#### INTERNATIONAL JOURNAL OF RESEARCHES IN SOCIAL SCIENCES AND INFORMATION STUDIES © VISHWASHANTI MULTIPURPOSE SOCIETY (Global Peace Multipurpose Society) R. No.MH-659/13(N)

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# ACOMPARATIVESTUDYOFHEALTHRELATED PHYSICALFITNESS Meshram V.

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**Abstract:** The intention of this study was to know the Health – Related Physical Fitness condition of girls and to compare various Physical Fitness Test of Rural and Urban Region..(school going girls) Total Three hundred subjects were randomly selected for the purpose of this study. One Hundred Fifty girls Rural Region and One Hundred Fifty girls Urban Region of 12-15 years age group were selected from the Maharashtra State Board School. (Marathi Medium). Physical parameters like abdominal strength and endurance, cardio-respiratory, flexibility and body composition conditions like back and leg ratio, body mass index, skin fold thickness. Various related tests were administered and data was gathered from various schools, institutions and colleges for the purpose of this study. The collected data was analyzed with the help of suitable statistical procedures and 't' test was applied to make comparison between Rural and Urban Region data scores. The level of significance was 0.05 level for this study.

Keywords: Physical Fitness Test, Physical Education Program, Rural and Urban Region. (School going girls).

#### Introduction:

Although it is generally agreed that physical fitness is an important part of the normal growth and development of a child, a generic definition regarding the precise nature of physical fitness has not been universally accepted Through research and scholarly inquiry, it is clear that the multidimensional characteristics of physical fitness can be divided into two areas: health-related physical fitness and skillrelated physical fitness (AAHPERD, 1980; Corbin and Lindsey. 1988). This departure from the traditional notion of fitness has resulted in a clear differentiation between physical fitness related to functional health and well-being and physical performance related primarily to athletic ability. A practitioner must be aware that this definitional distinction has curricular implications. Understanding the distinctive features of health-related and skill-related fitness and the components of each will help physical educators develop program foals and performance-based student objectives and measure progress toward those goals.

#### Objective

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

#### Delimitations

- The study was delimited to the school students of 12 15 years of age.
- 2) 2. The number of students was delimited to 150 students from rural area and
- 3) 150 students from urban area of Nagpur district..
- 4) 3. The study was further delimited to following items of AAHPER Health

#### Significance of the Study

 The study would provide the norms of health related physical fitness for School
girls of various area.

• The study would also help to evaluate the present status of health related Physical • Fitness of the girls in the age group of 12 – 15 years.

• The study would unfold the phenomena of physical fitness development among

 $\circ~$  girls of middle and higher secondary schools

• The result of the study may also provide impetus to in physical education

Program in Schools of Nagpur District.

# Statement of the hypothesis:

There would no significance difference in Health Related Physical Fitness of Rural and Urban aria in Nagpur District .

# Methodology

Here selection of subjects, selection of variables, administration of tests collection of data and statistical analysis of data has been explained.

# 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.

# Selection of subjects

Three hundred girls were randomly selected as subjects of this study from each group. Their age records were collected from school records. The breakup of the subjects has been presented.

There after the 300 samples were divided into two groups. 150 sample in Rural Aria & 150 sample in Urban Aria .

# Statistical procedure:

The collected data was analyzed with the help of suitable Statistical Procedures and 't' test was applied to make comparison between Rural and Urban Aria data scores. The level of significance was 0.05 level for this study.

#### Finding :

The findings of each of the parameters like Cardio-Respiratory Endurance, Skinfold Thickness, Abdominal Strength and Flexibility are presented in Table-1 to Table 4.

Table-1 Comparison between the means of Rural Area and Urban Area test scores of 1.5 miles Walk / Run test  $% \lambda = 0.013$ 

M1 Rural Aria	M2 Urban Aria	D.M	S.E	't' ratio	Required 't' value
1) 17.8	2) 16.3	3) 1.5	0.18	8.42*	1.96

Table-2 Comparison between the means of Rural Area and Urban Area test scores of Skinfold Thickness test

Skin folds	M1 Rural Aria	M2 Urban Aria	D.M	S.E	't' ratio	Required 't' value
Triceps	6.7	6.3	0.4	0.12	3.23*	1.96
Sub-scapular	6.2	6.1	0.1	0.13	0.79	1.96

Table-3 Comparison between the means of Rural Area and Urban Area test scores of Modified Sit-ups test

M1	M2			't' ratio	Required
Rural Aria	Urban Aria	D.M	S.E		't' value
15.46	14.2	1.26	0.22	5.77*	1.96

Table-4 Comparison between the means of Rural Area and Urban Area est scores of Sit &	
Reach test	

M1	M2			't' ratio	Required
Rural Aria	Urban Aria	D.M	S.E		't' value
4.6	4.32	0.28	0.14	2.02*	1.96

#### **Conclusions :**

- There was no significant difference has been found on one and half mile run between rural and urban girls.
- Rural girls found more abdominal strength as compared to urban girls.
- No significant difference has been observed on flexibility among rural and urban girls.
- Urban girls have shown more triceps skinfold at significant level as compared to rural girls.
- Urban girls have found to be more fat on subscapular skinfold at significant level as compared to rural girls.
- 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.

#### **References:**

- Behnke, Albert A and Wilmore, Jack H. (1974). "Evaluation and Regulation of Body Bulid and Composition" Englewood Cliffs, N.J. Prentice-Hall,Inc
- Chariers, B. and Dindsey, Ruth (1994). Concepts of Physical Fitness Madison : Brown and Benchmark.

- Clarke, Harrison H. And Clarke, Davie H. (1970). Application of Measurement to Physical Education New Jersey : Prentice-Hall Inc., Englewood Cliffs.
- 4) Clarke, Harrison H. And Clarke, Davie H. (1972). Advance Statistics
  : Supplement to Research Process in Physical Education, Recreation and Health Englewood Cliffs, New Jersey : Prentice-Hall Inc.
- 5) Clarke, Harrison H. And Clarke, Davie H. (1970). Research processes in Physical Education, Englewood Cliffs, New Jersey : Prentice-Hall Inc.
- 6) EspenschedeAnna S (1956), " A Note on Comparative Motor Ability Of Negro White 10th Grade Girls" Child Development 17 : 247-248 cited in Encyclopedia of Educational Research 3rd ed. S.V. Motor Development by Ruth D. Glassow.
- Hoeger, Wermer W.K. and Hoeger, Sharon A,(1990), Fitness and Wellness U.S.A. : Morton Publishing Company.
- 8) **Walter, Karl W.**Foundations and Principales of Physical Education London, Tornonto:W.H. Sounders Company, 1969.

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