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Comparison of motor fitness abilities of rural and urban school students

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Abstract
The purpose of this investigation was to compare the motor fitness abilities of rural and urban school students. Thirty school going boys students were (*n* = 30) randomly selected as subjects and their age were ranged between 14 and 18 years. Among these thirty subjects fifteen (*n* = 15) were rural area and the remaining fifteen (*n* = 15) were from urban area school going students. For the purpose of the study motor fitness variables were considered for this study as flexibility and speed. It was measured by using the standard test items of sit-and reach test and 50m run test. The collected data were analyzed by using the statistical tool of independent '*t*' test. The result of the study revealed that, there was a significant difference on selected motor fitness variables of flexibility and the seed between the rural and urban area high school students of Wayanad district in Kerala state. Moreover, we can say that the basic motor fitness level of rural area high school students were better than the urban area school students. The level of confidence was fixed as 0.05 in all cases.

Keywords: Flexibility, speed, rural area school students, urban area school students.

Introduction

An urban area is an area with an increased density of human-created structures in comparison to the areas surrounding it. Urban areas may be cities, towns or conurbations. In fact, urbanized areas agglomerate and grow as the core population/economic activity center within a larger metropolitan area or envelope. People living there are open, they choose their cultures and their beliefs and share them and that's what makes them a very modern society. They care most about technology, communication, economy, etc and always look forward to develop and extend markets, diversification products (answers.yahoo.com). Rural areas are most recognized as farms, and less density areas, and also mostly a tight community that can affect one another easily. In summary, rural is any territory that is not urban or in other words the word rural is what is left over after urban has been defined (cber.cba.ua.edu).

Motor fitness is a term that describes an athlete's ability to perform effectively during sports or other physical activity. An athlete's motor fitness is a combination of five different components, each of which is essential for high levels of performance. Improving fitness involves a training regimen in all five. In other words motor fitness, or motor physical fitness, refers to how an athlete can perform at his or her sport, and involves a mixture of agility, coordination, balance, power, and reaction time. Improving this form of fitness is an indirect result of training in any of these attributes. All five components of fitness are essential for competing at high levels, which is why the concept is seen as an essential part of any athlete's training regime (www.wisegeek.com).

Flexibility is the range of motion of our joints or the ability of our joints to move freely. It also refers to the mobility of our muscles, which allows for more movement around the joints. Range of motions the distance and direction of our joints can move, while mobility is the ability to move without restriction (study.com). Flexibility is important in fitness because it allows for better performance when playing sports or exercising and in our day-to-day activities, such as bending, walking and lifting. Flexibility can be improved with stretching exercises. While stretching does not increase our muscle strength, it is an important part of reducing injury risk and soreness that result from activity (weightloss.about.com).

Speed is the ability to move quickly across the ground or move limbs rapidly to grab or throw (www.topendsports.com). Speed is not just how fast someone can run, but is dependent on their acceleration, maximal speed of movement, and also speed maintenance. Movement speed requires good strength and power, but also too much body weight and air resistance can act to slow the person down. In addition to a high proportion of fast twitch muscle fibers, it is vital to have efficient mechanics of movement to optimize the muscle power for the most economical movement technique.

Materials and Methods

The aim of this investigation was to compare the motor fitness variables between rural and urban area school students. To achieve this purpose thirty (n = 30) high school boys were randomly selected as subjects and out of that, the fifteen (n = 15) were from rural area school going students and the remaining fifteen were from (n = 15) urban area school going students. Their age were ranged between 14 and 18 years. The school students were selected from Wayanad district of Kerala State. Flexibility and speed were considered as motor fitness components for this study and it was assessed by using the standard test items of sit and reach test and 50m run test. The collected data were statistically examined by using an independent't' test to find out the significant difference between the rural and the urban area high school boys on flexibility and speed.

Results and Discussion

Table-I: Analysis of Independent'*t*' test on Flexibility between Rural and Urban School Students

Subjects	Strength	Mean Value In Cm.	SD	't'
Rural School Students	N= 15	29.60	3.85	2.29*
Urban School Students	N= 15	26.53	3.46	

*Significant at 0.05 level of confidence.

Table I shows that the mean values of flexibility between rural and urban area school students are 29.60 and 26.53 respectively. The obtained't' ratio of 2.29 is greater than the table value of 2.04 for df 1 and 29 required for significance at 0.05 level. The result of the study indicated that there was a significant difference on flexibility between the selected rural and urban area school students. The mean values of flexibility between rural and urban area school students were graphically represented in the figure 1.

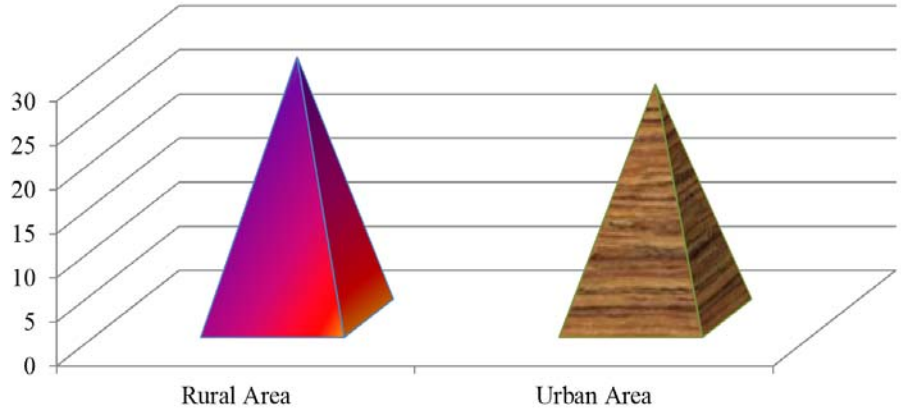

Fig 1: The mean values of flexibility between rural and urban area school students.

Table-II: Analysis of Independent'*t*' test on Speed between Rural and Urban School Students

Subjects	Strength	Mean Value In Sec.	SD	't'
Rural School Students	N= 15	8.29	0.56	2.13*
Urban School Students	N= 15	8.73	0.55	

*Significant at 0.05 level of confidence.

Table II shows that the mean values of speed between rural and urban area school students are 8.29 and 8.73 respectively. The obtained 't' ratio of 2.13 is greater than the table value of 2.04 for df 1 and 29 required for significance at 0.05 level. The result of the study indicated that there was a significant difference on speed between the selected rural and urban area school students. The mean values of speed between rural and urban area school students were graphically represented in the figure 2.

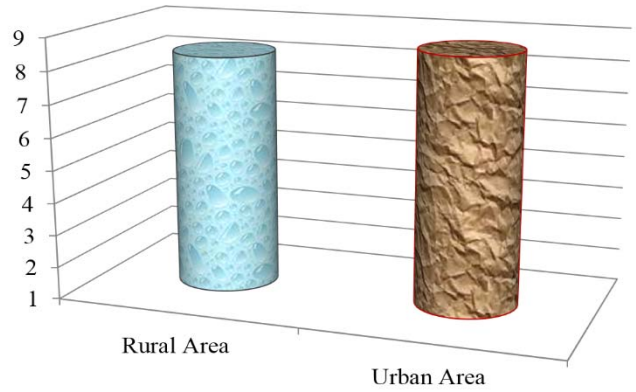

Fig 2: The mean values of speed between rural and urban area school students.

Kolekar and Sawant (2013) were conducted a cross-sectional study to compare the physical fitness of the healthy school children from the urban and rural areas of Sangli district at Maharashtra. The result of the study shown that, the motor fitness qualities were significantly better for rural area school children than the urban area students. Kumar (2014) was compared the physical fitness variable of 15-19 years of urban and rural area basketball players and he reached the conclusion that, the fitness status of the different area players have role in selected motor fitness qualities. Awati (2014) evaluated the physical status of the rural and urban area high school students and reached the conclusion that there was a significant difference between the selected subjects. Dutta (2014) conducted a comparative study of motor fitness status of rural and urban college boys and was concluded that agility and speed of rural college boys is definitely better than urban boys. Gill *et al*. (2010) were concluded their study about the comparison of the rural and urban area college female students. The result also be pointed out that, there was a significant difference between the two area college female subjects. Ghosh and Goon (2015) examined the comparison of physical fitness components of rural and the urban area school going female students and reached the conclusion that the rural area school students were better than the urban area female students. Namjoo *et al*. (2012) conducted a study of comparison between the urban and rural area high school students and reached the conclusion that they have significant difference on motor qualities to each other. The studies of Parveen (2007), Paulomi Das and Chatterjee (2013), Pal *et al*. (2014), Hiana *et al*. (2013), Loucaides *et al* (2003), Vats and Patra (2015), and Tinazci and Emiroglu (2009) were also described that the selected physical and motor fitness components were significantly difference among the rural and the urban area subjects. The result of the present study also conclude that the selected motor fitness

variables of speed and the flexibility were significantly greater result for the rural area school students than the urban area students.

Conclusion

The result of the study revealed that, there was a significant difference on selected motor fitness variables of flexibility and the seed between the rural and urban area high school students of Wayanad district in Kerala state. Moreover, we can say that the basic motor fitness level of rural area high school students were better than the urban area high school students.

References

1. Amit Kumar. A comparative study of selected physical fitness variables of 15-19 years basketball players of urban and rural area of Rohtak district in relation to their age. IJPESH 2014; 1(2):22-24.
2. Asghar Namjoo, Mehdi Mogharnasi, Enayatollah Asad Manesh, Masoomeh Kamyabnia. The comparison of physical related readiness factors with health between urban and rural students of guidance and high-school. European Journal of Experimental Biology. 2012; 2(5):1952-1956.
3. Constantinos A, Loucaides Sue, Chedzoy M, Neville Bennett. Differences in physical activity levels between urban and rural school children in Cyprus, Health Education Research 2003; 19(2):138-147.
4. Gahlawat Parveen. Comparison of Physical Fitness status of Rural and Urban Male Collegiate students in Kurukshetra. Journal of Exercise Science and Physiotherapy. 2007; 3(2):157-159.
5. http://cber.cba.ua.edu/asdc/urban_rural.html
6. http://study.com/academy/lesson/flexibility-in-fitness-definition-stretches-exercises.html
7. http://weightloss.about.com/od/glossary/g/flexibility.htm
8. http://www.topendsports.com/fitness/speed.htm
9. http://www.wisegeek.com/what-is-motor-fitness.htm
10. https://answers.yahoo.com/question/index?qid=20080402232156AAtBWJe
11. Manmeet Gill, Nishan Singh Deol, Ramanjit Kaur. Comparative Study of Physical Fitness Components of Rural and Urban Female Students of Punjabi University, Patiala. Anthropology 2010; 12(1):17-21.
12. Pallab Ghosh, Ashok Kr. Goon. Comparison of Physical Fitness Level Urban and Rural School Going Female Student. International Journal of Social Science and Humanities Research. 2015; 3(1):313-316.
13. Paulomi Das, Pinaki Chatterjee. Urban-rural contrasts in motor fitness components of youngster footballers in West Bengal, India, Journal of Human Sport & Exercise. 2013; 8(3):797-805.
14. Sanjayakumar S, Awati A. comparative analysis on physical fitness of rural and urban high school students: a case of bagalkot, New Man International Journal of Multidisciplinary Studies. 2014; 1(4):122-134.
15. Sanjiv Dutta. Comparison of motor fitness status of rural & urban college boys. International journal of research pedagogy and technology in education and movement sciences (IJEMS). 2014; 02(03):60-67.
16. Sankarson Pal, Sagarika Bandyopadhyay, Arup Gayen. Motor Fitness of Rural Primary School Girls In Comparison To Boys. IOSR Journal of Sports and Physical Education. 2014; 1(7):39-42.
17. Sunil M. Kolekar Sunita U, Sawant A. Comparative Study of Physical Growth in Urban and Rural School Children from 5 to 13 Years of Age. International Journal of Recent Trends in Science and Technology. 2013; 6(2):89-93.
18. Tan Chee Hiana, Zainal Fikiri Mahmudb, Tham Yin Choongc. Physical Fitness Level between Urban and Rural Students-Case Study. Procedia - Social and Behavioral Sciences 2013; 90(1):847–852.
19. Tinazci C, Emiroglu O. Physical fitness of rural children compared with urban children in North Cyprus: a normative study. J Phys Act Health. 2009; 6(1):88-92.
20. Umang Vats, Prosenjit Patra. Effect of Moderate Intensity Aerobic Exercises on Vital Capacity and Quality of Life on Asymptomatic Subjects with Sedentary Lifestyle. International journal of medical and health education, 2015, 4(1).