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**Vaidyanatha U**  
Research scholar, University  
College of Physical Education  
Bangalore University Bangalore,  
Karnataka, India

**Dr. Prasannakumar  
Shivasharanappa**  
Assistant Professor (Contract  
Basis) University of Agricultural  
science Dharwad, Karnataka,  
India

**Altat Sab**  
Physical Education Director  
Anjuman Institute of  
Technology and management  
Anjumanabad, Bhatkal,  
Karnataka, India

**Correspondence**  
**Vaidyanatha U**  
Research scholar, University  
College of Physical Education  
Bangalore University Bangalore,  
Karnataka, India

## A comparative studies on sargent jump of high school students in 13-16 years students of Uttara Kannada district and Dakshina Kannada district

**Vaidyanatha U, Dr. Prasannakumar Shivasharanappa, Altat Sab**

### **Abstract**

The purpose of this study is to compare Sargent Jump between Uttara Kannada District and Dakshina Kannada District high school 13-16 years' students. To achieve the purpose of these study 320 students that is 160 Uttara Kannada students and 160 Dakshina Kannada were selected as subjects from various high schools, and their age ranged from 13 to 16 years. These subjects were tested on Sargent Jump by vertical jump test. The collected data was analyzed using T-value to find out the significant difference between Uttara Kannada District and Dakshina Kannada District high school students. The result of the study showed that there was no significant difference on Sargent Jump between Uttara Kannada District and Dakshina Kannada District high school students. To find out the mean, standard deviation and T-value was done and analyses of the both Uttara Kannada and Dakshina Kannada high school students. The ability performance shows that Dakshina Kannada high school students have well in the Sargent Jump compare to the Uttara Kannada. The purpose of the study was to compare two group terms of some numerical depended variable. Uttara Kannada and Dakshina Kannada students come from different sample of participants that can be different height and weight. The two group samples of Uttara Kannada and Dakshina Kannada means could be significantly different or not depending on the different means, standard deviation of the sample and number of value in students of high school. The data analysis of Sargent Jump performance shows that and Dakshina Kannada students have a good motor fitness of Sargent Jump, compare to Uttara Kannada. It is concluded that both district demands greater Sargent Jump for better performance. The nature of both districts varies, although the skills like spiking and jump shot require Sargent Jump as a result of this no difference is elicited between the groups.

**Keywords:** Sargent Jump, High school students, T- Value

### **1. Introduction**

Today there is a growing emphasis on looking good feeling and living longer. Increasingly, scientific evidence tells us that one of the key to achieving these ideals is fitness and exercises. Getting moving is a challenge because today physical activity is less a part of our daily lives.

“Physical fitness refers to the organic capacity of the individual to perform the normal task of daily living without undue tiredness or fatigue having reserves of strength and energy available to meet satisfactorily any emergency demands suddenly placed upon him” Nixon

Physical fitness involves the performance of the heart and lungs and the muscles of the body and since what we do our bodies also effects what we do our minds fitness influences to some degree qualities such as mental alertness and emotional stability

Physical fitness is divided into four health and six skill-related components. Skill- or performance-related fitness involves skills that will enhance one's performance in athletic or sports events. Health-related fitness involves skills that enable one to become and stay physically healthy.

Muscular power (Sargent Jump) ability to release maximum muscular force in an explosive manner in the short duration is known as muscular force or power example standing broad jump and Vertical jump performance.

It's important among the student in sports. The right for the student as well as their parents and teacher are curious to know about their level of physical fitness so diagnose the weakness or strength of their inherent body potentials. The higher school student 13-16 years the high school can usually be sub-classed as general high school. It is the vision that each student well

be physically educated by the time he/she levels of school to be a physically educated. Student each child should can understand the importance and benefits of physical activity. The student can select the potential probates for specific profession or sports craterous at young age the promising individual having higher per- training basic level of the sports for which the selection in test of Sargent Jump

The purpose of study was to find out the performance of Sargent Jump of Uttara Kannada and Dakshina Kannada district area. In order to facilitate such a study knowledge and evaluation similar words done become essential. Hence the went through the high school’s student, text book, magazines, research quarterlies available library and internet services etc. and also on effort of some literatures related to this study.

The following method was used for collection of data. The test for Sargent Jump performance and physiological variables were conducted at the classrooms, school ground, indoor stadium wherever adequate facilities were available for conducting the tests.

The most of studies investigated the correlation between total performance and a wide range of variables, using a range of method that we consider to be in appropriate. A few students are costal land and few non costal lands. Our analyses present determine of such areas, which are substantially different from those obtained when analyzing total and per areas performance. We also fond higher performance is in which area that has a moderate environment

Physical fitness is one of the important ways of measuring the Sargent Jump of an individual. Physical fitness informs us, how to healthy a person is in physical fitness affects a client’s mentally capacity, and productivity at work and stress management. Physical fitness is also important for the mere fact that a person feels better and looks better when then they are physically fit

Demonstrate position personal/social sportsmanship a variety of physical activity and also develop and maintain both health related fitness. The student can classified into one instructional and trainees possessing marked different in their physical fitness are classified into separate instruction group

The student can select the potential probates for specific profession or sports craterous at young age the promising individual having higher per- training basic level of the sports for which the selection in test of Sargent Jump.

It’s important among the student in sports. The right for the student as well as their parents and teacher are curious to know about their level of physical fitness so diagnose the weakness or strength of their inherent body potentials. The higher school student 13-16 years the high school can usually be sub-classed as general high school. It is the vision that each student well be physically educated by the time he/she levels of school to be a physically educated. Student each child should can understand the importance and benefits of physical activity. The student can enjoy and actively participate in variety of sports activities such as games and events.

**Methodology**

The chapters give information about the subject, the test procedure equipment and procedure of collation of data and place of testing. The total subject: 320 High School students from Uttara Kannada and Dakshina Kannada district were taken on subjects for their conatigation

**Method of data collection**

For the present study the researcher selected student of high school boys and girls total student 320 students. Were selected

from the high schools of Uttara Kannada and Dakshina Kannada district of 96 boys and 64 girls

**Test procedure**

In beginning a demonstration of vertical jump to either by the tester himself or through earlier trained helper. The subject asks to stand erect facing the board. He/she dominant hands fingertips are marked with a chalk power and the subject asked to raise the marked fingertip to maximum height on the black board without lifting the heels so has to marked his /her maximum reach point. The finger tips are reachable. With the chalked hand side towards the wall, a vertical jump is to be performed by the subject to make another mark at the maximal height of the jump. The subject is not allowed run and hop. However, subject is properly instructed to take a good jump by bending the knees and swinging arms. The subject given to three trials at her/his will and best performance is considered.

**Statistical treatments**

Analyzed the vertical jump from stand point of foot pounds of work done this measure was established on physical sciences definition of power; leg power was evaluated in units of horse power, subsequently, these investigators simplified their power evaluation based on vertical jump utilizing the following formula:

$$\text{Work} = \frac{\text{Bodyweight (lbs.)} \times \text{distance jumped (inch)}}{12}$$

The jump itself was preformed from a full squat: extraneous movements of the hands were eliminated by securing one hand behind the back, while the preferred arm was raised vertically and held steadily against the side of the head.

**Statistical technique**

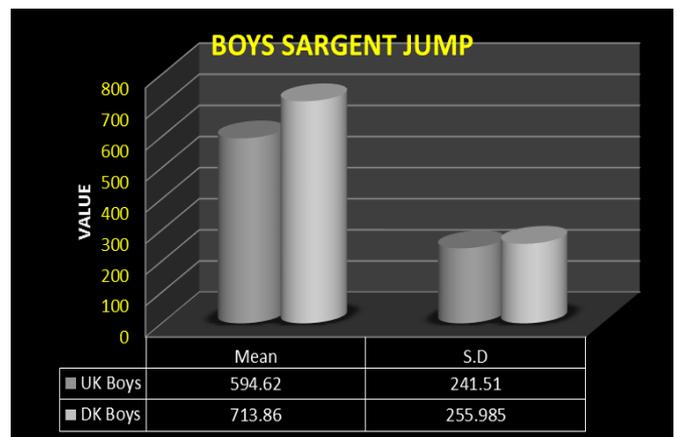
The static group design was used as experimental design in this study. The collected data on selected criterion variables were statistically analyzed by using T-value to find out the significant difference between Uttara Kannada and Dakshina Kannada high school students. In all the cases, 0.05 level of confidence was fixed to test the significance, which was considered as an appropriate.

**Result**

**Table 1:** Statistical values for the data on jumping ability of DK and UK boys

Subjects	Mean	S.D	df	t-value
UK Boys	594.62	241.510	190	0.001
DK Boys	713.86	255.985		

\*Table value of 0.05 level of sig. is 1.960

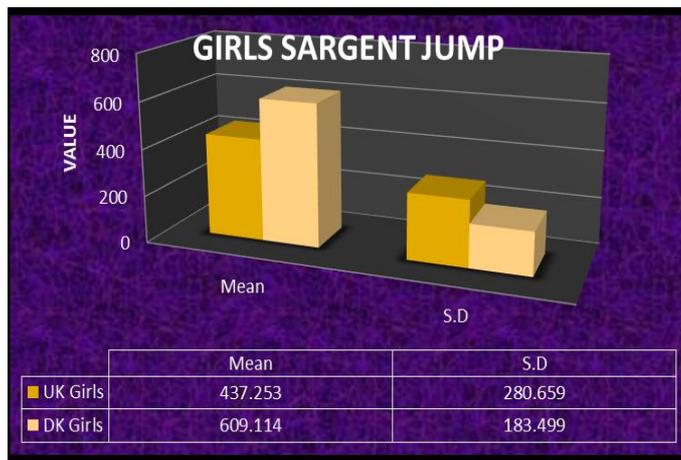


Above table shows that mean, Standard deviation and t-value on Jumping ability of Uttara Kannada (UK) Boys and Dakshina Kannada (DK) Boys. Mean value of UK Boys is 594.62 is less than the mean value of DK boys is 713.86. While Standard deviation of UK boys 241.510 is less than the DK boys is 255.985. The calculated t-value 0.001 is less than the table value 1.960 @0.05 level of significance for df 98. Hence null hypothesis is accepted. Hence we can conclude that there is no significance difference on jumping ability among the boys of UK and DK.

**Table 2:** Statistical values for the data on jumping ability of DK and UK Girls

Subjects	Mean	S.D	df	t-value
UK Girls	437.253	280.659	126	3.674
DK Girls	609.114	183.499		

\*Table value of 0.05 level of sig. is 1.960



Above table shows that mean, Standard deviation and t-value on Jumping ability of Uttara Kannada (UK) Boys and Dakshina Kannada (DK) Girls. Mean value of UK Boys is 437.253 is less than the mean value of DK boys is 609.114. While Standard deviation of UK boys 280.659 is higher than the DK boys is 183.499. The calculated t-value 3.674 is also higher than the table value 1.960 @0.05 level of significance for df 98. Hence null hypothesis is rejected. Hence we can conclude that there is significance difference on jumping ability among the girls of UK and DK.

- There is no significance difference on jumping ability among the boys of UK and DK.
- There is significance difference on jumping ability among the girls of UK and DK.

**Discussion**

The present findings of the study showed no difference on Sargent Jump between Uttara Kannada and dakshinakannada students. The greater vertical jump performance (Gladden & Colacino 1978; Fleck *et al.* 1985; Marques, *et al.* 2006 & 2008) for spiking, blocking and jump serve. Similarly, basketball requires vertical jump performance (Hoffman *et al.* 1996; Hoffman & Maresh 2000) for rebound, jump shot and dunking. So both games require greater degrees of Sargent Jump in terms of vertical jump. As a result, there was no significant difference elicited between the groups on Sargent Jump.

**Conclusion**

Hence, it was concluded that through high school student Motor fitness of Sargent Jump test are analyses are discussed

hear it was considered that through the Uttara Kannada and dakshinakannada students showed superior performance in fitness and components they still needed regular practice hard work and professionals’ determination and devotion to improve Sargent Jump

On the basis of the data analysis the researcher in confident of arriving at certain conclusion based on the result of the studies. They are:

There is no different between the boys of Uttara Kannada and dakshina kannada Sargent Jump among jumping ability.

Boys vertical jump of Uttara Kannada and dakshina kannada high school students no difference of Sargent Jump or vertical jump.

The Uttara Kannada high school girls good and better then dakshina kannada high school girls

Uttara Kannada students should be improving the motor fitness performance by regular practice and seriously.

Serious and regular practice will be improving the motor performance which batteries improve the speed, strength, flexibility, co-ordination.

The teacher must conduct the fitness test for the development of motor fitness performance of the high school students

Similarly, this study can be conducted to identify the motor fitness of high school students for the different sports and games

There was no significance mean difference in Uttara Kannada and dakshinakannada of high school boys

There was significance mean difference between Uttara Kannada and dakshinakannada of high school girls

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