



A COMPARATIVE STUDY OF HEALTH RELATED PHYSICAL FITNESS OF
 MAHARASHTRA STATE AND C.B.S.C. BOARD SCHOOL BOYS STUDENTS
 IN RURAL AND URBAN REGIONS OF NAGPUR DISTRICT

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Abstract: Although it is generally agreed that Physical Fitness is an important part of the normal growth and development of a child. Fitness is constantly changing and is influenced by many factors. Health is an important input in any process of development. An unhealthy society cannot be a society of high achievers and cannot make a nation great. The objective of the study is to find out the Health related Physical Fitness of school going children of different board to suggest means to improve health related physical fitness. Three hundred boys of 12 – 14 years age group will be Randomly Selected as subjects of this study from each board. Their age records will be collected from school records. AAHPER (1987) Health-Related Physical Fitness Test battery. After data was collected suitable Statistical Procedure. Mean and Standard Deviation will be calculated and the effect will be made with the help of ‘t’ ratio. The level of significance for this study will be 0.05.

Introduction:

Although it is generally agreed that Physical Fitness is an important part of the normal growth and development of a child. Fitness is constantly changing and is influenced by many factors. Fitness is based upon a solid foundation of good health. Healthful living implies freedom from disease, enough strength, endurance, skill, agility, capacity to meet the daily demands and sufficient reserves to meet extra ordinary stresses without undue fatigue, besides mental development and emotional balance according to the maturity level of the individual. Physical fitness is one of the most important things in life and one of the most valuable assets one can ever have.

Health is one of the pre-requisites for a happy, well-balanced life. Health is an important input in any process of development. An unhealthy society cannot be a society of high achievers and cannot make a nation great. Health is a continuum from maximally dependent and incapacitating conditions to a maximally self-reliant blissful life. “Etymologically” the word “Health” is derived from the English term meaning “Whole” which in turn means a well-integrated holistic living state. The

corresponding term in Sanskrit is ‘SWASTHYA’ which means relying on one’s own self of blissful condition (Rao, 1999).

Physical Fitness can be divided into two areas: Health-Related Physical Fitness and Skill-Related Physical Fitness (AAHPERD, 1980; Corbin and Lindsey. 1988).

Health related fitness is defined as the ability to perform strenuous activity without excessive fatigue showing evidence of traits that limb the risks of developing diseases and disorders, which affect a person’s functional capacity. Components of health-related physical fitness are identified as muscular strength, endurance, flexibility, cardio respiratory endurance and body composition. However, the degree of development of each varies with the type of physical activity (Sademtop, 1994).

The Maharashtra State Board of Secondary and Higher Secondary Education is a statutory and autonomous body established under the Maharashtra Secondary Boards Act 1965 (amended in 1977). The Maharashtra State Board of Secondary Education, Pune came into existence on January 1, 1966 to regulate certain matters pertaining to secondary education in the state of Maharashtra,

India. The act was amended in 1977 and the name of the Board changed to its present name - The Maharashtra State Board of Secondary and Higher Secondary Education.

In India, a number of scholars have made attempts to assess the physical fitness of boys and girls of different age groups on regional basis but the scholar could find very studies related to health related fitness of school going population. In today's changing pattern of human life the latest concept of health-related fitness seems to be more relevant.

Objectives of the study:

The objective of the study is to find out the Health related Physical Fitness of school going boys (age group 12 – 14) of different board and regions of Nagpur District to suggest means to improve health related physical fitness.

Methodology:

Three hundred boys of 12 – 14 years age group will be Randomly Selected as subjects of this study from each board and regions. Their age records will be collected from school records. AAHPER (1987) Health-Related Physical Fitness Test battery consisting of following four test items will be used to assess the Health-related physical fitness for boys.

1. 1.5 Mile Run and Walk Test to Measure Cardio-Respiratory Endurance.
2. Skin fold measurements: to measure body composition (leanness/fitness)
3. Modified Sit-ups: to measure abdominal Strength and Endurance
4. Sit and Reach test: to measure the Flexibility of the back and leg (hamstring) muscles to measure the Flexibility of the Back and Leg (hamstring) muscles.

After data was collected by the investigator with the help of assistants was analyzed with the help of suitable Statistical Procedure. Mean and Standard Deviation will be calculated and the effect will be made with the help of 't' ratio. The level of significance for this study will be 0.05.

Analysis of data and inter pretation:

Table No. 1: Comparison of 1.5 mile run/walk among rural boys and urban boys

Variable	Rural Boys (n=150)		Urban Boys (n=150)		't'	Level of Significance
	Mean	S.D	Mean	S.D		
1.5 mile run/walk	15.57		1.80		15.781.06	NS

't' value at NS=not significant. .05 = 1.96 and .01= 2.57

Table No. 2: Comparison of modified sit ups among rural boys and urban boys

Variable	Rural Boys (n=150)		Urban Boys (n=150)		't'	Level of Significance
	Mean	S.D.	Mean	S.D.		
Modified sit ups	25.36	8.70	26.86	8.55	1.49	NS

't' value at NS= not significant,.05 = 1.96 and .01= 2.57

Table No. 3: Comparison of sit and reach among rural boys and urban boys

Variable	Rural Boys (n=150)		Urban Boys (n=150)		't'	Level of Significance
	Mean	S.D.	Mean	S.D.		
Sit and reach	9.46	2.01	9.67	1.94	0.93	NS

't' value at .05 = 1.96 and .01= 2.57

Table No.4: Comparison of triceps skinfold among rural boys and urban boys

Variable	Rural Boys (n=150)		Urban Boys (n=150)		't'	Level of Significance
	Mean	S.D.	Mean	S.D.		
Tricep skinfold	12.01	5.29	12.17	5.16	0.26	NS

't' value at NS= not significant, .05 = 1.96 and .01= 2.57

Table No. 5: Comparison of subscapular skinfold among rural boys and urban boys

Variable	Rural Boys (n=150)		Urban Boys (n=150)		't'	Level of Significance
	Mean	S.D.	Mean	S.D.		
Subscapular - skinfold	11.99	5.83	12.50	5.25	0.79	NS

't' value at NS= not significant, .05 = 1.96 and .01= 2.57

Table No. 6 : Comparison of total skin fold among rural boys and urban boys

Variable	Rural Boys (n=150)		Urban Boys (n=150)		't'	Level of Significance
	Mean	S.D.	Mean	S.D.		
Total skin fold	24.00	10.65	24.67	10.05	0.56	NS

't' value at NS= Not significant, .05 = 1.96 and .01= 2.57

Conclusions:

1. No significant difference has been found on one and half mile run while comparing rural and urban boys together.
2. There was no significant difference has been observed on sit up among rural and urban boys.
3. Rural and urban boys did not show any difference on sit and reach test i.e. flexibility.
4. No significant difference has been found of triceps skinfold between rural and urban boys.
5. Rural and urban boys did not show significant difference on subscapular skinfold.
6. No significant difference has been observed on total skinfold among rural and urban boys.

Recommendations:

- This type of study may be possible on college students studying in rural and urban areas.
- The comparison of health related physical fitness may be possible on older people living in urban and rural areas.

References:

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