



**A Comparative Study of Selected Health Related Physical Fitness
between National and State level Judo Players.**

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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 this comparative study is to find out the Health related Physical Fitness of school going girls children of different board to suggest means to improve health related physical fitness. The data is gathered from total 300 girls students randomly selected of Maharashtra State and C.B.S.C. board School where 150 students of urban region and 150 students from Wardha district as subjects of this study. The age group of students are ranged from 13 – 15 years will be collected from school records. Components of health-related physical fitness are identified as muscular strength, endurance, flexibility, cardio respiratory endurance and body composition. The 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 girls. 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. Conclusion of this study is there was no significant difference has been found on one and half mile run between rural and urban girls ('t' value at .05 = 1.96 and .01= 2.57), Rural girls found more abdominal strength as compared to urban girls (.05 = 1.96 and .01= 2.57), No significant difference has been observed on flexibility among rural and urban girls ('t' value at .05 = 1.96 and .01= 2.57), Urban girls have shown more triceps skinfold at significant level as compared to rural girls ('t' value at .05 = 1.96 and .01= 2.57), Urban girls have found to be more fat on subscapular skinfold at significant level as compared to rural girls ('t' value at .05 = 1.96 and .01= 2.57) and There was significant difference has been found by the researcher on total skinfold. Urban girls found to be more fat as compared to rural girls ('t' value at .05 = 1.96 and .01= 2.57).

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).

Health related fitness is defined as the ability to perform strenuous activity without excessive fatigue showing evidence of traits that limit 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 girls (age group 12 – 14) of different board and regions of Nagpur District to suggest means to improve health related physical fitness.

Methodology

Three hundred girls of 13 – 15 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 girls.

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.

Objective:

The objective of the study is to find out the Health related Physical Fitness of school going 13 – 15 years girls of rural and urban group and to suggest means to improve health related physical fitness.

Selection Of Subjects:

Three hundred girls were randomly selected as subjects of this study from rural and urban area of Nagpur district. Their age records were collected from school records. There after the three hundred samples were divided into two groups 150 sample in rural girls & 150 urban girls Group.

Administration Of Test And Collection Of Data:

AAHPER (1987) Health-related Physical Fitness Test battery consisting of following four test items will be used to assess the Health-related physical fitness of Boys and Girls.

1. 1.5 Mile Run and Walk Test: it measure cardio-respiratory endurance.
2. Skin fold measurements: to measure body composition (leanness/fatness).
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

Analysis Of Data And Inter Pretation:

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

Variable	Rural Girls (n=150)		Urban Girls (n=150)		t'	Level of Significance
	Mean	S.D.	Mean	S.D.		
1.5 mile run/walk	16.19	2.02	16.50	1.77	1.43	NS

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

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

Variable	Rural Girls (n=150)		Urban Girls (n=150)		t'	Level of Significance
	Mean	S.D.	Mean	S.D.		
Modified sit ups	24.70	8.25	19.20	6.93	6.24	0.01

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

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

Variable	Rural Girls (n=150)		Urban Girls (n=150)		t'	Level of Significance
	Mean	S.D.	Mean	S.D.		
Sit and reach	9.73	2.12	9.41	2.20	1.27	NS

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

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

Variable	Rural Girls (n=150)		Urban Girls (n=150)		t'	Level of Significance
	Mean	S.D.	Mean	S.D.		
Triceps skinfold	13.59	5.54	15.27	5.43	2.64	.01

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

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

Variable	Rural Girls (n=150)		Urban Girls (n=150)		t'	Level of Significance
	Mean	S.D.	Mean	S.D.		
Subscapular skinfold	13.74	6.28	16.82	6.18	4.29	.01

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

Table No. 6. Comparison of total skinfold among rural girls and urban girls:

Variable	Rural Girls (n=150)		Urban Girls (n=150)		t'	Level of Significance
	Mean	S.D.	Mean	S.D.		
Total skinfold	27.34	11.36	32.10	11.09	3.67	.01

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

Conclusions:

1. There was no significant difference has been found on one and half mile run between rural and urban girls.
2. Rural girls found more abdominal strength as compared to urban girls.
3. No significant difference has been observed on flexibility among rural and urban girls.
4. Urban girls have shown more triceps skinfold at significant level as compared to rural girls.
5. Urban girls have found to be more fat on subscapular skinfold at significant level as compared to rural girls.
6. There was significant difference has been found by the researcher on total skinfold. Urban girls found to be more fat as compared to rural girls.

Recommendations:

1. This type of study may be possible on college girl's students studying in rural and urban areas.
2. The comparison of health related physical fitness may be possible on older women's living in urban and rural areas.
3. The study of Health related physical fitness may be possible among different culture, socio economic status and different life style of girls.
4. This type of study may be possible on the basis of occupation of the women's.
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