

Construction of physical fitness norms for School Students

Dr. Harbans Lal Godara

Abstract

The purpose of the study was to construct the norms for school students of Kendriya Vidyalaya STPS Suratgarh. Boys playing handball from last four year i.e. from 2008 to 2012 were chosen as subjects. Since the purpose of this study was to construct physical fitness norms for School Student of Kendriya Vidyalaya sangathan in age group of 13. From the total population of schools the twenty students were selected. All the students of the Vidyalaya were contacted and the purpose of the study was explained to them. All of them readily agreed to extend full cooperation and ensured that students would be made available for conducting the AAHPER Youth Fitness test as and when required.

From the records of the students enrolled in classes eighth of the school, those students who has been already completed 13. The selection of age groups of 13, was also based on the recommendation by Physical Education Experts of Rajasthan University Jaipur.

The norms were constructed by using percentile. The norms were prepared for each items of physical fitness.

Keywords: Physical fitness, percentile scale, AAPHER

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.

The purpose of this study was to construct physical fitness norms for Handball players of Sri Ganganagar in age of 13 or can also be used by other physical education teachers of various schools for selection of students to play handball game.

Methodology

So, keeping the above criteria in mind, the various components of physical fitness, administrative feasibility of tests and economy of time and cost involved in this research project, the AAHPER youth fitness test was selected for the purpose of developing norms. The test has the following test items.

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

Statistical Technique

The Percentile scale was used to construct norms for each of the physical fitness test items for boys. In order to construct scales mean and standard deviations were used as statistical tool for analyzing the data.

Analysis of the Data

The mean and standard deviation have been calculated for each of the test item. The mean and standard deviations calculated separately for each event i.e. 50 mts run, standing broad jump, medicine ball throw, 600 mts run I walk and shuttle run are presented in Table -1 & 2

Table 1: Mean & Standard Deviation of Each Physical Fitness Test Items

Test Item	Mean	Standard Deviation
Pull Ups	3.95	2.163
Bent Knee sit up	12.09	6.094
Shuttle run	14.07	1.676
Standing broad jump	143.43	15.313
50mtsrun	9.37	1.159
600 mts run/walk	206.29	30.683

The norms prepared using percentile scale is presented in Table -2.

Table 2: Norms for Physical Fitness Test Items by using percentile Scale

Points	50 Mts Run	Pull ups	Bent Knee Sit-ups	Standing Broad Jump	Shuttle Run	600 Mtrs. Run/Walk
0
1	7.24	0	0	100	10.80	140
5	7.71	0	1	120	11.36	159
10	8.00	1	2	120	12.01	170
15	8.24	2	5	123	12.40	175
20	8.36	2	8	125	12.49	180
25	8.56	2	9	130	12.90	185
30	8.74	2	10	140	13.00	190
35	8.90	3	10	142	13.20	190
40	9.04	3	11	145	13.56	195
45	9.17	4	12	147	13.73	199
50	9.28	4	12	150	13.84	204
55	9.47	5	14	150	14.10	210
60	9.56	5	14	152	14.25	214
65	9.63	5	15	152	15.00	220
70	9.78	5	15	152	15.10	222
75	9.89	5	16	154	15.20	226
80	10.12	6	16	154	15.52	230
85	10.35	6	18	156	16.10	240
90	10.89	6	19	158	16.19	246
95	11.53	8	22	162	17.00	256
100	14.00	10	30	195	18.56	297

Summary

Keeping in mind, the various components of physical fitness, administrative feasibility of tests and economy of time and cost involved in this research project, five physical fitness test items were chosen. The test was administered under the supervision of qualified person in order to minimize the error. The data was collected on subjects during their fitness test. The norms were constructed by using percentile scale. The norms were prepared for boys for each item of physical fitness.

Conclusions

The normative scales constructed in the study may be used to evaluate the physical fitness of Kendriya Vidyalaya handball's players. The scholar has computed percentile scale for boys which may be modified of the few years depending upon the progress made by the physical fitness program in these physical fitness items.



References

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