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## A critical analysis of physical fitness among rural and urban high school boys and girls of Dharwad district Kalghatgi Taluk

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### Abstract

The main purpose of the study was to find out the fitness level among the rural boys and rural girls students of schools level students of Dharwad district, total 200 subjects were recruited from different schools of Dharwad district and their age ranged from 12 to 16 years. Mean Standard Deviation and T Test was computed. For testing the hypothesis the Level of confidence was set at 0.05 Level of significance. Computation was done with the help of SPSS; the author found that there was significant difference in the specific motor fitness variables among rural boys and rural girls students. The author recommended carrying similar studies on larger sample and different age category players.

**Keywords:** Physical fitness, sports, urban and rural students

### Introduction

Physical fitness is defined as the ability of body to function efficiently and effectively, to enjoy leisure, to be healthy, to resist disease, and to cope with emergency situations. Health-related components of physical fitness included body-composition, cardiovascular fitness, flexibility, muscular endurance, and strength. Skill-related components included agility, balance, coordination, power, reaction time, and speed. Physical fitness is used in two close meanings: health-related which state the health and well-being and skill-related which more task-oriented based on the ability to perform specific aspects of sports or occupations. (Tham Yin Choong, 2012)

Along with the modernization of the world, most of the technologies nowadays have made people less active. They do less work but achieve more output as this is what we call efficiency, to do something with little input but bring out more input. As the technologies becoming more advanced, people are less making work and this resulting in the decrement of fitness. (Chandu Lamani, 2016)

### Statement of the problem

A Critical Analysis of Physical Fitness among Rural and Urban High School Boys and Girls of Dharwad District Kalghatgi Taluk

### Purpose of the study

The purpose of this study was to compare the rural and urban boys and Girls students and to find out which of these two categories is more physically fit in response to tests administered so as one can improve the standard and level of physical fitness in rural and urban boys and Girls students of Kalghatgi Taluk.

### Significance of the study

It is hoped that the data generated and interpreted in this study will one day help the Physical Education and coaches of Dharwad district Fraternity; the information collected can be used for monitoring the training programme as well as for counselling, providing information about the standard of motor fitness one should have among students. The author also assumes that this study will help the Goan cricket to improve the standard of sports and Physical fitness level among students.

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**Hypothesis**

1. There is no association between rural boys and rural girls students of high school with respect to different physical fitness variables i.e.
2. There is no significant difference between urban boys and urban girls students of high school with respect to different physical fitness variables

**Delimitation of the Study**

- The study was delimited to the school boys studying from seventh standard to tenth standard in the Kalghatgi Taluk
- Their age ranged from 12 to 16 years.
- The study was considered 200 school boys and Girls (both rural and urban) belonging to 8 Schools in Kalghatgi Taluk

**Limitations of the study**

- The study was conducted on sample drawn from different populations in different places. So the motivation level of the subjects at the time of testing was not controlled.

- Certain factors like habits, life style, daily routine work, diet, etc, might have influenced the results which were not considered in this study.
- The background of the previous training of the students was not considered.
- The conditions of the school ground and environmental factors had not been taken into consideration.
- The subjects for the study do not come from the same social, economical and cultural background.

**Methodology and statistical process**

Total 200 school going students from rural and urban were selected for the purpose of the study and their age was ranged between 12 to 16 years. Mean Standard Deviation and T Test was computed. For testing the hypothesis the Level of confidence was set at .05 Level of significance. Computation was done with the help of SPSS;

**Results Findings and Discussion of the Study**

**Table 1:** Results of t test between rural boys and rural girls students of high school with respect to different physical fitness variables

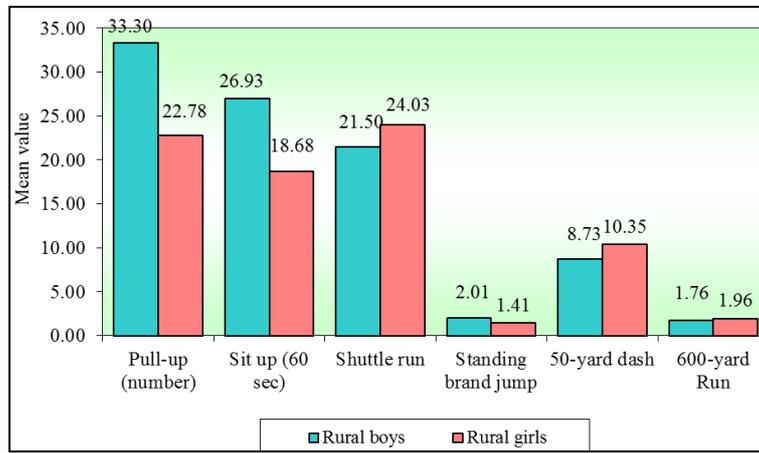
Variable	Groups	Mean	SD	t-value	P-value	Signi.
Pull-up (number)	Rural boys	33.30	4.36	10.0782	0.0001	S
	Rural girls	22.78	4.96			
Sit up (60 sec)	Rural boys	26.93	3.70	8.6607	0.0001	S
	Rural girls	18.68	4.75			
Shuttle run	Rural boys	21.50	1.20	-8.8504	0.0001	S
	Rural girls	24.03	1.35			
Standing brand jump	Rural boys	2.01	0.21	13.5613	0.0001	S
	Rural girls	1.41	0.19			
50-yard dash	Rural boys	8.73	1.28	-5.5637	0.0001	S
	Rural girls	10.35	1.33			
600-yard Run	Rural boys	1.76	0.33	-3.0775	0.0029	S
	Rural girls	1.96	0.27			

**The results of the above table clearly shows that the followings**

- The rural boys and rural girls students of schools differs statistically significant with respect to pull-up (number) scores ( $t=10.0782, p<0.05$ ) at 5% level of significance. It means that, the rural boy students of schools have significant higher pull-up (number) scores as compared to rural girl students of schools.
- The rural boys and rural girls students of schools differs statistically significant with respect to sit up (60 sec) scores ( $t=8.6607, p<0.05$ ) at 5% level of significance. It means that, the rural boy students of schools have significant higher sit up (60 sec) scores as compared to rural girl students of schools.
- The rural boys and rural girls students of schools differs statistically significant with respect to shuttle run scores ( $t=-8.8504, p<0.05$ ) at 5% level of significance. It means that, the rural boys and rural girl’s students of schools have different shuttle run scores.
- The rural boys and rural girls students of schools differs statistically significant with respect to standing brand jump scores ( $t=13.5613, p<0.05$ ) at 5% level of

- significance. It means that, the rural boy students of schools have significant higher standing brand jump scores as compared to rural girl students of schools.
- The rural boys and rural girls students of schools differs statistically significant with respect to 50-yard dash scores ( $t=-5.5637, p<0.05$ ) at 5% level of significance. It means that, the rural boy students of schools have significant smaller 50-yard dash scores as compared to rural girl students of schools.
- The rural boys and rural girls students of schools differs statistically significant with respect to 600-yard run scores ( $t=-3.0775, p<0.05$ ) at 5% level of significance. It means that, the rural boy students of schools have significant smaller 600-yard run scores as compared to rural girl students of schools. The mean scores are also presented in the following figure.

Therefore, these results make us to reject the Null hypothesis that is “There are no association between rural boys and rural girls students of high school with respect to different physical fitness variables.”



**Fig 1:** Comparison of rural boys and rural girl’s students of high school with respect to different physical fitness variables

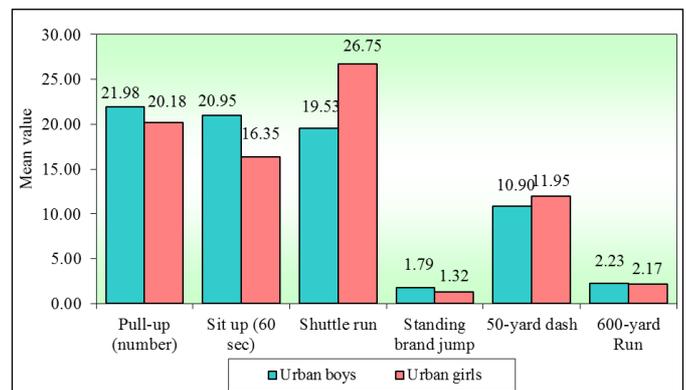
**Table 2:** Results for urban boys and urban girls students of high school with respect to different physical fitness variables

Variable	Groups	Mean	SD	t-value	P-value	Signi.
Pull-up (number)	Urban boys	21.98	4.31	2.1870	0.0317	S
	Urban girls	20.18	2.92			
Sit up (60 sec)	Urban boys	20.95	5.03	4.6833	0.0001	S
	Urban girls	16.35	3.64			
Shuttle run	Urban boys	19.53	1.20	-24.3382	0.0001	S
	Urban girls	26.75	1.45			
Standing brand jump	Urban boys	1.79	0.17	14.6314	0.0001	S
	Urban girls	1.32	0.11			
50-yard dash	Urban boys	10.90	1.26	-3.5367	0.0007	S
	Urban girls	11.95	1.40			
600-yard Run	Urban boys	2.23	0.24	1.1894	0.2379	NS
	Urban girls	2.17	0.22			

The results of the above table clearly shows that the followings

1. The urban boys and urban girls students of schools differs statistically significant with respect to pull-up (number) scores ( $t=2.1870, p<0.05$ ) at 5% level of significance. Hence, the null hypothesis is rejected. It means that, the urban boy students of schools have significant higher pull-up (number) scores as compared to urban girl students of schools.
2. The urban boys and urban girls students of schools differs statistically significant with respect to sit up (60 sec) scores ( $t=4.6833, p<0.05$ ) at 5% level of significance. It means that, the urban boy students of schools have significant higher sit up (60 sec) scores as compared to urban girl students of schools.
3. The urban boys and urban girls students of schools differs statistically significant with respect to shuttle run scores ( $t=-24.3382, p<0.05$ ) at 5% level of significance. It means that, the urban boys and urban girls students of schools have different shuttle run scores.
4. The urban boys and urban girls students of schools differs statistically significant with respect to standing brand jump scores ( $t=14.6314, p<0.05$ ) at 5% level of significance. It means that, the urban boy students of schools have significant higher standing brand jump scores as compared to urban girl students of schools.
5. The urban boys and urban girls students of schools differs statistically significant with respect to 50-yard dash scores ( $t=-3.5367, p<0.05$ ) at 5% level of significance. It means that, the urban boy students of schools have significant smaller 50-yard dash scores as compared to urban girl students of schools.
6. The urban boys and urban girls students of schools do not

differs statistically significant with respect to 600-yard run scores ( $t=1.1894, p>0.05$ ) at 5% level of significance. It means that, the urban boys and urban girl’s students of schools have similar 600-yard run scores. The mean scores are also presented in the following figure.



**Fig 2:** Comparison of urban boys and urban girls students of high school with respect to different physical fitness variables

Therefore, these results make us to reject the Null hypothesis that is “There is no significant difference between urban boys and urban girls a student of high school with respect to different physical fitness variables.”

**Conclusion and Recommendations**

The following recommendations are made on the basis of the study.

- Similar study may be conducted throughout the Dharwad district to formulate National level norms as a standard reference for further Normative research work.

- Research study on this problem may be undertaken for different age groups of boys and girls throughout the State so as to facilitate the assessment of fitness level and a comparative study among them.
- To inculcate a sense of maintaining the physical fitness among the student community individually and collectively and thus making physical education as a compulsory subject at school and college levels in Karnataka.
- Adequate facilities for Games and Sports may be provided for all the villages and competitions may be conducted district wise and inter district wise.

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### **References**

1. Roxane R. Joens-Matre, PhD;1,2 Gregory J. Welk, PhD;2 Miguel A. Calabro, MS;2 Daniel W. Russell, PhD;3 Elizabeth Nicklay, MS;4 and Larry D. Hensley, PhD42008. Rural–Urban Differences in Physical Activity, Physical Fitness, and Overweight Prevalence of Children, *The Journal of Rural Health*.
2. Kamla-Raj. Comparative Study of Physical Fitness Components of Rural and Urban Female Students of Punjabi University, Patiala, 2010.
3. Kanwar Mandeep Singh, Mandeep Singh, Sukhdev Singh. Study of physical fitness among rural and urban children from Punjab. *International Journal of Physical Education, Sports and Health*. 2016; 3(3):475-478.
4. Dollman J, Norton K, Norton L. Evidence for secular trends in children’s physical activity behaviour, 2007.
5. Enio Ricardo Vaz Ronque1,2,4, Edilson Serpeloni Cyrino1,2, Valfredo Dórea2,3, Helio Serassuelo Júnior1,2,5, Enori Helena Gemente Galdi4 and Miguel de Arruda1,2,4, Physical fitness diagnosis in schoolchildren of high socioeconomic status: evaluation for health criterion reference, *Rev Bras Med Esporte*. 2007, 13(2).