



## A Comparative study on AAHPER youth fitness test norms with percentile Norms of 13 years boys of Rajasthan

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### Abstract

Physical fitness is the ability to perform daily tasks with greater efficiency without undue fatigue and with ample reserve energy to enjoy leisure time activities and to meet the unforeseen emergencies. The fitness is also an important aspects the field of physical education. There are so many tests through which the fitness of an individual can be measured. Among the test AAHPER youth fitness test one of them but the norms of the test specially made with the American students. So in the present study the researcher try to construct a norms of AAHPER youth fitness test for 13 years boys. For the study two hundred fifty boys were selected as the subjects from school of Rajasthan State and they were gone through six test items of AAHPER youth fitness test. The test is conducted through standard procedure. After collecting the data with the help of standard statistical procedure. Lastly the researcher concludes that constructed AAHPER Youth fitness test norms are more consistent than original AAHPER Youth fitness test norms. In constructed are more centrally (50%) distributed than the original norms of AAHPER Youth fitness test.

**Keywords:** Physical fitness, Percentile norms.

### Introduction

Physical fitness has been considered as one of the most important aspects of human existence. A sound body and an active mind are interrelated. This relationship has given respectability to physical education. No education is complete without good physical health as it makes a person efficient and fit to work in any area of human activity. The concept of physical fitness has become a point of attraction in our country. The Government and the people are becoming aware of its importance in present day living because physical fitness underly productive power of its citizens and a high level of efficiency in techniques and tactics in most of the sports are not possible without a high level of physical fitness.

The AAPHER youth fitness test project represented in the first attempt by the physical education profession to establish national norms. The test battery was originally developed in 1957 by special committee of the AAPHER recreation

council. The youth fitness test now consists of six items, for both boys and girls of age group 10-17 and college men and women.

The norms are values considered to be representation of a specified population. Norms are usually based on age, grade, height, weight or various combinations of these characteristics.

Physical fitness is an important part of total fitness. Basic fitness can be classified in four main components: Strength, speed, stamina and flexibility. However, exercise scientist have identified nine components that comprise the definition of fitness, that components were

Strength, Power, Agility Balance, Flexibility, Local Muscle Endurance, Cardiovascular Endurance, Strength Endurance Co-ordination

### **AAHPER Youth Fitness Test**

In 1958, the research committee of American Alliance for Health, Physical Education and Recreation constructed a Youth Physical Fitness Test Battery for the motion wide use for assessing the fitness level of American Youth (Hunsicker, 1958). Subsequently extensive data were collected and the national norms were revised (AAHPER, 1965)

The following table represents the test items of presently used AAHPER youth fitness test battery.

AAHPER Youth fitness test items along with the elements tested by each item.

S. No.	Test Items	Elements Tested
1.	Pull-ups (boys)	Muscular Strength (Dynamic and Muscular) Endurance of Arm and Shoulders.
2.	Bent Knee sit ups	Muscular Strength and Endurance (Trunk)
3.	4x10 m. shuttle Run	Speed and Agility
4.	Standing Broad Jump	Explosive strength of Legs (Power)
5.	50 M. Dash	Speed of Lower Extremities and Explosive strength
6.	600 M. Run/walk	Cardio-vascular Endurance

The purpose of the present study is to observe the difference between AAHPER youth fitness norms and Constructed percentile norms of AAHPER youth fitness tests and parameter as a whole.

### Statistical Technique

In this study the researcher make an attempt to describe the methods to collect the information regarding the subject procedure or collection information regarding the study undertaken. Two Hundred Fifty boys of 13 years age, (ranging from 12.5 years to 13.5 years) were selected randomly from Rajasthan state.

### Analysis of Data

After collecting the data to reach into the result and conclusion the following statistical calculation were adopted mean and standard division as descriptive statistics and 't' value (mean difference) were calculated as comparative statistics.

**Table 1:** Raw scores of AAHPER Youth fitness test and their ranges of two norms-

	50 Yard Dash	Pull up	Bent Knee Sit up	SBJ	10x4 Yard Shuttle run	600 Yard run
Mean	9.28	4.00	12.00	150.00	13.8400	204.00
S.D	1.15883	2.163	6.094	15.313	1.67866	30.683
AAHPER norms range	2-85	20-90	2-92	7.5-91.0	3-80	5-96
Constructed Norms range	0.81- 96.2	9.01-99.34	3.6-98.12	1.9-99.2	0.37-96.4	1.2-99.23

It appears from the table no-1 that the mean of AAHPER Youth Fitness test parameters, i.e 50 Yard Dash, Pull up, Bent Knee Sit up, SBJ 10x4 Yard Shuttle run 600 Yard run were 9.28, 4.00, 12.00, 150.00, 13.84 and 204.00 respectively, and S.D were 1.15883, 2.163, 6.094, 15.313, 1.67866 and 30.683.

In the similar way the range of percentile norms of AAHPER Youth fitness test parameters were 2-85, 20-90, 2-92, 7.5-91.0, 3-80 and 5-96 respectively. The range of constructed norms were 0.81- 96.2, 9.01-99.34, 3.6-98.12, 1.9-99.2, 0.37-96.4 and 1.2-99.23 respectively.

### **Comparison of Total AAHPER Youth Fitness Test Norms and Constructed AAHPER Youth Fitness Test Norms**

Represents the AAHPER Youth fitness test norms and Constructed test norms of all Test Battery and their comparison---

**Table 2**

	<b>AAHPAR norms</b>	<b>Constructed norms</b>	<b>t value</b>
Mean	39.553	61.525	5.125
S.D.	12.397	21.034	

#### **T value at 0.05 level =1.99 df= 98**

From the table-2, it appears that the mean and S.D of AAHPER norms were 39.553 and 12.397 the Constructed norms were 61.525 and 21.034.

Comparing the mean value of two different norms it was observed that there were difference in values exist. To observe that the significant difference between means t was calculated and found to be 5.125 which was significant.

From the above discussions it may be conclude that the Constructed AAHPER Youth fitness test norms are more consistent than original AAHPER youth fitness test norms. In Constructed norms were more centrally (50%) distributed than the original norms of AAHPER Youth fitness test.

#### **Discussion**

From the result of the study the researcher conclude that Constructed AAHPER Youth fitness test norms are more consistent than original AAHPER Youth fitness test norms. In Constructed are more centrally (50%) distributed than the original norms of AAHPER Youth fitness test.



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