

## Physical fitness of athletes and non-athletes

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### Abstract

**Objective of the study:** Objective of the study was to compare the physical fitness athletes and Non-athletes of S.G.G.S. Khalsa College Mahilpur. The AAHPER Youth Physical Fitness Test (Test Item Six : Pull-up, Sit-up, Shuttle Run, Standing Broad Jump, 50 yard Dash and 600 Yard Run/Walk) was conducted on 50 male students ranging between 18 to 25 years students of physical education (N=25) and Non-physical education (N=25).

**Statistical Technique:** To compare the mean differences between physical education and Non-physical students ‘t’ test was computed with the help of SPSS Software. The level of significance chosen was .05. There were significant differences obtained between physical education and Non-physical education students. The finding reveals that physical education students are superior in their physical fitness than their counterparts.

**Keywords:** Physical Fitness, Shuttle Run and Standing Broad Jump

### Introduction

Fitness has been a concern of man from pre-historic time. Primitive man was either fit for fighting or was subdued by others. Physical fitness as a term refers to the total dynamic physiological state of the individual, ranging on a continuum from optimal human performance to severe debilitation and death. Physical fitness is made up of a series of components, for example, strength, endurance, flexibility and so on. The development of physical fitness is an important concern of the American alliance for health, physical education, recreation and dance (AAHPERD), which has categorized fitness components into two categories, health-related and motor skill-related. Physical fitness is the ability of the body to adopt and recover from strenuous exercise. It is alertness without undue fatigue, sufficient energy for unforeseen emergencies. Often people think only of fitness when the term “fitness is used but the above definition implies that one should view physical fitness as an only part of total fitness. A person is considered to be fit for particular task or activity when he can accomplish. It was a reasonable degree of efficiency without undue fatigue and recovery from the effect of exertion. Physical fitness is the capacity to carry out, reasonably well, various forms and includes qualities importance to the individual’ health and wellbeing. The basic moments like running, jumping, climbing, throwing, lifting etc., require specific physical attributes such as muscular strength, muscular endurance, cardio-respiratory endurance, and strength, balance and co-ordination. Therefore this present study was an effort to investigate the physical fitness status between physical education and Non-physical education students.

### Methodology

All the students were tested for the physical fitness. The physical fitness variables were measured by using AAHPERED youth fitness battery. In this current study, a sample of 50 male students ranging between 18 to 25 years from physical education (25 students) and Non-physical education students (25 students) of S.G.G.S. khalsa College Mahilpur was taken as subjects for this study. AAPER Youth Physical Fitness Test Battery (1976) was used to measure Physical Fitness Status of the subjects. The test battery consist these six test items: Pull-up, Sit-up, Shuttle Run, Standing Broad Jump, 50 yard Dash and 600 Yard Run/Walk. To compare the mean differences between the physical education and Non-physical education students “t” test was applied. The level of significance chosen was 0.05.

### Results and Discussion

The data collected by adopting above procedure were statistically analyzed. The results are presented in the following tables. For testing the significance in Pull-up, Sit-up, Shuttle Run, Standing Broad Jump, 50 yard Dash and 600 Yard Run/Walk, the level of significance chosen was .05. The comparison between the physical and Non-physical education students for physical fitness variables: Pull-up, Sit-up, Shuttle Run, Standing Broad Jump, 50 yard Dash and 600 Yard Run/Walk were statistically analyzed using “t” test. The data pertaining to the same is presented in Table 1.

**Table 1:** Comparison of Scores of Physical Fitness component of athletes and non-athletes

	Group Statistics					t-test for Equality of Means	
	group	N	Mean	Std. Deviation	Std. Error Mean	t	df
Pullups	nsp	25	11.0000	2.73861	.54772	-6.929	48
	sp	25	18.5600	4.71770	.94354		
Situps	nsp	25	19.9200	3.34066	.66813	4.560*	48
	sp	25	24.2400	3.35758	.67152		

S_R	nsp	25	9.6796	.45879	.09176	9.456*	48
	sp	25	7.9360	.79966	.15993		
SBJ	nsp	25	6.4708	.88603	.17721	-4.480	48
	sp	25	8.0660	1.54420	.30884		
fifty_yard	nsp	25	8.3492	1.16389	.23278	4.298*	48
	sp	25	7.2044	.64753	.12951		
sixhundred_Yard	nsp	25	126.1024	22.13608	4.42722	7.270*	48
	sp	25	91.5164	8.70809	1.74162		

\*Significant at .05 level  
 $t^{*.05}(48) = 1.645$

It is depicted from the Table 1 that the calculated “t” values in case of athletes and non-athletes on Sit-up, shuttle run, 50 yard Dash and 600 Yard Run/Walk were found to be statistically significant as the value obtained were 4.560 (Sit-Up), 9.456 (shuttle run), 4.298 (50 yard Dash), 7.270 (600 Yard Run/Walk) whereas, the tabulated value was 1.645 which 48 degrees of freedom at .05 level of significant.

### Conclusions

In the light of the findings and limitations of the present study the following conclusions were drawn: There were significant differences obtained on Sit-up, shuttle run, 50 yard Dash and 600 Yard Run/Walk. There were no significant differences obtained on pull ups and standing broad jump of athletes and non-athletes.

### References

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