since the obtained't' Test Value is greater than Table Value 2.06 with df 24 at 0.05 level of confidence. Hence it is significant at 0.05 level of confidence 24.

**Table No. 8**

Computation of analysis of co variance of Pre Test and Post Test Mean values on arm shoulder muscular strength. (Males category)

Variables	Pre-Test		Post-Test		Mean	Sd.E	D	Obt	Tabul	Significa
	Mea	S.D.	Mea	S.D.	n	rror	.F.	."t"	ated	n
	n		n					't'	't'	nce
arm shoulder muscular strength	31.6	7.48	38.4	7.40	-	5.71	2	-	2.06	P<0.05
	400	421	000	495	6.76000	752	4	5.912		

\* Significant at 0.05 level  
(Table value required for significance 0.05 level't' – Test with df 24 is 2.06)

The table no.8 shows the analyzed data in arm shoulder muscular strength of B.P.Ed. Students. The Pre-Test and Post Test means of arm shoulder muscular strength are 31.6400 and 38.4000 respectively. Since the obtained't' Test Value are less than Table Value 2.06 with df 24 at 0.05 level of confidence. Hence it is significant at 0.05 level of confidence 24.

**Discussions**

The analysis of the data reveals that movement education programmes significantly develop the physical fitness components among the trainees of B.P.Ed course after getting involved in movement education programmes.

The study was supported by the findings of Sallis et al.(1997) who suggested that minor games and other recreational activities are the important aspects of the development of physical fitness at the school level.

This study is also supported by Arora,P.S.(1983) who conducted a study on physical fitness components on 5<sup>th</sup> grade students by conducting AAPHER and North Carolina fitness test and found that planned programme of physical education showed significant improvement in the components of physical fitness.

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