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Learning Achievement of Elementary School Students in Urban Slums of Varanasi City: A Comparative Study

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Abstract

Our country is a sovereign socialist secular democratic republic committed to provide quality elementary education to all children including deprived children in the age group of 6 to 14 in the society. The slum children come from most deprived and downtrodden sections of the population in urban areas. As such, the country has a special responsibility for their education and welfare. In order to provide quality elementary education to slum children, learning achievement of students should be satisfactory. In this research paper, the learning achievement of elementary school students in Varanasi slum areas has been assessed and compared with learning achievement of elementary school students at national level. Descriptive survey method was used in the study. The study was conducted in randomly selected sample of 67 (32 government and 35 private) elementary schools in urban slum areas of Varanasi city. The subjects of the study were 670 students of Class V of these sampled elementary schools. Data was analyzed using per centage method, bar-diagram and t-test. Learning achievement of students of elementary schools in slum areas of Varanasi city was not found satisfactory and the learning achievement of the students of government elementary schools in slum areas was found significantly less than that of the students of private elementary schools. Furthermore, learning achievement of students in slum areas was found significantly less than learning achievement of elementary school students at national level.

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Introduction

Education is the key to national prosperity and welfare. It equips the individual with basic knowledge and technical skills essential for work, productivity and economic survival. Education enhances personal growth, economic advancement and social effectiveness which are vital for success in a competitive society. It is generally said that children are the future of the nation. Nelson Mandela, a Nobel Peace Prize Laureate and former President of South Africa, while addressing to the world's children, stated:

"My dear young people: I see the light in your eyes, the energy of your bodies and the hope that is in your spirit. I know it is you, not I , who will make the future, it is you, not I, who will fix our wrongs and carry forward all that is right with the world." (UNICEF, 2001)

If children are our future, they are the agent of change as well as custodian of continuity (Myers, 1992), and, therefore, Government should be committed to provide quality elementary education to all children in the society.

The Government of India is committed to provide equal educational opportunity to all children. To ensure quality elementary education of deprived children, the Government of India has launched various programmes and schemes. The *Sarva Shiksha Abhiyan* (SSA), launched in 2001, has laid special focus on disadvantaged group of children in the 6-14 age group like children from rural and difficult areas, children from SC, ST minority communities, children with disabilities, and all those who are out of school. The other programmes and schemes are: Operation Blackboard Scheme, the Alternative, Innovative and Education Guarantee Scheme (EGS/ AIE). The National Programme for Education of Girls at Elementary Level (NPEGEL) and Kasturba Gandhi Balika Vidyalaya (KGBV) are specially designed to help girls to achieve education at par with boys. The Mid-day Meal Scheme has been universalised to help children enrol and retain in schools. These initiatives have had considerable impact on children's access to education, but the issue of elementary education with satisfactory learning achievement is still a major concern. In reality, learning achievement of students belonging to disadvantaged groups dwelling in slum areas including poor children, girls, children from Scheduled Castes (SC), Scheduled Tribes (ST), and Other Backward Class (OBC), is comparatively low. Most of the students do not attain minimum level of learning in slum areas. The students cannot properly read or write even though they have completed their elementary education. Without ensuring elementary education with adequate learning achievement in these deprived slum community, the national as well as international commitments cannot be fulfilled.

To assess the learning achievement of elementary school students in urban slum areas of Varanasi city and compare it with learning achievement at national level, the present study has been conducted.

Objectives of the Study

The present study was conducted to achieve the following objectives:

- To assess learning achievement of elementary school students in urban slums of Varanasi city.
- To compare the learning achievement of Government elementary school children with that of private elementary school children in urban slums of Varanasi city.
- To compare the learning achievement of elementary school children in urban slums of Varanasi city with learning achievement of elementary school children at national level.

Hypotheses

In view of the above objectives, following hypotheses were formulated:

$H_0$1: There is no significant difference in academic achievement of Government elementary school children with that of private elementary school children.

$H_0$2: There is no significant difference in academic achievement of elementary school children in urban slums of Varanasi city with academic achievement of children at national level.

Operational Definition of the Terms Used

Some important terms which have been frequently used in this study are defined conceptually and operationally for their clarity:

Learning Achievement

Student learning achievement is defined in terms of the knowledge, skill, and abilities that students have attained as a result of their involvement in a particular set of educational experiences.

Elementary Schools

Elementary schools refer to the schools from Classes I to VIII, (NCERT, 1975; Education Commission, 1964-66).

Urban Slums

In the present study, the term slum has been defined as places where buildings are:

- in any respect unfit for human habitation;
- by reason of dilapidation, overcrowding, faulty arrangement and design of such buildings, narrowness or faulty arrangement of streets, lack of ventilation, light, sanitation facilities or any combination of these factors which are detrimental to safety, health and morals. (Slum Areas Improvement and Clearance Act, 1956)

Urban slums in Varanasi city have been operationally defined as 227 areas by District Urban Development Agency (DUDA) (Base Line Survey Report on

Varanasi City, 2011).

Methodology

To assess the learning achievement of elementary school students, descriptive survey method was used in the study.

Sample of the Study

Multistage stratified random sampling technique was used for selection of sample of the study. The sample consisted of 67 elementary schools (32 Government and 35 private) in urban slum areas of Varanasi city. Further, 670 students of Class V (10 from each selected elementary schools) were randomly selected for the study.

Tools Used in the Study

The following tools were used to collect the data:

- Mathematics test for Class V, developed by the Department of Educational Measurement and Evaluation (DEME), NCERT
- Language (Hindi) test for Class V, developed by DEME, NCERT

Data Analysis

Data were analyzed in accordance with the objectives and hypotheses of the study. Percentage and bar-diagrams and t-test were used for analyzing the data.

Table 1 presents the facts that not a

Results

- Learning Achievement of Students in Urban Slums of Varanasi City

Table 1

Percentage of Elementary School Students' Frequencies in Different Grades of Learning Achievement in Mathematics

Learning achiev-ement range	*Grade*	*Percentage of students' frequency (Government school)*	*Percentage of students' frequency (private school)*	*Percentage of students' frequency (all sampled schools)*
0-34	Below minimum grade	83.04	63.19	73.12
35-39	Minimum grade	6.97	10.43	8.7
40-49	Average grade	8.70	13.04	10.87
50-59	Good	1.30	11.88	6.59
60-79	Excellent	0	1.47	0.73
80-100	Mastery grade	0	0	0

single student was found in mastery grade in mathematics either from Government or private schools. In excellent grade only 1.47 per cent of students were found from private schools. In good grade 1.30, 11.88 and 6.59 per cent of students were found from Government, private and total sampled schools, respectively. In average grade 8.70, 13.04, 10.87 per centages of students were found from Government, private and total sampled schools, respectively. In minimum grade the frequency of Government, private and total sampled schools were found 6.97, 10.43 and 8.7 per cent, respectively. Maximum number of students was found in below minimum grade. The per centages of students in below minimum grade, from Government, private and total sampled schools were 83.04, 63.19 and 73.12, respectively. The bar diagram given in Fig. 1 also depicts the per centage of students of government, private and total sampled schools in different grades of learning achievement in mathematics.

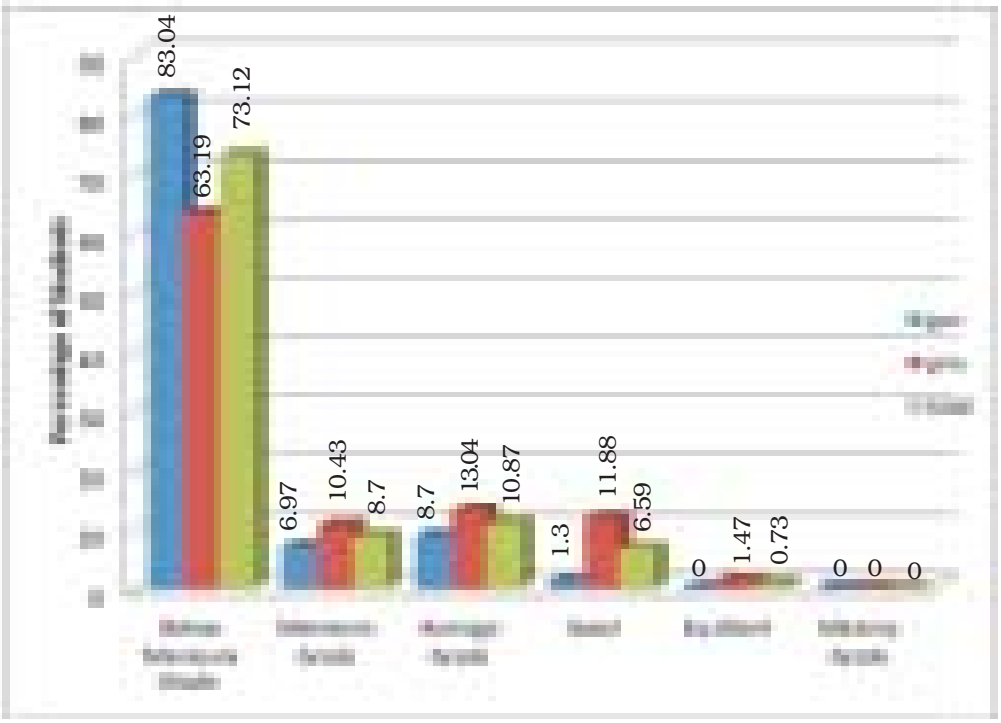

Fig. 1: Percentage of students in different grades of learning achievement in mathematics

Table 2

Percentage of Elementary School Students in Different Grades of Learning Achievement in Language (Hindi)

Learning achiev-ement range	*Grade*	*Percentage of students (in sampled government school)*	*Percentage of students (in sampled private school)*	*Percentage of students (in all sampled schools)*
0-34	Below minimum grade	61.30	24.06	42.69
35-39	Minimum grade	9.57	11.88	10.73
40-49	Average grade	11.74	23.74	17.74
50-59	Good	6.97	18.84	12.91
60-79	Excellent	10.43	19.42	14.93
80-100	Mastery grade	0	2.03	1.02

Table 2 shows that only 2.03 per cent of students were found from private schools in mastery grade of learning outcomes in Hindi. In excellent grade 10.43, 19.42 and 14.93 per cent of students were found from government, private and total sampled schools respectively. In good grade 6.97, 18.84 and 12.91 per cent of students were found from government, private and total sampled schools, respectively. In average grade 11.74, 23.74 and 17.74 per centage of students were found from Government, private and total sampled schools, respectively. In minimum grade, the frequency of government, private and total schools were found 9.57, 11.88 and 10.73 per cent, respectively. Maximum number of students was found in below minimum grade. The percentage of students in below minimum grade, from government, private and total schools was 61.30, 24.06 and 42.69, respectively. Bar diagram given in Fig. 2 also depicts the per centage of students in different grades of learning achievement in language Hindi.

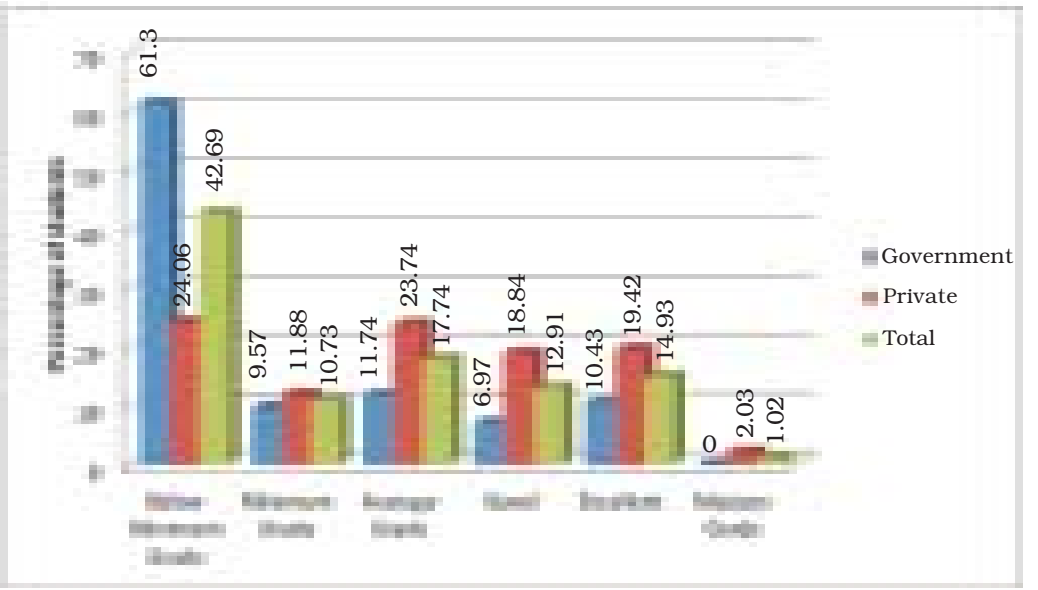

Fig. 2 Percentage of students in different grades of learning achievement in language (Hindi)

- Difference in the Learning Achievement of Government Elementary School Students with that of Private Elementary School students in Urban Slums of Varanasi City

Table 3

t- Value for Difference in Learning Achievement of Government and Private Elementary School Students in Mathematics

Elementary schools	***Mean of learning achievement in mathematics***	***SD***	***Number of students***	***t-Value***	***Sig (2 -tailed)***
Government school	25	12.54	320	8.626	<.01
Private school	33	11.36	350		

Table 3 reveals that the obtained t-value for difference in students' learning achievement in mathematics for Government and private schools was found to be significant at 0.01 level of confidence. It means that the group of government and private school students differ significantly with respect to the learning achievement of students in mathematics. The above table further reveals that the mean learning achievement of students of private schools in mathematics was found to be higher than that of government schools.

Table 4 reveals that the obtained t-value for difference in students' learning achievement in language (Hindi) for government and private school was found to be significant at .01 level of confidence. It means that the group of government and private school's students differ significantly with respect to the learning achievement of students in language (Hindi). The above table further reveals that the mean learning achievement of students of private schools in language (Hindi) was found to be higher than that of Government schools.

On the basis of significance of difference in learning achievement in both the subjects, i.e. mathematics and language (Hindi), hypothesis H_o1 has been rejected. It may be inferred that learning achievement of students of private elementary schools is significantly better than learning achievement of students of Government elementary schools in urban slums of Varanasi city.

Table 4

t- Value for Difference in Learning Achievement of Government and Private Elementary School Students in Language (Hindi)

Elementary schools	*Mean of learning achievement in language (Hindi)*	*SD of learning achievement*	*Number of students*	*t-Value*	*Sig (2-tailed)*
Government school	32	11.04	320	17.488	<.01
Private school	46	9.54	350		

- Learning Achievement of Elementary School Children in Urban Slums of Varanasi City in Comparison to Learning Achievement of Elementary School Children at National Level

Table 5

Percentages of Sampled Elementary School and National Level Elementary School Students in Different Ranges of Learning Achievement in Mathematics

Learning achiev-ement range	*Percentage of students (at national level)**	*Percentage of students (government school)*	*Percentage of students (private school)*	*Percentage of students (in all sampled schools)*
0-49	58.74	98.70	86.65	92.68
50-59	13.57	1.30	11.88	6.59
60-100	27.69	0	1.47	0.73
Total	100	100	100	100

* National level students' learning achievement at the end of Class V is taken from NCERT study.

Table 5 shows that the students' percentage of sampled elementary schools and national level elementary schools having learning achievement in 0-49 range was 92.68 and 58.74, respectively. In 50-59 range of learning achievement, the per centages of students were 6.59 and 13.57 and in 60-100 range, per centages were 0.73 and 27.69, for sample schools and elementary schools at national level respectively. The results are also depicted in the following bar diagram.

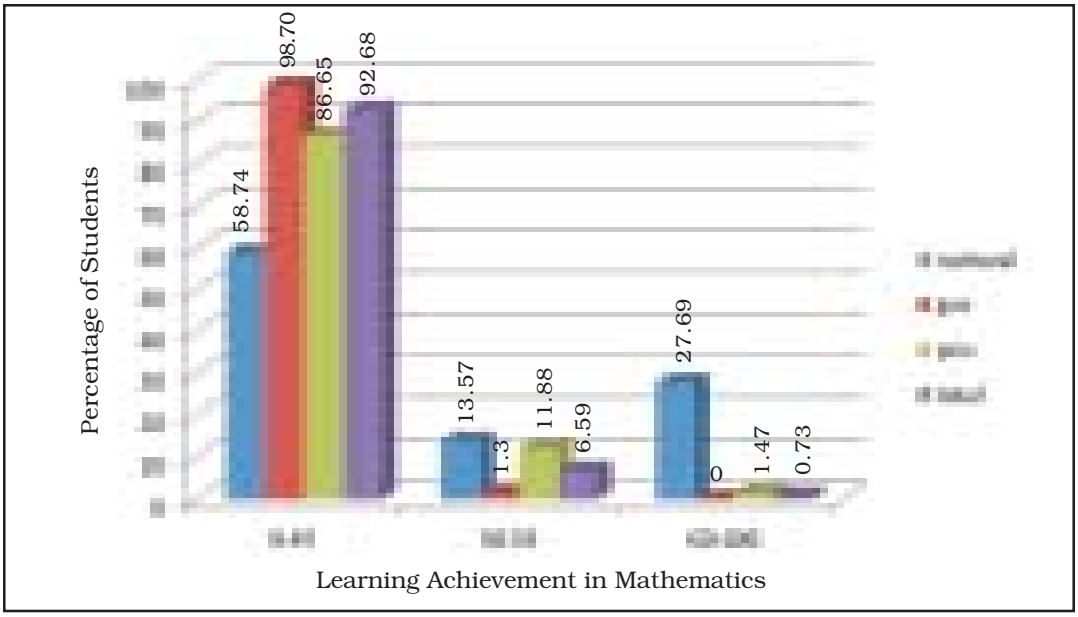

Fig. 3 Percentage of students in different range of learning achievement in mathematics

Table 6

Percentage of Students of Sampled Schools and National Level Elementary Schools in Different Ranges of Learning Achievement in Language (Hindi)

Learning achiev-ement range	*Percentage of Students (at national level) in Hindi**	*Percentage of students (government school)*	*Percentage of students (private school)*	*Percentage of students (in all sampled schools)*
0- 49	30.25	82.61	59.68	71.16
50-59	18.68	6.97	18.84	12.90
60-100	51.07	10.42	21.48	15.94
Total	100	100	100	100

* National level students' learning achievement at the end of Class V is taken from NCERT study.

Table 6 shows that in Hindi language, the percentage of students of sampled elementary schools and national level elementary schools having learning achievement in the range of 0-49 was 71.16 and 30.25, respectively. In 50-59 range of achievement, the percentage of students was 12.91 and 18.68 for sampled elementary schools and at national level of elementary education respectively. In 60-100 range, per centage of students was 15.94 for sampled elementary schools and 51.07 for elementary schools at national level. The results are also depicted in the following bar diagram.

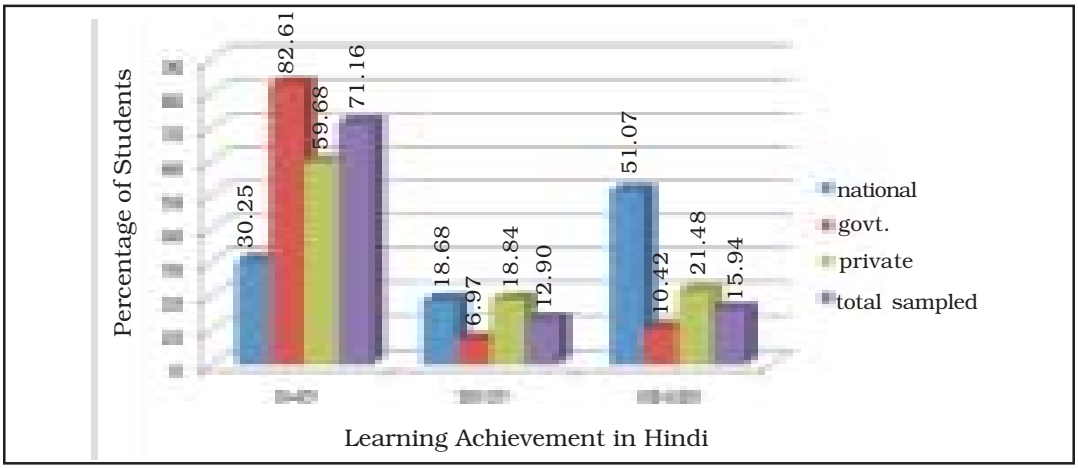

Fig. 4 Percentage of students in different ranges of learning achievement in language (Hindi)

Table 7

t- Value for Difference in Learning Achievement of Students of Sampled Schools and Elementary Schools at National Level in Mathematics

	Mean of learning achievement in mathematics	***SD of learning achievement***	***Number of students***	***t-Value***	***Sig (2 -tailed)***
Learning achievement National Level*	46.51	21.30	88271	37.91	<.01
Sampled School learning achievement	29	11.81	670		

* Mean, SD and number of students were taken from learning achievement of students at the end of Class V, NCERT.

Table 7 reveals that the obtained t-value for students' learning achievement in mathematics for elementary schools in slum areas of Varanasi city and learning achievement of elementary school students in mathematics at national level was found to be significant at 0.01 level of confidence. It means that the group of elementary school students at national level and in slums of Varanasi city, differ significantly with respect to the learning achievement of students in mathematics. The above table further reveals that the mean learning achievement of students of elementary schools at national level in mathematics was found to be higher than that of elementary schools in slum areas of Varanasi city.

Table 8 reveals that the obtained t-value for students' learning achievement in language (Hindi) for elementary schools in slum areas of Varanasi city and learning achievement of elementary school students in language (Hindi) at national level was found to be significant at .01 level of confidence. It means that the group of elementary school students at national level and in slums of Varanasi city differ significantly with respect to the learning achievement of students in language (Hindi). The above table further reveals that the mean learning achievement of students of elementary schools at national level in Hindi was found to be higher than that of elementary schools in slum area of Varanasi city. On the basis of significance of difference in achievement in both the subjects, i.e. mathematics and language (Hindi),

Table 8

t- Value for Difference in Learning Achievement of Students of Sampled Schools and Elementary Schools at National Level in Language (Hindi)

Elementary School	*Mean of learning achievement in Hindi*	*SD of learning achievement*	*Number of students*	*t-Value*	*Sig (2-tailed)*
Learning achievement National Level*	58.57	18.30	88271	47.652	<.01
Sampled School learning achievement	39	10.51	670		

* Mean, SD and number of students were taken from learning achievement of students at the end of Class V, NCERT.

hypothesis H_o2 has been rejected. The learning achievement of students of elementary schools at national level is significantly better than learning achievement of students of elementary schools in urban slums of Varanasi city.

Discussion

Learning achievement of students was not found satisfactory in elementary schools of Varanasi slum areas. Most of the students could not attain minimum level of learning in both the subjects. Comparatively, learning achievement of private school students was found better than learning achievement of government school students in both the subjects. Furthermore, learning achievement of elementary school students in urban slum areas of Varanasi city is comparatively lower than learning achievement of elementary school students at national level. The findings of the study that the slum children had lower learning achievement are in accordance with the findings of similar studies conducted by Fraser, 1959; Dave, Mathur, 1963; Douglas, 1964; Tiwari, Chandrashekharaiah, 1965; Sharma, 1974; and Rath,1976. It indicates that equal educational opportunity is not available to slum children. Government of India has initiated a number of programmes and schemes with the objective to ensure quality education in access of deprived children in their schools but the target of elementary education with satisfactory learning achievement could not be achieved. It seems that governmental policies and programmes have not been effectively implemented in urban slum areas.

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