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## A COMPARATIVE STUDY OF GROWTH AND DEVELOPMENT AMONG THE RURAL AND URBAN SCHOOL STUDENTS

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### **Abstract:**

The present study was to use comparative research method and objective to comparative study of growth & development among the rural and urban school students. For the study 30 students selected in that 15 rural students as well as 15 urban students (Average 15.25 yrs.) were selected as sample through the purposive sampling technique from K. B. H. Arts, Commerce & Science college, Nimgaon Taluka Malegaon Dist. Nashik. In present study selected the growth & development variable. Standing height, body weight, push-ups, sit-ups & standing broad jump tests used for the data collection. A results shown that rural and urban students of growth and development in the present study standing height variable of rural and urban students there was no significant difference as well as body weight, push-ups, sit-ups & standing broad jump of rural and urban students there was significant difference.

**Keywords:** Growth and Development, Rural and Urban School Students.

### **Introduction:**

The study of physical growth and development of children has become a major interest not only among the auxologists, but also among the biologists, anthropologists, nutritionists and other social and behavioural scientists with different interests and objectives of study. To paediatricians and other medical researchers, the main focus of attention is on the impact of the environment on the individual or a small group of individuals and the aim is to cure or alleviate ill-health and distress. To human biologists, growth is a major concern in understanding the complexity of nutritional and hormonal mechanisms that control changes in the human body. To epidemiologists, growth is often used as a summary measure of environmental influences and increasingly as a proxy for environmental influences during childhood and adolescence, which may affect the later health of an individual. To practical nutritionists, growth is the

measure of success of intervention in dietary supplementation. To economists, physical growth and strength help to determine individual labour productivity and the magnitude of poverty in a population since growth is a good indicator of nutritional status which is greatly influenced by economic condition of a given individual or population. To anthropologists, growth is of considerable interest in understanding human adaptation to physical, biological and cultural environments, especially to understand the interaction between growth and culture.

### **Material and Method**

The researcher used the descriptive comparative method to see the difference of growth and development variables of rural and urban school students.

### **Subjects**

The study 30 students selected in that 15 rural students as well as 15 urban students (Ave. age 15.25 yrs.) were selected as sample through the purposive sampling technique from K. B. H. Arts, Commerce & Science college, Nimgaon Taluka Malegaon Dist. Nashik.

### **Selection of Variable**

This procedure allowed for the assessment of the growth and development variable was familiarization with accurate testing procedures in the match situation. The correspondent mean values were considered for statistical analysis.

### **Tools for data collection**

The data was collected by the researcher designed observation tool standing height, body weight, push-ups, sit-ups & standing broad jump attempting score sheet.

### **Procedure of the study**

The researcher has taken necessary permission from organizers regarding data collection. The researcher used the descriptive comparative method to see the difference of growth and development variables of rural and urban school students. The study 30 students selected in that 15 rural students as well as 15

urban students (Ave. age 15.25 yrs.) were selected as sample through the purposive sampling technique from K. B. H. Arts, Commerce & Science college, Nimgaon Taluka Malegaon Dist. Nashik. This procedure allowed for the assessment of the growth and development variable was used. The data was collected by the researcher designed observation tool standing height, body weight, push-ups, sit-ups & standing broad jump and collected data.

### Statistical Analysis

Statistical analysis followed the most important obtained data was analyzed by using independent sample 't' test statistics.

### Results of the study:

The results pertaining to compare the difference of growth and development variables of rural and urban school students were assessed using the independent sample 't' statistical test and the results are presented in table no. 1.

**Table no 1**  
**Descriptive Statistics of Growth and Development**  
**For Rural and Urban School Students**

Variable	Subject	N	Mean	Mean Diff	't'	Sig (2-tail)
Standing Height	Rural	15	150	0.24	2.62	0.09
	Urban	15	151			
Body Weight	Rural	15	45.1	0.12	1.13	0.01
	Urban	15	48.3			
Push-ups	Rural	15	21.0	2.41	4.40	0.00
	Urban	15	24.1			
Sit-ups	Rural	15	17.1	1.53	2.92	0.02
	Urban	15	14.6			
Standing Broad Jump	Rural	15	5.10	1.17	3.48	0.01
	Urban	15	4.13			

**Major Findings:**

The above analysis and interpretation of data following the major findings were drawn;

There was no significant difference between the rural & urban school students of growth parameter in Standing Height test ( $p=0.09$ ).

There was significant difference between the rural & urban school students parameter in Body Weight test ( $p=0.01$ ).

There was significant difference between the rural & urban school students of development parameter in Push-ups test ( $p=0.00$ ).

There was significant difference between the rural & urban school students of development parameter in Sit-ups test ( $p=0.02$ ).

There was significant difference between the rural & urban school students of development parameter in Standing Broad Jump test ( $p=0.01$ ).

**Discussion of the study:**

Discussion of the results of Growth and Development which indicate the difference between the rural and urban school students among that used various tests were given as; It was observed from the findings that the comparative study of Growth and Development among the rural and urban areas school students the significance value is less than 0.05, Standing Height test. Which shows there was no significant difference between the rural and urban school students at 0.05 level of significance ( $p=0.09$ ). Hence the research hypothesis was rejected and null hypothesis accepted. But significant difference found in Body Weight, Push-ups, Sit-ups and Standing broad jump tests. Which shows there was significant difference between the rural and urban school students at 0.05 level of significance ( $p=0.01$ ), ( $p=0.00$ ), ( $p=0.02$ ) and ( $p=0.01$ ). Hence the null hypothesis was rejected and research hypothesis accepted. Following findings was supported by the discussion.

This findings was supported by **Pradeep S. Chahar (2014)**, studied the Physiological basis of Growth and Development among Children and Adolescent in Relation to Physical Activity. This study was designed to evaluate the Physical inactivity is one of the leading causes of serious chronic disease which

keeps on increasing with high rate. Physical activity plays an important role in enhancing the various physiological dimensions of growth and development in children and adolescents. Physical activity of different duration will enhance cardiovascular health, bone ossification, muscle growth and endocrine glands secretion. Data suggested that anthropometry is a key component for growth and development assessment in children and adolescent especially body mass index, which is quite effective and reliable. Without engaging the children's in physical activity leads to increased chances of obesity, cardiovascular diseases, cancer and diabetes in future and that fastenings the attention of fitness personal and policy makers. Developing good practices early in life, will benefited in future. Hence, parents, teachers and policymakers have to plan accordingly to make their child healthy and fit.

#### **Conclusion of the study:**

It was concluded from the comparative study of Growth and Development among the rural and urban areas school students the significance value is less than 0.05, Standing Height test. Which shows there was no significant difference between the rural and urban school students at 0.05 level of significance ( $p=0.09$ ). Hence the research hypothesis was rejected and null hypothesis accepted. But significant difference found in Body Weight, Push-ups, Sit-ups and Standing broad jump tests. Which shows there was significant difference between the rural and urban school students at 0.05 level of significance ( $p=0.01$ ), ( $p=0.00$ ), ( $p=0.02$ ) and ( $p=0.01$ ). Hence the null hypothesis was rejected and research hypothesis accepted.

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