



ISSN: 2456-0057

IJPNPE 2018; 3(2): 2223-2227

© 2018 IJPNPE

www.journalofsports.com

Received: 22-05-2018

Accepted: 24-06-2018

**Rajesh Gour**

Research Scholar, School of  
Physical Education, DAVV,  
Indore, Madhya Pradesh, India

**VF Peter**

Associate Professor, School of  
Physical Education, DAVV,  
Indore, Madhya Pradesh, India

## Assessment of selected physical fitness components of among groups of governments and CBSC schools students of district Sehore, Madhya Pradesh

**Rajesh Gour and VF Peter**

### Abstract

The purpose of this study the Investigation of selected physical fitness components of Different Groups of Governments and CBSC schools of sehore district, Madhya Pradesh. The Objective of this study to describe the selected Physical Fitness variables of different groups Government schools, and CBSC school Navoday school and KVS for the Sehore district of, Madhya Pradesh. The analysis and collected of the data for this study the total number of subjects six hundred (N=600) Two hundred 200 from Government School, two hundred 200 Navoday school and, two hundred 200 KVS subject were selected from each group equal subjects was selected data was purposive selected as the subjects for this study. Age ranged between 12 to 14 years of subjects were selected. The selection of variables for this study physical fitness variables, government school, Navoday School and KVS from district sehore, Madhya Pradesh. The data was collected for the Physical fitness component Standing Broad jump, Pull-ups, and Sit-ups, through modify aahphar youth physical fitness test. According to objectives for this study Statistics tools were used descriptive statistics, (Mean, Standard Deviation, Minimum and Maximum) were applied. The data analysing tools SPSS- 21 software was used. The level of significance to check the compare obtained analysis of variance was set at 0.05 level. There was significance Mean score of Standing Broad jump for the all various groups (Government school, Navoday and KVS) of district sehore, Madhya Pradesh. There was significance Mean score of Pull-ups for the all various groups (Government school, Navoday and KVS) of district sehore, Madhya Pradesh. There was significance Mean score of Sit-ups for the all various groups (Government school, Navoday and KVS) of district sehore, Madhya Pradesh.

**Keywords:** Fitness, standing, jump, sit-ups, Government, Navodaya, KVS, school, Sehore, Madhya, Pradesh, etc.

### Introduction

The components of physical fitness video we're going to be talking about the five health-related components of physical fitness the first one is your cardiovascular system your cardiovascular fitness this is the ability of the circulatory system to supply oxygen to working muscles during exercise this is our stamina this is how long we can keep going without collapsing it is amazing just how far we can push the human body the more we can train this part the more efficient our bodies become a delivering oxygen and clearing out lactic acid lactic acid is a by-product of oxygen consumption it can build up in our muscular system and cause the muscles to cease and stop working we generally as humans stop exercise before our muscles come to this point in addition to burning fat and keeping a lean body cardiovascular fitness helps reduce levels of stress in our bodies as well second component of physical fitness is body composition this is the relative percentage of body fat compared to lean body mass which is made up of muscles bones and water so fat versus your lean body it is important to maintain a healthy weight to decrease the amount of strain that is put on your joints and muscles as they carry around a heavier frame the third component of physical fitness is flexibility this is the range of movement possible at various joints if we are not flexible in our joints they become stiff and our movement decreases flexibility also helps to prevent injuries improve posture and reduce lower back pain the fourth component of physical fitness and the fifth are muscular strength and muscular endurance muscular strength is the amount of force

**Corresponding Author:**

**Rajesh Gour**

Research Scholar, School of  
Physical Education, DAVV,  
Indore, Madhya Pradesh, India

that can be produced by a single contraction of a muscle it is important to be strong to power through sports movements sustain a physical hit and avoid injuries muscular endurance is the ability of the muscle group to continually contract over an extended length of time there are six skill related components of physical fitness the first is speed this is the ability to move quickly from one point to another in a straight line not just your body speed but in some sports it requires more speed from certain body parts like in golf and baseball the swing the hands or in football the speed of kicking the ball agility is the ability of the body to change direction quickly you can use this to dodge a defender or get to a ball quicker than your opponent's third component is balance the ability to maintain an upright posture while still or moving it is linked to agility and that in order to move quickly and efficiently your body has to be on balance in different postures the fourth skill related component is coordination this is the integration with your hands or your foot movements and an input of the senses the fifth is reaction time this is the amount of time it takes to get moving it is how quickly your brain can respond to a stimulus and initiate that response and the sixth is power this is the ability to do strength work at an explosive pace it is the product of both strength and speed put together.

### Objectives of the study

1. The Objective of this study to describe the selected Physical Fitness variables of different groups Government schools, and CBSC school Navoday school and KVS for the Sehore district of, Madhya Pradesh.

### Methodology

#### Selection of the subjects

The selection of subjects for this study the total number of subjects six hundred (N=600) Two hundred 200 from Government School, two hundred 200 Navoday school and, two hundred 200 KVS subject were selected from each group equal subjects was selected data was purposive selected as the subjects for this study. Age ranged between 12 to 14 years of subjects were selected.

#### Criterion measure

The analysis and collected of the data for this study the total number of subjects six hundred (N=600) Two hundred 200 from Government School, two hundred 200 Navoday school and, two hundred 200 KVS subject were selected from each group equal subjects was selected data was purposive selected as the subjects for this study. Age ranged between 12 to 14 years of subjects were selected. The selection of variables for this study physical fitness variables, government school, Navoday School and KVS from district sehore, Madhya Pradesh. The data was collected for the Physical fitness component standing broad jump, pull ups, sit-ups, through modify aahphar youth physical fitness test.

1. Standing broad jump to measure explosive strength and power of the subjects
2. Pull-Up to measure arms and shoulder strength of the subjects
3. Bend knee sit-up to measure abdominal strength of the subjects

### Explosive Strength

#### (Standing Broad Jump)

**Purpose:** To measure the explosive power of the legs in jumping forward.

**Equipments:** Either a mat or the floor may be used for this test. Marking material (tape or chalk) is needed for the

starting line, along with a tape measure to mark off increments of distance along the landing area.

**Test Administration:** With the feet parallel to each other and behind the starting mark, the performer bends the knees and swings the arms and jumps as far forward as possible.

**Scoring:** The number of inches between the starting line and the nearest heel upon landing is the score.

Three trials were permitted and then the best trial was recorded as the score. For the convenience of the study score was converted from inches to metre

### Shoulder strength

#### (Pull-Up)

**Equipment:** For pull-up doorway gym bar in background, ladder in foreground. Starting position for pull. up. 16 EQUIPMENT A metal or wooden bar approximately V/2 inches in diameter is preferred. A doorway gym bar can be used, and, if no regular equipment is available, a piece of pipe or even the rungs of a ladder can also serve the purpose. The bar should be high enough so that the pupil can hang with his arms and legs fully extended and his feet free of the floor. He should use the overhand grasp. After assuming the hanging position. The pupil raises his body by his arms until his chin can be placed over the bar and then lowers his body to a full hang as in the starting position. The exercise is repeated as many times as possible. RULES I. Allow one trial unless it is obvious that the pupil has not had a fair chance. 2. The body must not swing during the execution of the movement. The pull must in no way be a snap movement. If the pupil starts swinging. Check this by holding your extended arm across the front of the thighs. 3. The knees must not be raised and kicking of the legs is not permitted. SCORING Record the number of completed pull-ups to the nearest whole number.

### Muscular endurance

#### Sit-Ups

Sit-ups (flexed leg/ Boys and Girls Figure 5 Starting position touch flexed leg sit-up FIGURE 6 Flexed leg sit-up 18 Equipment Clean floor. mat or dry turf and stopwatch. Description The pupil lies on his back with his knees bent. Feet on the floor and heels not more than 12 inches from the buttocks. The angle at the knees should be less than 90 degrees. The pupil puts his hands on the back of his neck with fingers clasped and places his elbows squarely on the mat. Floor or turf. His feet are held by his partner to keep them in touch with the surface. The pupil tightens his abdominal muscles and brings his head and elbows forward as he curls up. Finally touching elbows to knees. This action constitutes one sit-up. The pupil returns to the starting position with his elbows on the surface before he sits up again. The timer gives the signal "ready-go." and the sit-up performance is started on the word "go." Performance is stopped on the word "stop." The number of correctly executed sit-ups performed in 60 seconds shall be the score. RULES 1. Only one trial shall be allowed unless the teacher believes the pupil has not had a fair opportunity to perform. 2. No resting between sit-ups is permitted. 3. No sit-ups shall be counted in which the pupil does not (a) keep the fingers clasped behind the neck. (b) Bring both elbows forward in starting to sit up without pushing off the floor with an elbow: or (c) return to starting position. With elbows flat on the surface, before sitting up again.

**Scoring:** Record the number of correctly executed sit-ups the pupil is able to do in 60 seconds. A foul nullifies the count

for that sit-up. The watch is started on the word "go" and stopped on he word.

**Statistical technique**

According to objectives for this study Statistics tools were used descriptive statistics, (Mean, Standard Deviation, Minimum and Maximum) were applied. The data analysing

tools SPSS- 21 software was used.

**Level of Significance**

The level of significance to check the compare obtained analysis of variance was set at 0.05 level.

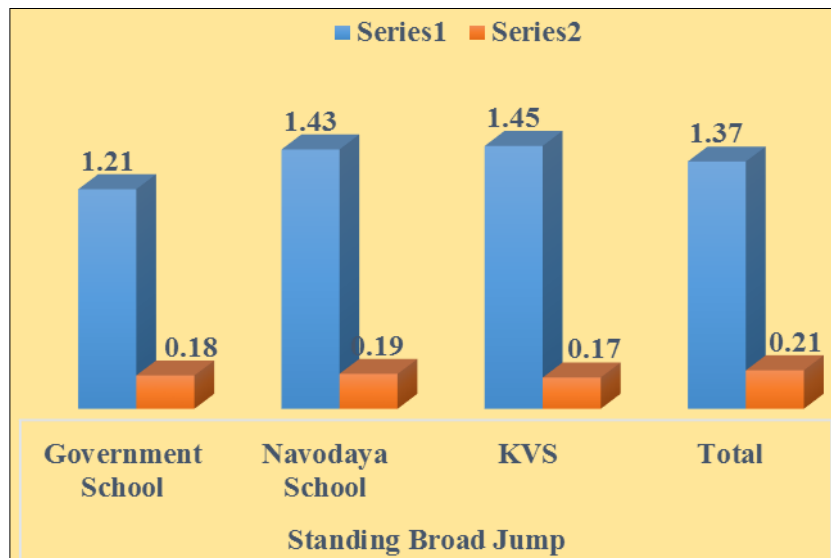
**Findings and Results of the Study**

**Table 1:** Descriptive statistics tables Mean and Standard Deviation value of Different groups of Government School, and CBSC School Navoday and KVS coaching Physical fitness components of Standing Broad Jump

Variables	Groups	Mean	Std. Deviation	Minimum	Maximum
Standing Broad Jump	Government School	1.21	0.18	.85	2.00
	Navodaya School	1.43	0.19	1.00	1.91
	KVS	1.45	0.17	1.00	1.91
	Total	1.37	0.21	.85	2.00

Table- 1 This study was conducted results for the various government and CBSC Navoday and KVS the mean and standard deviations let me pull this up here standard deviations are very useful in comparing the data sets therefore that first table, group Statistics, is shown in Figure 4.1 This table includes descriptive statistics mean and standard deviations for each group of physical fitness variables, standing broad jump, pull ups, sit-ups, for various groups

government school, Navoday school and KVS from district sehore, Madhya Pradesh. Specifically, the table includes the mean and standard deviations of standing broad jump. Government school (1.21±0.18) and CBSC Navoday (1.43±0.19) and KVS (1.45±0.17) and you might be tempted to conclude that this indicates that government school of standing broad jump, and Navoday, KVS standing broad jump. running had no significantly mean scores.



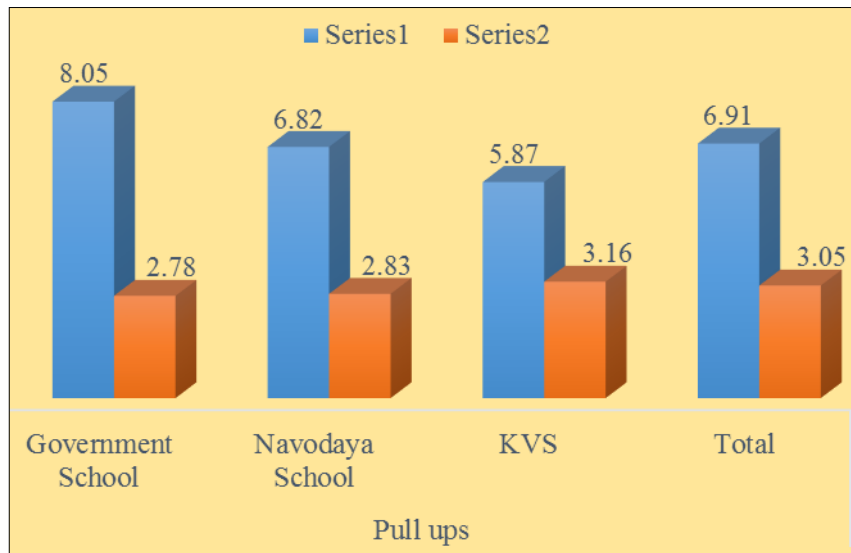
**Fig. 1:** Mean and Standard Deviation Value of Different groups (Government School, and CBSC School Navoday and KVS) students of Physical fitness components of Standing Broad Jump.

**Table 2:** Descriptive statistics tables Mean and Standard Deviation value of Different groups of Government School, and CBSC school Navoday and KVS coaching Physical fitness components of Pull-ups

Variables	Groups	Mean	Std. Deviation	Minimum	Maximum
Pull ups	Government School	8.05	2.78	1.00	16.00
	Navodaya School	6.82	2.83	1.00	17.00
	KVS	5.87	3.16	1.00	18.00
	Total	6.91	3.05	1.00	18.00

Table-2 This study was conducted results for the various government and CBSC Navoday and KVS the mean and standard deviations let me pull this up here standard deviations are very useful in comparing the data sets therefore that first table, group Statistics, is shown in Figure 1 This table includes descriptive statistics mean and standard deviations for each group of physical fitness variables, like component standing broad jump, pull ups and sit-ups, for

various groups government school, Navoday school and KVS from district sehore, Madhya Pradesh. Specifically, the table includes the mean and standard deviations of Pull-ups. Government school (8.05±2.78) and CBSC Navoday (6.82±2.83) and KVS (5.87±3.16) and you might be tempted to conclude that this indicates that government school of standing broad jump, and Navoday, KVS standing broad jump. running had no significantly mean scores.



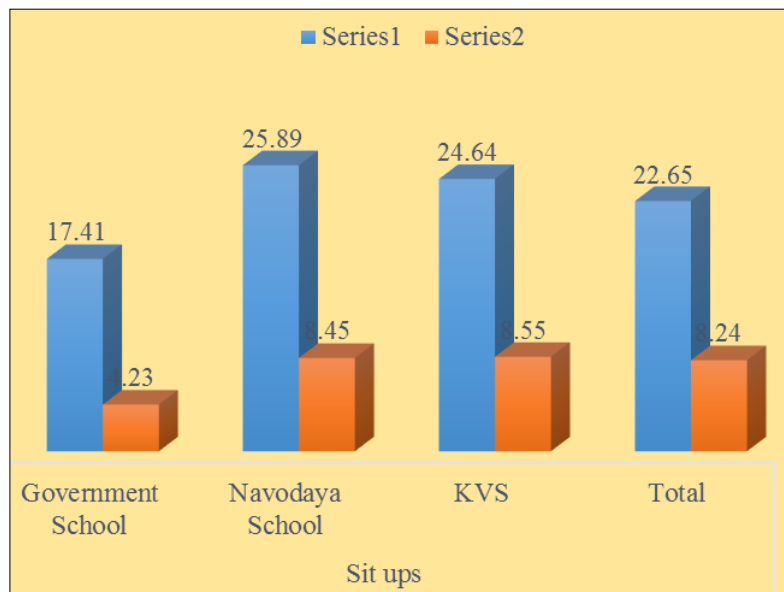
**Fig.2:** Mean and Standard Deviation Value of Different groups (Government School, and CBSC School Navodaya and KVS) students of Physical fitness components of Pull-ups.

**Table 3:** Descriptive statistics tables Mean and Standard Deviation value of Different groups of Government School, and CBSC School Navodaya and KVS coaching Physical fitness components of Sit-ups

Variables	Groups	Mean	Std. Deviation	Minimum	Maximum
Sit ups	Government School	17.41	4.23	0.00	28.00
	Navodaya School	25.89	8.45	11.00	50.00
	KVS	24.64	8.55	-22.00	50.00
	Total	22.65	8.24	-22.00	50.00

Table- 3 This study was conducted results for the various government and CBSC Navodaya and KVS the mean and standard deviations let me pull this up here standard deviations are very useful in comparing the data sets therefore that first table, group Statistics, is shown in Figure 4.1 This table includes descriptive statistics mean and standard deviations for each group of physical fitness variables, like component standing broad jump, pull ups and sit-ups, for various groups government school, Navodaya school and KVS

from district sehore, Madhya Pradesh. Specifically, the table includes the mean and standard deviations of Sit-ups. Government school (17.41±4.23) and CBSC Navodaya (25.89±8.45) and KVS (24.64±8.55) and You might be tempted to conclude that this indicates tha between government school of sit-ups, and Navodaya, KVS sit-ups score higher had significantly mean scores of Navodaya and KVS school.



**Fig 3:** Mean and Standard Deviation Value of Different groups (Government School, and CBSC School Navodaya and KVS) students of Physical fitness components of sit-ups.

**Discussion of findings**

The present study was conducted with the objective of finding out the significant difference between stress and anxiety on

male and female athletes. The sample size was 600. The data was analysed with the help of descriptive statistics. On the basis of the above findings we can say that physical fitness

variables. The reason of these differences can be associated with above results this is probably due to the different nature of the physical components training and pre-requisite for students. Number of participation and level of participation. The reason may be attributed that the physically trained student or level of achievements and taken deferent types nutrition food. These results may be due to a small sample of size and other factors such as different types of body, differences in body composition. These results may be nutrition diet schedule deference. The reason may be Psychological variables like stress, sports competition anxiety, aggression, fear, motivation confidence, attention concentration etc. The similar studies like (A.M. Al-Sendi, P. Shetty and A.O. Musaiger,) “Anthropometric and Body Composition Indicators of Bahraini Adolescents. (S G. Begum and B. Choudhary,) Age Changes in Some Somatometric Characters of the Assamese Muslims of Kamrup District, Assam. (D. Molnar and B. Livingstone,) Physical activity in relation to overweight and obesity in children and adolescents. (Dr. Amandeep Singh) Comparative study of selected physical fitness variables between urban and rural school going girls of Sangrur district. (Kiran NC1, C. G. Venkatesha Murthy) Academic Task Commitment among the Students of Jawahar Navodaya Vidyalayas (JNVs) and Kendriya Vidyalayas (KVs).

### Conclusions

Within the limitations of the study the following conclusions were drawn:

- There was no significance Mean score of Standing Broad jump for the all various groups (Government school, Navoday and KVS) of district sehore, Madhya Pradesh.
- There was no significance Mean score of Pull-ups for the all various groups (Government school, Navoday and KVS) of district sehore, Madhya Pradesh.
- There was no significance Mean score of Sit-ups for the all various groups (Government school, Navoday and KVS) of district sehore, Madhya Pradesh.

### References

1. Floyd B. Can Socio-Economic Factors Account for “atypical” correlations between Timing, Peak Velocity, and Intensity of Adolescent Growth in Taiwanese Girls?, *Am J Hum Biol* 2000;12:102-117.
2. Zhen-Wang B, Cheng-Ye J. Secular Growth Changes in Body Height and Weight in Children and Adolescents in Shandong, China between 1939 and 2000, *Ann Hum Biol* 2005;32(5):650-65.
3. Shukla M, Venugopal R, Mitra M. A Comparative Study of Growth Pattern and Motor Quality of Boys of Jawahar Navodaya Vidyalaya and Kendriya Vidyalaya in Chhattisgarh, India, *Journal of Exercise Science And Physiotherapy*, 2008.
4. Dr. Anbu N. Effect of six weeks aerobic training on selected physical fitness variables among men students, *International Journal of Yogic, Human Movement and Sports Sciences* 2019;4(1):Part H.
5. Dr. Savitri Patil S. Effect of asana on physical fitness variables of secondary school students. *International Journal of Yogic, Human Movement and Sports Sciences* 2018;3(1):Part L.
6. Gursev Singh, Dr. Amarpreet Singh. Comparative study of emotional health status between teaching and non-teaching employees of Punjabi University Patiala. *International Journal of Yogic, Human Movement and*

- Sports Sciences* 2018;3(2)Part M.
7. Pampapathi S. A comparative study on physical variable of rural and urban secondary school girls, *International Journal of Yogic, Human Movement and Sports Sciences* 2019;4(1):Part K.
8. Pawiter Singh. Training effects of six weeks on physical fitness of under 17 boys tug of war players. *International Journal of Yogic, Human Movement and Sports Sciences* 2018;3(1):H.
9. Al-Sendi AM, Shetty P, Musaiger AO. Anthropometric and Body Composition Indicators of Bahraini Adolescents, *Ann Hum Biol* 2003;30(4):367-79.
10. Fredriks AM *et al.* Height, Weight, Body Mass Index and Pubertal Development References for Children of Moroccan Origin in The Netherlands, *ActaPaediatr* 2004;93(6):817-24.
11. Kiran NC, Venkatesha Murthy CG. Academic Task Commitment among the Students of Jawahar Navodaya Vidyalayas (JNVs) and Kendriya Vidyalayas (KVs).