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Research Paper

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# A Comparative Study of the Blood Pressure of Male and Female Students of Rural and Urban Area

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Abstract: The purpose of this research study was a Comparative Study of the Blood Pressure of Male and Female Students of Rural and Urban Area. In this research study, the students of the rural and the urban schools of Sabarkantha district were selected as the samples, In this research study the students studying in standard 8, 9 and 10 were selected. In this research study, the boys and the girls students of the rural and urban schools of Sabarkantha district were selected. In this research study 200 male students and 200 female students total 800 samples were selected. In this research study the students between the age group 13 to 18 were selected. In the scale of measurement, the blood pressure was measured by Sphygmometer. In order to compare physiological factors of male and female students of rural and urban area: "t" test was applied and relevance was checked at the level of 0.05 level. There was no significant difference in the Systolic Blood Pressure and Diastolic Blood Pressure of the urban and rural boys. It can be said that the Systolic Blood Pressure of both the groups was similar.

### Introduction

The human body is like a unique mantra which gives us information about the structure of the body. It is called physiology. This scripture tells us about the size and shape of its different organs. Its relation gives an idea about the composition and chemical phenomena etc. It is necessary to get knowledge about its function after getting the narrative of the composition of those organs. This branch is called physiology. The study of physiology provides an understanding of the organs of the body, its functions as well as its effects on the whole body.

Each part of the body has to perform its own specific function. Each part that performs a specific type of function is known as a sense organ. The circulatory system in the body. The digestive system The excretory system The skeletal system The nervous system The cognitive system are available.



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The human body is like a wonderful machine. The scriptures which give us information about the structure of the body is called physiology. This scripture gives us an idea about the body and its different organs in size, shape, its relation to other organs and its capital phenomenon etc.lt is necessary to get knowledge about the function of that organ after getting an idea of its structure. This branch is called physiology. The study of physiology provides an understanding of the functions of the organs of the body as well as their effects on the whole body.

Each part of the body has to perform its own specific function. The body has a circulatory system, a respiratory system, a digestive system, an excretory system, an ecosystem, an age system, a cognitive system, a system of reproductive system, and so on.

### The purpose of the Study

The purpose of this research study was a Comparative Study of the Blood Pressure of Male and Female Students of Rural and Urban Area.

# **Selection of Samples**

In this research study, the students of the rural and the urban schools of Sabarkantha district were selected as the samples, In this research study the students studying in standard 8, 9 and 10 were selected. In this research study, the boys and the girls students of the rural and urban schools of Sabarkantha district were selected. In this research study 200 male students and 200 female students total 800 samples were selected. In this research study the students between the age group 13 to 18 were selected.

### **Standard of Measurement**

Sr.	Variable	Process	Units	



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No.			
1		Sphygmometer	mmHg
	High Blood Pressure		
2	Low Blood Pressure	Sphygmometer	mmHg

## **Statistical process**

In order to compare physiological factors of male and female students of rural and urban area: "t" test was applied and relevance was checked at the level of 0.05 level.

# Research of the Study

Table-1 Mean, variance, mean difference and 't' value of Systolic Blood Pressure of urban and rural boys

Group	Mean	N	Variance	MD	't' Value
Urban Boys	134.720	200	10.333		1.321
Rural Boys	135.150	200	10.841	0.430	

't' 
$$^{0.05}$$
 (398) = 1.965

It can be seen in Table-1 that the mean value of Systolic Blood Pressure test of urban boys is 134.720 and rural boys is 135.150. The variance of urban boys is 10.333 and rural boys is 10.841. The mean difference is 0.430 and the calculated 't' value is 1.321, which is not significant at 0.05 level.

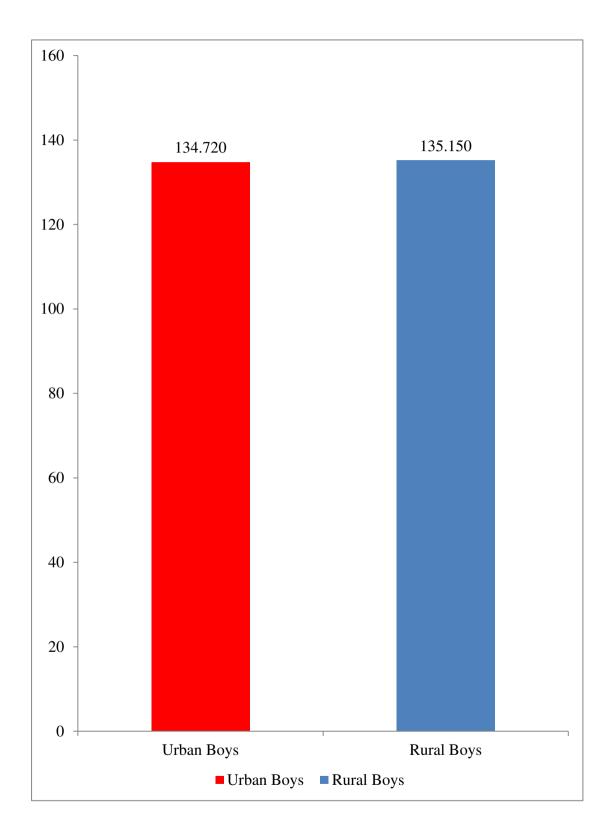


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**Graph-1** Graph showing the Systolic Blood Pressure of urban boys and rural boys





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Mean, variance, mean difference and 't' value of Diastolic Blood Pressure of urban and rural boys

Table-2

Group	Mean	N	Variance	MD	't' Value
Urban Boys	92.100	200	21.206	0.407	0.232
Rural Boys	91.995	200	19.683	0.105	

't' 
$$^{0.05}$$
 (398) = 1.965

It can be seen in Table-2 that the mean value of Diastolic Blood Pressure test of urban boys is 92.100 and rural boys is 91.995. The variance of urban boys is 21.206 and rural boys is 19.683. The mean difference is 0.105 and the calculated 't' value is 0.232, which is not significant at 0.05 level.

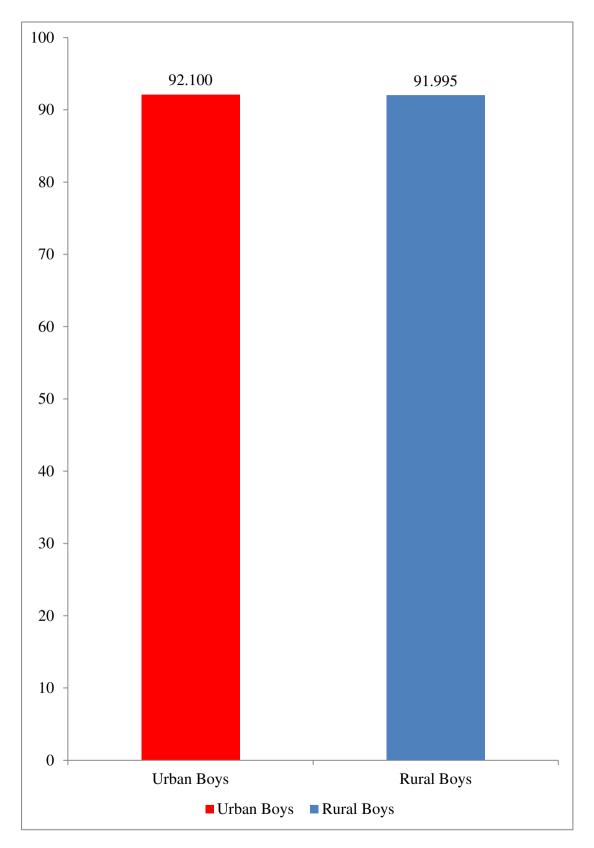


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**Graph-2** Graph showing the Diastolic Blood Pressure of urban boys and rural boys





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### **Conclusion:**

- There was no significant difference in the Systolic Blood Pressure of the urban and rural boys. It can be said that the Systolic Blood Pressure of both the groups was similar.
- There was no significant difference in the Diastolic Blood Pressure of the urban and rural boys. It can be said that the Diastolic Blood Pressure of both the groups was similar.

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