



## Comparative Analysis on Selected Motor Fitness Components of Physical Education Students Between General College and Training College

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### ABSTRACT

*In this study, 40 male students of Physical Education discipline were selected as the subject for the study. Among them 20 were selected from the Department of Physical Education, Visva-Bharati, Santiniketan, WB as training college students and 20 were selected from S.R.L Mahavidyalaya, Kalyani University, Majdia, WB as general college students. The age of the subjects were ranged between 18-21 years. Motor fitness components such as Speed, Agility, Explosive Strength, and Cardio Respiratory Endurance were selected as the variables for the study. To analysis the data descriptive statistics and t-test were used. The result of the showed that there was significant differences of the selected motor fitness variables between the training college group (TCG) students and general college group (GCG) students.*

**KEYWORDS :** Training College, General College, Motor fitness components.

### INTRODUCTION

Physical fitness is an important aspect of life. They play a vital role in bringing about healthy and joy full life. Best few decades has witnessed many on innovations in this area. Developing and maintaining physical fitness are becoming increasingly sophisticated technically and gaining popularity worldwide. From aged person to young are taking interest in doing physical activities for maintaining or developing physical fitness to enjoy the life enthusiastically. The participation in sports and physical fitness increases an individual's efficiency; it also promotes social harmony and discipline. Many diverse conditions can be improved by the careful control of all exercise and activity program. The perfect knowledge of physiological aspects of exercise is essential to set down the individualized type of exercise program to meet the particular require of each person. It is foolish to build a pyramid at the top without having built a base first. Similarly specialization in a branch of knowledge cannot be possible if the general concepts in the discipline are not clearly understood. This is very much applicably in case of physical education programme, where skills and techniques of any sport or game should be basically and mastered in the first instant. The degree to which the motor fitness contributes to a particular games or sports depends upon the type and variety of movements involved in them. In sports training much emphasis is laid on those components of physical fitness, which are most fundamental to those sports. The complex nature of

physical fitness includes the muscular strength, muscular endurance, cardio- respiratory endurance etc.

The students of physical education discipline need very much physical fitness as they are involved in various vigorous practical activities. There are basically two types of students in physical education discipline – one who study in training college and other who study in general college. The students of training college group (TCG) are generally involved in regular vigorous physical activities where as the students of general college group (GCG) are also involved in various physical activities but not like TCG students. The motor fitness play of the students play a major role in their performances and due to dif-

ferent type of physical activities their motor fitness level also may be different. The findings of the study would be helpful in understanding the fitness level of physical education students between training college and general college. The result would be helpful in selecting good physical education students for training college and general college.

The study was taken to make an attempt to investigate the comparison of the selected motor fitness components of the selected variables between the training college students and general college students.

### METHODOLOGY

#### Subjects:

40 male students of Physical Education discipline were randomly selected as the subject for the study. Among them 20 were selected from the Department of Physical Education, Visva-Bharati, Santiniketan, WB as training college students and 20 were selected from S.R.L Mahavidyalaya, Kalyani University, Majdia, WB as general college students. The age of the subjects were ranged between 18-21 years.

### VARIABLES AND CRITERION MEASURES:

Variables	TEST ITEMS	Criterion Measures
Speed	50 meter Dash	1/100 <sup>th</sup> of Seconds
Agility	4X10meter shuttle run test	1/100 <sup>th</sup> of seconds
Explosive Strength	SBJ	Meter
Cardio-respiratory Endurance	Queen's College Step Test	ml/kg/min

#### Design of Study:

Randomized group design method were used for this study.

#### Statistical Procedure:

For this study descriptive statistics and t-test were used to calculate the data.

### RESULT AND DISCUSSION

**Table I : Descriptive Statistics of the Selected Variables**

	Speed (sec)		Agility (sec)		Explosive Strength (meter)		C-R End (ml/kg/min)	
	TCG	GCG	TCG	GCG	TCG	GCG	TCG	GCG
Mean	7.327	7.699	9.688	10.364	2.376	2.276	49.7475	42.618
Max score	6.8	7.02	9.07	9.47	2.64	2.46	62.61	55.89
Min Score	7.8	8.78	10.5	11.32	2.17	2.05	35.52	27.33
SD	0.251498	0.411115	0.417729	0.482651	0.11061	0.130758	8.994814	7.146369

Legends: TCG-Training College Group, GCG-General College Group, C-R End- Cardio-Respiratory Endurance, SD-Standard Deviation

Table I expressed the descriptive statistics of the selected variables of the physical education students of training college and general college. Here in all the selected variables the training college group (TCG) showed better performance than the general college group (GCG).

**Table II: t-Test of the Selected Variables**

Variable		Mean	Mean Difference	t-value	t-critical two tail
Speed	TCG	7.327	0.672	3.451	2.024
	GCG	7.699			
Agility	TCG	9.688	0.676	4.732	
	GCG	10.364			
Explosive Strength	TCG	2.376	0.1	2.611	
	GCG	2.276			
C-R End	TCG	49.7475	7.1295	2.775	
	GCG	42.618			

Table-2 mentioned the t-value of the selected variables for the physical education students between the TCG and GCG. The t-value of the physical education students between TCG and GCG for speed was 3.451, for agility it was 4.732, for explosive strength it was 2.611 and for C-R End it was 2.775. In all cases the TCG was significantly better than the GCG. The reason might be due to that the TCG students were doing daily two session conditioning exercise for fitness development, practical classes and played games vigorously and the GCG students were doing the same physical activities but only one or two days in a week as in their class routine only one two classes were there in a week. Therefore probably the physical fitness level of the TCG students was significantly better than the GCG students. The result was supported by the study of Pujari H (2014) who worked on comparative study of cardiovascular fitness between sportsperson and non sportsperson. He concluded that participation of sports activities effects development of physical development and cardiovascular fitness among the participants.

**CONCLUSION**

On the basis of the result it was concluded that the motor fitness level of the training college students was significantly better than the general college students.

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