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A Comperative study on AAHPER youth fitness test norms with a newly constructed percentile Norms of 13 years boys

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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 one hundred thirteen years boys were selected as the subjects from school of Nadia district and they were gone through six test items of AAHPER youth fitness test. All the test are conducted through standard procedure. After collecting the data with the help of standard statistical procedure. Lastly the researcher conclude that newly constructed AAHPER Youth fitness test norms are more consistent than original AAHPER Youth fitness test norms. In newly constructed are more centrally (50%) distributed than the original norms of AAHPER Youth fitness test.

Keywords: Physical fitness, Percentile norms.

1. Introduction
Fitness is one of the most important aspects in the field of Physical Education. The need and importance of fitness was developed from the Greek & Roman period, the Dark Age, Renaissance, revival of Olympic World War etc.

Kipling Said ……"Nations have passed away and left not races
And history gives the naked cause of it one single, simple reason in all cases
They fell because their people were not fit."

- The word fitness is the ability of the body to meet the demands of the environment.
- Fitness not only years to life but life to one's years.
- 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

1.1. Physical Fitness
"One's ability to perform daily tasks with efficiency, without undue fatigue and with ample reserve to enjoy vigorous leisure – time activities and to meet unforeseen emergencies … and demonstration of physical activities traits and capacities that are consistent with minimal risk of developing hypo kinetic disease."

New concept of Physical Fitness –

More recently physical fitness have been dichotomized into –

a. Health related fitness
b. Performance or skill related fitness.

In different time many physical educator have been describe physical fitness test. Here we consider AAHPER youth fitness test.

1.2. 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.

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

Sl. No.	Test Item	Element Tested
i.	Pull ups (boys) or Flexed Arm Hang (Girls)	Muscular strength (Dynamic) and Muscular Endurance of Arm and Shoulders.
ii.	Bent-knee sit ups	Muscular Strength and Endurance (Trunk)
iii.	Shuttle Run (10x4 yards)	Speed and Agility
iv.	Standing Broad Jump	Explosive strength of legs.
v.	50 Yard Dash	Speed of Lower Extremities and Explosive strength.
vi.	600 yard Run-walk (10-12 years) 9 min run walk or 1 mile or 12 min. Run-walk or 1.5 Mile Run walk (Age 13 and above)	Cardio-vascular Endurance

1.3. Purpose of the Study

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

2. Methodology and Materials

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.

2.1. The Subject: Hundred boys of 13 years age, (ranging from 12.5 years to 13.5 years) were selected randomly from two schools of Nadia Districts.

2.2. Equipment for Collection of Data

Very little equipment war required for the test, which were –

(i) Measuring tape. (ii) Lime dust. (iii) Wooden block ($2^{//}$ x $2^{//}$x $4^{//}$).

(iv) A wooden or metal bar approx $1.5^{//}$ in diameter a piece of pipe. (v) Stop watch.

2.3. Formula used for Satisfied Analysis

After collecting the data to reach into the result and conclusion the following statistical calculation were adopted mean and standard division (6) as descriptive statistics and 't' value (mean difference) were calculated as comparative statistics.

3. Results and Discussion

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

	50 Yard Dash	SBJ	Sit up	Pull up	10x4 Yard Shuttle run	600 Yard run
Mean	8.44	69	29.81	3.29	11.05	133.89
S.D	0.72	6.275	8.45	2.39	0.769	15.427
AAHPER norms range	2-85	7.5-91.0	2-92	20-90	3-80	5-96
Newly constructed norms range	0.75-98.3	1.1-98.7	3.2-99.02	8.28-98.73	0.19-94.8	0.046-98.12

It appears from the table no-1 that the mean of AAHPER Youth Fitness test parameters, i.e 50 Yard Dash, SBJ, Sit up, Pull up, 10x4 Yard Shuttle run 600 Yard run were 8.44, 69, 29.81, 3.29, 11.05 and 133.89 respectively, and S.D were 0.72, 6.275, 8.45, 2.39, 0.769 and 15.427.

In the similar way the range of percentile norms of AAHPER Youth fitness test parameters were (2-85), (7.5-91), (2-92), (20-90), (3-80) and (5-96) respectively. The range of newly constructed norms were 0(.75-98.3), (1, 1-98.7), (3.2-99.02), (8.28-98.73), (0.19-94.8) and (0.046-98.12) respectively.

3.1. 50 Yard Dash

Table -2, Represents the AAHPER Youth fitness test norms and newly constructed test norms of 50 Yard Dash and their comparison---

	AAHPER norms	Newly constructed norms	t value
mean	23.97	49.709	2.432
S.D	18.35	29.276	

df =98, t value at 0.05 level = 1.99

From the table-2, it appears that the mean and S.D of AAHPER norms were 23.97and18.35 and the newly constructed norms were 49.709 and 29.276

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 2.43 which was significant at 0.05 level. So the newly constructed norms was shown higher values and more consistent than the AAHPER norms.

3.2. Standing Broad Jump

Table -3, Represents the AAHPER Youth fitness test norms and newly constructed test norms of standing broad jump and their comparison---

	AAHPER norms	Newly constructed norms	t value
mean	53.47	54.027	0.4377*
S.D	21.095	28.585	

df = 98, t value at 0.05 level = 1.99 *not significant

From the table-2, it appears that the mean and S.D of AAHPER norms were 53.47and21.095 and the newly constructed norms were 54.027 and 28.585

Compared 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 0.4377 which was not significant. So in this particular item the researcher found no difference between two norms newly constructed norms and AAHPER norms both are consistent.

3.3. Sit Ups

Table 4: Represents the AAHPER Youth fitness test norms and newly constructed test norms of Sit ups and their comparison-

	AAHPAR norms	Newly constructed norms	t value
mean	48.521	27.575	5.455
S.D	29.07	22.384	

df 98, t value at 0.05 levels.=1.99

From the table-4, it appears that the mean and S.D of AAHPER norms were 48.521and 29.07 and the newly constructed norms were 27.575 and 22.384

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 5.455 which was significant at 0.05 level. So the newly constructed norms was shown higher values and more consistent than the AAHPER norms.

3.4. Pull Ups

Table 5: Represents the AAHPER Youth fitness test norms and newly constructed test norms of Pull ups and their comparison---

	AAHPAR norms	Newly constructed norms	t value
Mean	53.5	48.036	0.069*
S.D	21.484	29.749	

df= 98 t value at 0.05 level *Not significant

From the table-5, it appears that the mean and S.D of AAHPER norms were 53.5and21.484 and the newly constructed norms were 48.036 and 29.749

Comparing the mean value of two different norms it was observed that there were no difference in values exist. To observe that the significant difference between means t was calculated and found to be 0.069which was not significant at 0.05 level. So in this particular item the researcher found no difference between two norms newly constructed norms and AAHPER norms both are consistent.

3.5. 10x4 Yard Shuttle Run

Table 6: Represents the AAHPER Youth fitness test norms and newly constructed test norms of 10X4 Yard shuttle run and their comparison---

	AAHPAR norms	Newly constructed norms	t value
mean	32.02	51.904	2.351
S.D	20.015	28.50	

t value at 0.05 levels=1.99, df=98

From the table-6, it appears that the mean and S.D of AAHPER norms were 32.02 and 20.015 and the newly constructed norms were 51.904 and 28.50

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 2.351 which was highly significant at 0.05 level. So the newly constructed norms was shown higher values and more consistent than the AAHPER norms

3.6. 600 Yard Run

Table 7: Represents the AAHPER Youth fitness test norms and newly constructed test norms of 600 Yard run and their comparison-

	AAHPAR norms	Newly constructed norms	t value
Mean (s)	46.787	49.944	0.397
S.D (s)	23.576	28.858	

t value at 0.05 level = 1.99, df=98

From the table-7, it appears that the mean and S.D of AAHPER norms were 46.787and23.576 and the newly constructed norms were 49.944 and 28.858.

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 0.397 which was significant at 0.05 level. So the newly constructed norms was shown higher values and more consistent than the AAHPER norms.

3.7. Comparison of Total Aahper Youth Fitness Test Norms and Newly Constructed Aahper Youth Fitness Test Norms

Table 8: Represents the AAHPER Youth fitness test norms and newly constructed test norms of all parameters and their comparison---

	AAHPAR norms	Newly constructed norms	t value
Mean	39.553	50.357	3.855
S.D	12.397	17.064	

T value at 0.05 level =1.99 df= 98

From the table-8, it appears that the mean and S.D of AAHPER norms were 39.553 and 12.397 the newly constructed norms were 50.375 and 17.064.

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 3.855 which was significant.

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

4. Conclusion

In this study the following conclusion are drawn

1. 50Yard dash, the newly constructed norms is shown higher values and more consistent than the AAHPER youth fitness test original norms.
2. Standing broad jump, the researcher find and AAHPER youth fitness test therefore both norms are consistent.
3. Sit ups, the newly constructed norms is shown higher values and more consistent than the AAHPER youth fitness test original norms.
4. Pull ups, in this case the researcher find no difference between two norms newly constructed AAHPER youth fitness test norms both are consistent.
5. 10 x 4 Yard shuttle run the newly constructed norms is shown higher values and more consistent than the AAHPER youth fitness test norms.
6. 600 Yard Run –the both norms are consistent.

Lastly the researcher conclude that newly constructed AAHPER Youth fitness test norms are more consistent than original AAHPER Youth fitness test norms. In newly constructed are more centrally (50%) distributed than the original norms of AAHPER Youth fitness test.

5. Reference and Materials

1. Kansal, Devender K. Test and Measurement in Sports and Physical Education. New Delhi: D.V.S. Publications, 262-267.
2. Barrow, Harold M, McGee, Rosemary. A Practical Approach to Measurement in Physical Education. Philadelphia: Lea & Febiger, Third Edition, 1979.
3. Mangal SK. Statistics in Psychology and Education. New Delhi: Tata Mc Graw-Hill Publishing Company Limited.
4. Garrett, Henry E, Woodworth RS. Statistics in Psychology and Education. New Delhi: Paragon International Publishers, Twelfth Indian Reprint, 2009.

Website: www.youthfiyness test (wikipedia.org)