# Standardization of Physical Fitness Norms for the Secondary School Boys of Telangana State 

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#### Abstract

Having a healthy level of physical fitness is essential to one's general health and well-being, particularly during the formative years of adolescence. Students who are enrolled in secondary education and are normally between the ages of 12 and 18 years old are at a crucial time of growth and development. Not only does engaging in regular physical exercise help to cognitive growth, emotional well-being, and social skills, but it also enhances physical health, which is one of the many benefits of doing so. To guarantee that secondary school students get the required direction and assistance to maintain a healthy lifestyle, it is essential to establish suitable physical fitness standards for them. Physical fitness standards for secondary school students play an important part in the development of healthy behaviours, the promotion of general well-being, and the prevention of health problems that are connected to a person's way of life. Schools are able to guarantee that every student has the chance to participate in physical activity that is appropriate for them by customizing fitness requirements to account for individual characteristics, developmental stages, and gender variances. We can provide the younger generation the tools they need to adopt a lifetime commitment to health and fitness if we put these standards into practise.


Keywords:Physical Education, Physical fitness, Telangana State,general health

## INTRODUCTION

The percentage of a country's population that is considered to be physically fit varies from country to country. In the past, those in positions of authority in the field of physical education all over the globe have showed a greater connection with respect to the population's specific level of physical fitness. This worry has inspired the development and implementation of fitness assessments in a number of different countries. Those who are already physically fit and give off the impression that they are in fantastic health, as well as those who have the best appearance, are the ones who are expected to put in the most effort to attain and keep their physical fitness levels. Not only is it helpful in an emergency situation, but also in day-to-day living, to be able to retain optimum strength, muscle tone, and endurance. the key to a healthy and active lifestyle Data that may be used to make an indirect comparison can be obtained via the measurements and assessments of the degree of physical fitness that young people's bodies have throughout a variety of countries. There are variations in the degrees of success that may be attained by participation in various physical education programmes when it comes to achieving one's physical education
objectives. Using methods such as measuring, calculating, and analysing, teachers may determine the degree of physical health and athletic ability of their students. The teacher of physical education has the power to establish criteria for athletic ability and physical fitness, in addition to development curves. Comparisons between different physical education programmes and different young populations are able to be made with the use of such data. Since the United States found out during World War II that a significant portion of its population did not meet the requirements for military service, there has been an increase in the number of people choosing to participate in programmes that encourage physical fitness. This is especially true for children who are currently enrolled in educational institutions. In 1954, Kraus and Hirschland attempted to determine whether or not there were significant differences in the levels of physical fitness among the youth populations of different countries by analysing the results of the Kraus-waver test of muscular fitness administered to children in the United States and Europe. Kraus and Hirschland believe that the high degree of mechanisation that exists in American society, as well as the relative lack of opportunities for young people to engage in physical activity as a consequence of this, might be to blame for the poor performance of the United States.

## STATEMENT OF THE PROBLEM

There are a total of 29 states and 7 union territories in India, which makes it a very large nation. India's total land area is around $3,166,414$ square kilometres. These states are organised geographically in such a manner that each state and each union territory has its own distinct collection of climatic variables. This, in turn, has a variety of effects on the people who live there, including how their bodies are constructed. It is imperative to investigate the actual level of physical fitness among secondary school boys in each district in order to establish appropriate physical fitness standards for the district. This is because the Telangana state district has unique geographical characteristics that have an impact on its residents' physical health. Although there are uniform fitness standards for all Indian states and union territories, these standards do not apply to the Telangana state district. This is because the Telangana state district has unique geographical characteristics that have an impact. That is the In this regard, the researcher is quite excited to begin working on a study on the topic of "Standardization of Physical Fitness Norms for the Secondary School Boys in Telangana state's Respective Districts."

## OBJECTIVES OF THIS STUDY:

The primary objective of this research was to establish a set of physical fitness standards applicable to male secondary school students in each of Telangana's districts. This was done with the intention of fostering the following realisations:
i) To assess the level of physical fitness of the Telangana state respective district's secondary school boys.
ii) To research the issues that arise when administering the exam, to identify them, and to recommend solutions.

## HYPOTHESIS FOR THE STUDY:

(H1): The physical fitness standards for secondary school boys would be sufficiently valid and reliable.

## OPERATIONAL DEFINITIONS:

The following terms pertinent to the study are defined for the clarification of succeeding discussion.

## PHYSICAL FITNESS:

Physical fitness is the capacity to carry out daily tasks with excitement and alertness without undue exhaustion, with plenty of energy to engage in leisure activities and to prepare for unforeseen circumstances and unplanned crises.

## SIGNIFICANCE OF THE STUDY:

Because of this study, secondary school boys in the Telangana state district will be provided with criteria for their physical fitness. This would be helpful in determining the degree of physical fitness possessed by the boys attending secondary schools in the separate districts of Telangana state and in encouraging them to engage in exercise routines that include movement. It would be to everyone's advantage to adopt assessment systems that are based on established standards. The students would have a far better understanding of both themselves and their potential after going through with such an assessment. It would be useful to arrange the curriculum for physical education in line with the kids' categorisation in order to maximise its effectiveness. The research would also assist students in secondary schools in improving their athletic and physical activity performance. The research that was used to assist teachers and teachers of physical education in comparing the conditions of the students who attend school in the Amravati
district. The study would increase students' knowledge of, as well as their love for, the need of maintaining a healthy body. This would open the door for further investigation into this subject area.

## Review of Literature

Manoj, (2013), conducted a study on concept of fitness of HRPFKT on students in Keralahigh school and higher secondary school subjects. This study investigated the demention concepts of fitness of the health related physical fitness knowledge among high school and higher secondary school students in Kerala. The subjects were 5110 students ( 2545 boys and 2565 girls) studying in high school and higher secondary schools of Kerala with age between 13 to 19 years and were from the rural and urban areas and that to from different syllabus followed by the students namely State Board, C.B.S.E. and I.C.E. Besides, the data collected from 5110 students do represent proportionately the various districts of Kerala state.

Dhokrat (2013), undertake the present study to find the main techniques of karate in systematic form. Individual training in basic techniques, applied training with an opponent, and auxiliary exercises to increase skills required to perform the various technique sat unless he builds a firm foundation in the basic techniques, his progress will eventually be hampered and his lack of skill in the fundamentals will prove to be a bitter handicap Karate techniques can be performed both singly and in combination, and it has been proved that the most effective and well-rounded practice session. The formal exercise 2 is composed of all four techniques in combination, plus such body shifting and changes in stance as are required for their smooth performance. These formal exercises give valuable training in mastering the various techniques in combination. Sparring is a practice method in the form of simulated fighting which gives concrete training in choosing and executing the proper techniques.
Gross et al. (2016), utilized data from over 13000 students to determine the value of age, height and weight as a classification device for the AAHPERD youth fitness test(i.e. Pullups, Sit-Ups, Shuttle Run, Standing Broad Jump, 50 yard Dash and 600 yard Run and Walk). They reported that in all four groups senior and junior high school girls, senior and junior high school boys the factor of age height and weight had practically no value, singly or in combination as classifiers for the seven test items. In other words, each group could
be considered as a homogeneous group with respect to the effects of these factors on the fitness measures.

## METHODOLOGY OF THE STUDY

For the present research study required data was collected by conducting the physicalfitness test on the male subjects from secondary schools going population from Telangana stet of respective districts.

## SAMPLING PROCEDURE:

The topics were chosen from the secondary schools in the Telangana state of respective district's chosen one mandal.Ten mandals were chosen at random from the Telangana state of respective districts for the study. On the basis of random selection, one secondary school was chosen from among the chosen Tahsils. The total numbers of subjects are near about One Hundred 100 only.

## SELECTION OF THE VARIABLE

By looking through the existing scientific literature on physical fitness, the variables were chosen. Muscular strength, abdominal strength and endurance, agility, power, speed, and cardio-respiratory endurance are the fundamental components of fitness. The aforementioned variables were chosen.

## SELECTIONS OF THE TESTS:

The tests used for evaluating students' physical fitness are based on recommendations from professionals working in the field of physical education in addition to the guide's experience, and the following acceptable physical fitness characteristics are taken into consideration:
i)Pull-Ups for Muscular Strength.
ii) Sit-Ups for Abdominal Strength and Endurance.
iii) Shuttle Run for Agility.
iv) 50 Yard dash for Speed.
v) Standing Broad Jump for Power.
vi) 600 Yard Run/Walk for Cardio-respiratory endurance.

## Data Analysis and Interpretations

## GradingScaleofPerformancesofthe14YearAgeGroupBoysBasedonthePercen

tileNorms

| Grades | Pull- <br> Ups(inNos. ) | Sit- <br> Ups(60.Se <br> c) | Shuttle <br> Run <br> (insec.) | Standing <br> Broad <br> Jump <br> (infeet) | 50-Yard <br> Dash <br> (inSec.) | 600-Yard <br> Run/Walk <br> (inmin.) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Excellent | Above | 45 <br>  <br> Above | 10.7 $\& B$ <br> elow | $\&$ <br> Above | 6.9 $\& B$ <br> elow | $1: 46 \quad \&$  <br> Below  |
| Good | 12 To 10 | 42 <br> To4 <br> 0 | $\begin{array}{ll} 10.8 & \\ & \text { To1 } \\ 1.4 & \end{array}$ | 7'5To6'4 | $7.0$ <br> To7. $2$ | $\begin{array}{ll} 1: 47 & \text { To } \\ 1: 58 & \end{array}$ |
| Average | 09To08 | $37$ <br> To3 $2$ | $11.5$ <br> To1 $2.4$ | 6'3To5'4 | $7.3$ <br> To7. $9$ | $\begin{array}{ll} \text { 1:59 } & \text { To } \\ \text { 2:08 } & \end{array}$ |
| Fair | 07To06 | 30 <br> To2 <br> 5 | $12.5$ <br> To1 $3.4$ | 5'3To4'2 | $8.0$ <br> To8. $9$ | $\begin{array}{ll} 2: 09 & \text { To } \\ 2: 31 & \end{array}$ |
| Poor | $05$ $\&$ <br> Below | 24 $\& B$ <br> elow | 13.5 $\& A$ <br> bove | $4^{\prime} 1$ <br>  <br> Below | $9.0$ $\& A$ <br> bove | $2: 32$ <br>  <br> Above |

## InterpretationsofGradingScaleofthePerformancesinPhysicalFitnessTestsofthe14Ye arAgeGroupBoys:

Afterpreparingthepercentileofsixtests,undertakeninthisstudyofthe14yearsecondary schoolboysof Amravatidistrict, theresearcherdevelopedaGradingScaleon thebasisofthepercentilenorms.ThegradingcategorywereExcellent,Good,Average,Fairand Poor.

## PULL-UPS:

The above table shows that in the Pull-Ups exam, students who completed 13 repetitions or more were given an Excellent Grade, while those who completed 5 repetitions or fewer were given a Poor Grade. 12-10 repetitions, 9-8 repetitions, and 7-6 repetitions, respectively, were the Good, Average, and Fair Grades.

## SIT-UPS:

For the test on sit-ups for 14 -year-old males, the grades for Excellent, Good, Average, Fair, and Poor were 45 repetitions or more, 42-40, 37-32, 30-25, and 24 repetitions or fewer, respectively.

## SHUTTLERUN:

In the Shuttle Run exam, a time of 10.7 seconds or less earned an Excellent score, while times of 10.8 to 11.4 seconds, 11.5 to 12.4 seconds, 12.5 to 13.4 seconds, and 13.5 seconds or more earned Good, Average, Fair, and Poor grades, respectively.

## STANDINGBROADJUMP:

The Excellent grade performed at a level of 7'4 feet and above, according to the above Table, but the Poor category performed at a level of 9 feet and above. The Good, Average, and Fair grades, respectively, were 7'5-6'5 feet, 6'3-5'.4 feet, and 5'3-4'2 feet.

## 50-YARDDASH:

The above table revealed that the 50-yard sprint finish time for the Excellent category had to be 6.9 seconds or below. The proficient performer completed in 7.0 to 7.2 seconds. The average performer ran for 7.3 to 7.9 seconds. The time for the fair performance was between 8.0 and 8.9 seconds, while the timing for the poor performer was 9.0 seconds or longer.

## 600-YARDRUN/WALK:

According to the performance level of the 14-year-old males in the 600-Yard Run/Walk test, the grades for Excellent, Good, Average, Fair, and Poor were, in order, 1:46 minutes and below, 1:47 to $1: 58$ minutes, 1:59 to $2: 08$ minutes, $2: 09$ to $2: 31$ minutes, and 2:32 minutes and above. Based on The above Table, it can be concluded that the secondary school boys in the Telangana area had higher levels of total physical fitness.

Item-wiseTest-retestReliabilityofthe14yearAgeGroupBoys

| NameofTest-Item | ReliabilityCo-efficient |
| :---: | :---: |
| Pull-Ups | 0.91 |
| Sit-Ups | 0.89 |
| ShuttleRun | 0.86 |
| StandingBroadJump | 0.91 |
| 50-YardDash | 0.87 |
| 600-YardRun/Walk | 0.81 |

FindingsonReliabilityoftheTestItemof14YearAgeGroupBoys:

One hundred ( $\mathrm{N}=100$ ) secondary school boys from the Telangana state of respective district, who were all 14 years old, were given the test items. $20 \%$ of the total individuals were randomly chosen, and the test items were given again. The outcome with reference to the same is shown in The above Table .Pull-ups, sit-ups, shuttle runs, standing wide jumps, 50 -yard dashes, and 600 -yard run/walk all had item-wise correlation coefficients of $0.91,0.89,0.86,0.91,0.87$, and 0.81 , respectively, which were all significant at the. 01 level.But the test's overall reliability coefficient (TestRetest) was 0.89 , statistically significant at the level of 0.01 .

FINDINGS:In our nation, schools, colleges, and universities have mainly overlooked students' physical health. Schools and universities lack a solid and comprehensive physical education curriculum. Fitness implies making an acceptable adjustment to
one's surroundings. A fit nation is an advantage, whereas a wealthy nation is a problem. Modern society places a great deal of importance on physical education, which warrants serious consideration. More so than in the past, people are becoming more cautious and changing their attitudes about the enormous benefits of exercise. Their current understanding of physical fitness is earned. The advantages of physical fitness weren't defined or made obvious in any way. Many different fitness ideas connected to physical education and sport are covered in-depth in practically every book in the field, but there is still no understanding of how to interpret them all in a way that extends the notions of complete fitness. the explanationTotal fitness has been defined as including physical education, which includes the fitness of spiritual, social, and moral well-being in addition to any other significant characteristics that may exist. In relation to physical education and athletics, fitness is laced with a specific and general opinion of overall fitness that is so exclusive as to be worthless. People frequently characterize and search for physical education to suit their needs for day-to-day living by using the most amount of muscular power and endurance in order to overcome this barrier with such a broad definition.

Conclusion: Man constantly aspires to excellence in all fields of study and Endeavour. A singular outcome of nature's creations and evolutions is the human being. It is without a doubt due to his highly developed muscle and neurological system that he is able to think, express, and search for everything he desires. Modern living requires fitness to conquer all of life's behaviors due to scientific development, technology improvement, and study results in every area of life. A contented kid is a source of national pride. Children are the world's greatest resource, therefore let's look forward to a fantastic millennium with regard to investing in children's development, which would be a wise move for a strong and developing country like India.Due to factors including age, sex, genetics, ethnic, cultural, and economic trends, as well as the physical environment, the physical fitness status of the national population differs between nations. Physical education pioneers throughout the world have recently expressed greater worry about the population's level of physical fitness. The creation and use of fitness tests in several nations is a reflection of this concern. Physically fit people put out greater effort to maintain their physical fitness because they look better, feel better, and have the good health required for a happy and
fulfilling life. The secret to dynamic health may lie in having the right amount of strength, muscular tone, and endurance not just for crises but also for daily life.

## REFERENCES:

1.Alston, D.J.(2011) "The Physical Performance of High School Girls on Three Physical Fitness Test", Completed Research in Health Physical Education and Recreation, Vlo.7.
2. Anand V. Upadhyay,(2013), Construction and development of norms of basic motor fitness test, Research Bi-Annual for Movement, volume 29 No. 02 April, 66-70.
4. Anyanwu(2008) Physical fitness norms for Nigerian boys and girls of 11 to 18 years of age were constructed". Completed Research in Health, Physical Education andRecreation, Vol. No:2,
5. Arnett, C.(2006) "The Purdue Motor Fitness Test Batteries for Senior High School Girl", Research Quarterly, Vol. 22:No.3, Jun.
6. Avenl(2012) "Test of Static and Dynamic strength for girls nine to twelve year old,"Completed Research in Health, Physical Education and Recreation, Vol.4, No:2
7. Backford(2008)"'To evaluate the physical fitness level of Navajo girls through AAHPER
youth fitness test", Completed Research in Health, Physical Education and Recreation,Vol.2,
8. Barrow H.M. and Rosemary McGee.(1979) A Practical Approach to Measurement in Physical education, Philadelphia: Lea and Febiger.
9. Basheer, Abid,(2001) "An analytical study of selected physical fitness variables amongthe students of Andhra Pradesh and Kashmir", Research Quarterly, Vol. 22: No.3.
10. Bender, J. and Shea E.J.(1964) Physical Fitness Tests and Exercises, New York: TheRonald Press company,
11. Berger and Paradils(2005) "A study to compare the physical fitness scores of white and
black students" Research Quarterly, Vol. 20:No.2, Jan.
12. Bitcon, L.E.,(2005) "Validation of a Four Item Fitness Test and Norms for High School

Boys in the State of lowa." Completed Research in Health, Physical Education andRecreation, Vol.2,

