

A COMPARATIVE STUDY OF ACADEMIC ACHIEVEMENT OF SECONDARY SCHOOL STUDENTS STUDYING IN SCHOOLS OF UTTARKASHI DISTRICTS

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Abstract

Academic achievement is connected with the institutional education of students. Academic achievement can also be explained as the performance outcome of students as a result of learning in the classroom in the form of classroom instruction and co-curricular activities in different subjects. Academic achievement can be measured through scores on academic tests. Measuring academic achievement is important as it has predictive value for learning, intelligence, motivation, attitude, interest of students, efficiency of teaching etc; is considered for admission to several courses; attracts jobs. The present study studies the academic achievement of secondary school students in Uttarkashi district based on gender, location of school, and type of school. The findings of the study revealed that the academic achievement of private and urban school students is significantly higher as compare to Govt. and rural school students respectively.

Academic achievement

Academic achievement is connected with the institutional education of students. Wikipedia defines academic achievement as the extent to which a student has attained his short-term or long-term educational goals. Crow and Crow have defined academic achievement as the level to which a learner can absorb the instructions in a given area of learning i.e., achievement is reflected by the extent to which skill and knowledge have been imparted to him (Desai, 2013) and imbibed by the learner. Academic achievement can also be explained as the performance outcome of students as a result of learning in the classroom in the form of classroom instruction and co-curricular activities in different subjects. Academic achievement has predictive value.

Academic achievement can predict whether one will go for higher education or initiate his career in a particular vocational field. It is an indicator of intellectual education and cognitive domain. It is a good predictor of wages and employment in the future (Currie & Thomas, 1998). Academic achievement predicts the intelligence, motivation, attitude, and also interest of students. In a particular course, educational institutions want to give admission to those students who could be able to complete the course fruitfully. Parents also want to know about the performance of their children. Teachers want to know about the efficiency of their teaching. Society and management need to know about the return on their investment in education. Students also want to be acquainted with the areas of their weakness. Now the question arises about the measurement of academic learning. Academic learning can be measured through scores on academic tests called academic achievement. Academic achievement is the score of students in the academic tests taken after completion of the teaching-learning process to accomplish certain objectives in different subjects. These tests may be cognitive, skill-based, or a combination of both. Academic tests can be either subjective or objective or both. There are two ways of measuring academic achievement. One is 'Grade Point Average' (GPA) and the other is 'Standardised Assessment Tests' (SAT). Although academic grades are better between the two, the combination of both is the best indicator (Burton, 2001). Grades are a better measurement of student performance as only students with certain traits like perseverance, hard work, and self-discipline can score higher grades which are key to success. There is a positive correlation between anxiety and academic achievement. Social maturity (Puar, 2013), emotional maturity (Ganie & Ganai, 2021), self-concept (Herrera, 2020), and socioeconomic status (OECD) are positively correlated with academic achievement, but entrepreneurship, leadership, and creativity (Tai, 2020) are negatively correlated with academic achievement. Online peer learning (Razak & See, 2010), self-directed learning (Vygotsky, 1978), e-learning, motivation strategies, and psychological capital resources (Martinez, 2019) help improve academic achievement.

Statement of Aim

The present problem is stated as 'A comparative study of academic achievement of secondary school students studying in schools of Uttarkashi district'.

Objective

The objectives of the present research are:

1. To study the difference between secondary school students' academic achievement based on gender.
2. To study the difference between secondary school students' academic achievement based on the locality of the schools.
3. To study the difference between secondary school students' academic achievement studying in Govt. and private schools.

Hypotheses

H₀1. There is no significant difference between male and female secondary school students' academic achievement.

H₀2. There is no significant difference between secondary school students' academic achievement based on the locality of schools.

H₀₃. There is no significant difference between secondary school students' academic achievement studying in Govt. and private schools.

Operational definition of variables used

Secondary school students: Secondary school students refer to those students who study in class ninth to twelfth in secondary schools of Uttarkashi District.

Academic achievement

Academic achievement is the self-reported score of students in their last term examinations.

Govt. Schools

Those schools funded by the Government are considered as Govt. schools.

Private schools

The schools not funded by the Government are considered private schools.

Rural

Rural means the schools situated in rural areas. The students studying in rural area schools are considered as students belonging to rural areas.

Urban

Urban means the schools situated in urban areas. The students studying in urban area schools are considered students belonging to urban areas.

Research method

The researcher has used a Descriptive Survey method for research.

Sample

The sample consists of 286 secondary school students who belong to Uttarkashi district of Uttarakhand State using a multi-level sampling technique. The students who participated in the study included 134 males and 152 females, 99 urban school students, 187 rural school students, 121 private school students and 165 Govt. school students.

Delimitation of the study

The study is delimited to Uttarkashi district of Uttarakhand state only.

Measuring tools for data collection

Academic achievement is measured using self-reported academic scores of students in their last term exams.

Statistical techniques used

The statistical techniques used for analysis are Mean (M) and Standard deviation (SD) whereas student-t is used for deducing inferences.

Data analysis and discussion

Data analysis and discussion is divided into two sections. Section A discusses data distribution whereas section B is related to data analysis using statistical techniques.

A Distribution of data

Table 1 Distribution of the sample among males and females

Gender	N	Percentage
Male	134	47%
Female	152	53%
Total	286	100%

Table 1 shows the number and percentage of male and female secondary school students in the total sample. The sample consisted of 286 subjects of which 134 (47%) are males and 152 (53%) are females.

Table 2 Distribution of the sample among rural and urban school students

Gender	N	Percentage
Rural	187	66%
Urban	99	34%
Total	286	100%

Table 2 shows the number and percentage of rural and urban secondary school students in the total sample. The sample consisted of 286 subjects of which 187 (66%) are rural and 99 (34%) are urban.

Table 3 Distribution of the sample among Govt. and private school students

Gender	N	Percentage
Govt.	165	58%
Private	121	42%
Total	286	100%

Table 3 shows the number and percentage of Govt. and private secondary school students in the total sample. The sample consisted of 286 subjects of which 165 (58%) are Govt. and 121 (42%) are private school students.

Table: 4 Distribution of sample on the basis of Gender in relation to Academic Achievement

Academic Achievement →	High		Average		Low		Total	
	N	%	N	%	N	%	N	%
Gender ↴								
Females	33	22	87	57	32	21	152	100
Males	21	16	85	63	28	21	134	100

- Table: 4 explains that 22% female students have high academic-achievement. 57% females have average academic-achievement. 21% female secondary students have low academic-achievement.
- 16% male students have high academic-achievement. 63% males have average academic-achievement. 21% male secondary students have low academic-achievement.

Following is the graphical representation of the table 4:

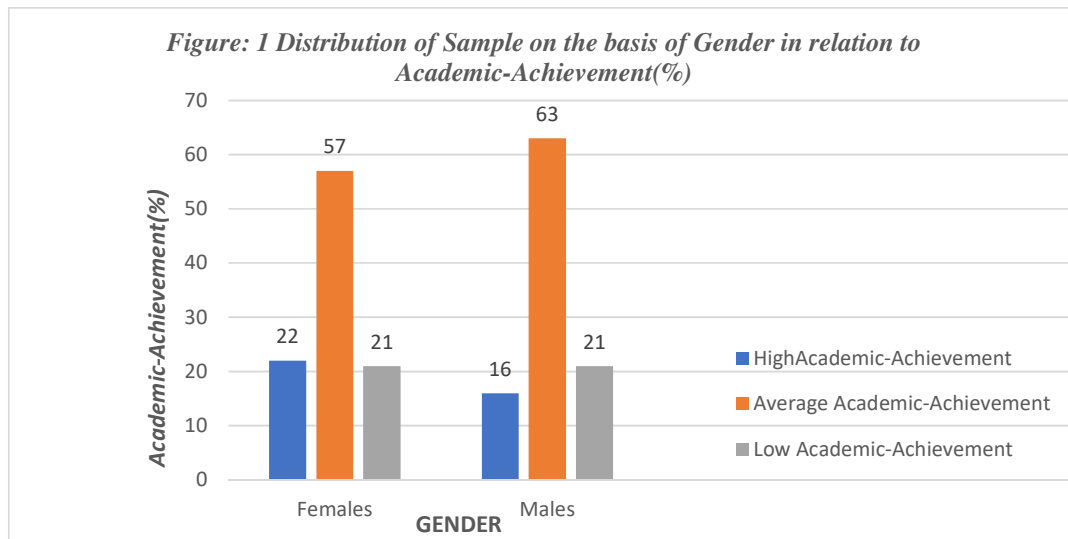


Table: 5 Distribution of sample on the basis of Location of School in relation to Academic Achievement

Academic Achievement →	High		Average		Low		Total	
	N	%	N	%	N	%	N	%
Rural	36	19	111	59	40	22	187	100
Urban	16	16	70	71	13	13	99	100

- Table: 5 explains that 19% rural students have high academic-achievement. 59% rural students have average academic-achievement. 22% rural secondary students have low academic-achievement.
- 16% urban students have high academic-achievement. 71% urban students have average academic-achievement. 13% urban secondary students have low academic-achievement.

Following is the graphical representation of the table 5:

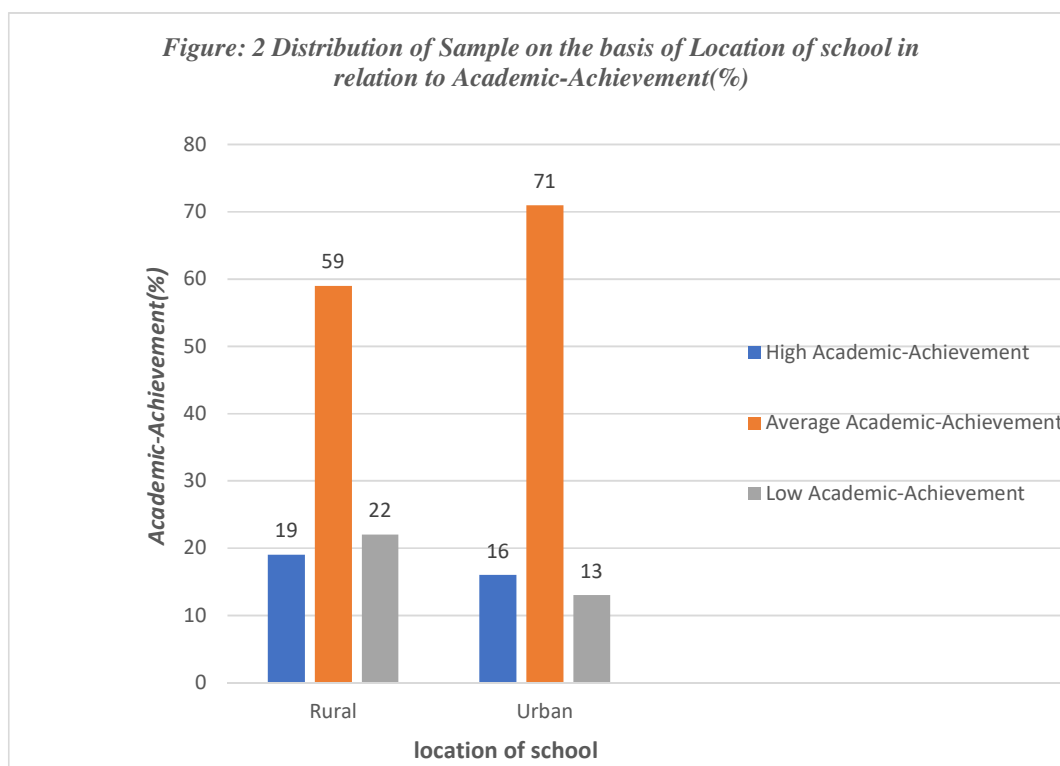


Table: 6 Distribution of sample on the basis of Type of school in relation to Academic Achievement

Academic Achievement →	High		Average		Low		Total	
	N	%	N	%	N	%	N	%
Govt. ↴	33	20	106	64	26	16	165	100
Private	23	19	80	66	18	15	121	100

- Table: 6 explains that 20% students studying in Govt. schools have high academic-achievement. 64% have average academic-achievement. 16% secondary students studying in Govt. schools have low academic-achievement.
- 19% Students studying in private schools have highly academic-achievement. 66% have average academic-achievement. 15% secondary students studying in private schools have low academic-achievement.
- Following is the graphical representation of the table 6:

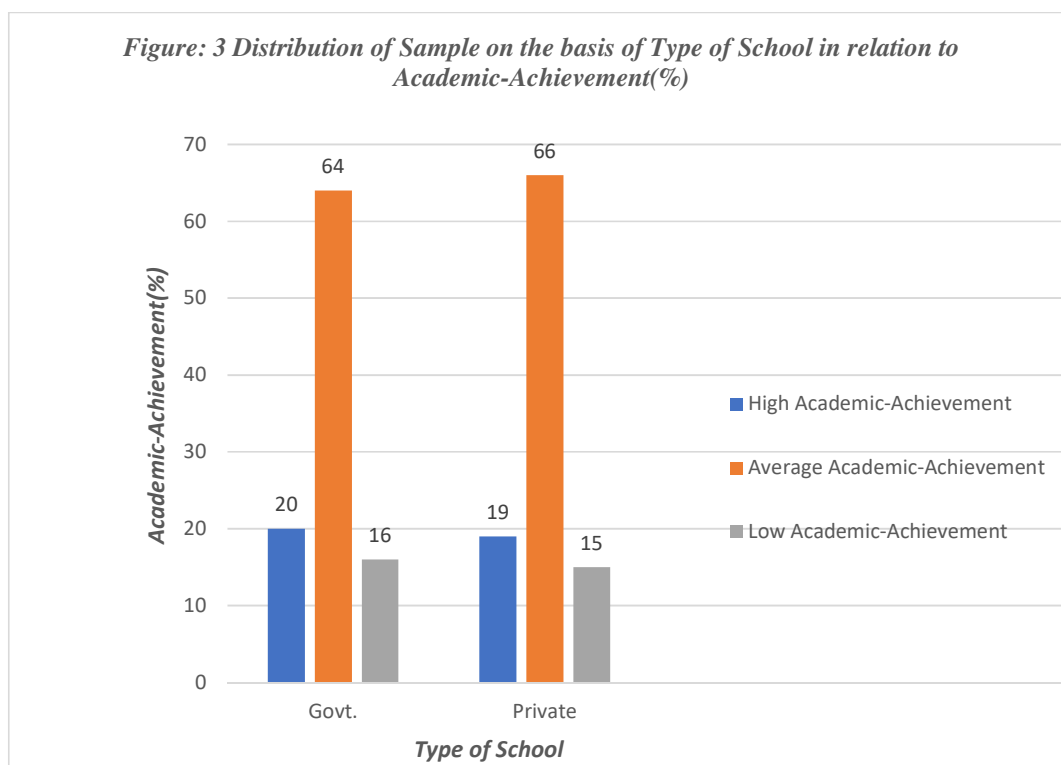


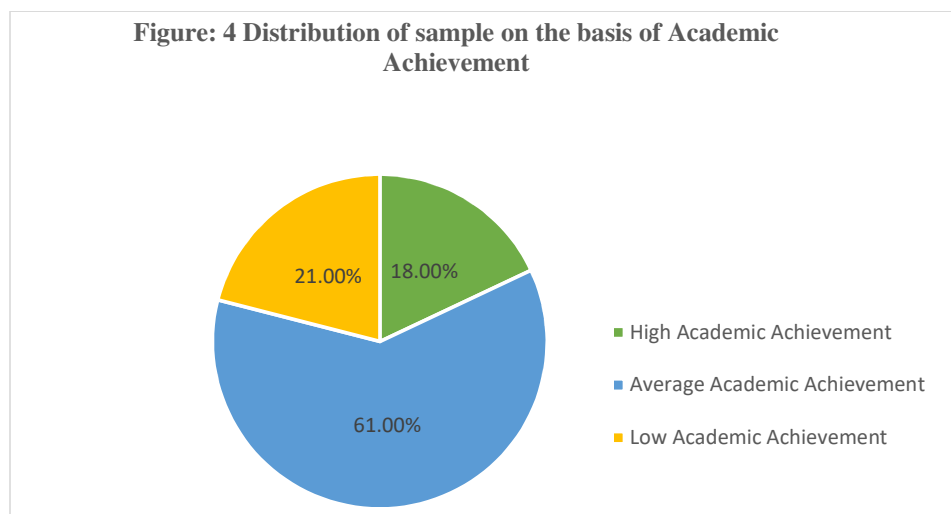
Table: 7 Distribution of sample on the basis of Academic Achievement

Level of Academic Achievement ↩	No. of Students	%
High Academic Achievement	52	18
Average Academic Achievement	174	61
Low Academic Achievement	60	21
Total	286	100

Table 7 shows the number and percentage of students on the three levels of Academic Achievement for the total sample (N=286).

- 18% of students (N=52) fall in High Academic Achievement Level
- 61% of students (N=174) fall in Average Academic Achievement level.
- 21% of students (N=60) fall in Low Academic Achievement Level.

Following is the graphical representation of table 7



B. Analysis of data

H₀₁ There is no significant difference between Academic achievement of female students and male students studying in secondary schools of Uttarkashi.

Table 8 Difference between Means of Academic achievement on the basis of gender

Variables ↓	N	M	SD	df	t	Level of significance
Female	152	68.36	15.15	284	0.52	p > .05
Male	134	67.44	13.98			

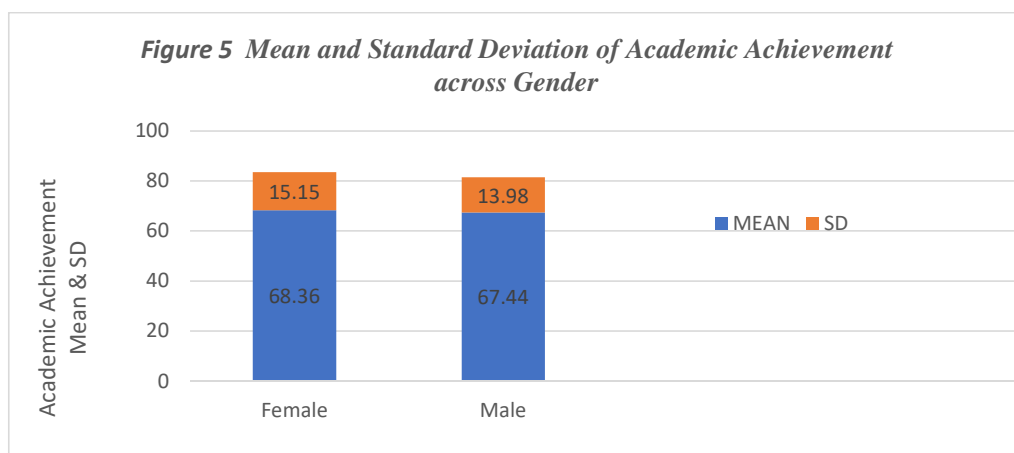


Table 8 reports the mean, standard deviation, and significance between means of academic achievement based on gender. In respect of academic achievement, a significant difference has not been found ($t = 0.52$) between female students ($M = 68.36$, $SD = 15.15$) and male students ($M = 67.44$, $SD = 14.13$). As $p > .05$, it can be stated that the results are not statistically significant at a .05 significance level. Therefore, H_0 is accepted, and concluded that there is no significant difference between the academic achievement of female and male students studying in secondary schools of Uttarkashi district. The results do not align with Alam (2016), Joshi (2000), Sunil Kumar (2012). They found significant differences in the academic achievement of students based on gender. The results are in tune with Lawrence & Jesudoss (2011), Deshmukh (1995). They did not find a significant difference in students' academic achievement based on gender.

H_0 2 There is no significant difference between the Academic achievement of secondary students studying in rural and urban Uttarkashi district schools.

Table 9 Difference between Means of Academic achievement based on the location of the school

Variables ↓	<i>N</i>	<i>M</i>	<i>SD</i>	<i>df</i>	<i>t</i>	Level of significance
Rural school	187	66.27	15.73	251	2.90	$p < .01$
Urban school	99	71.08	11.83			

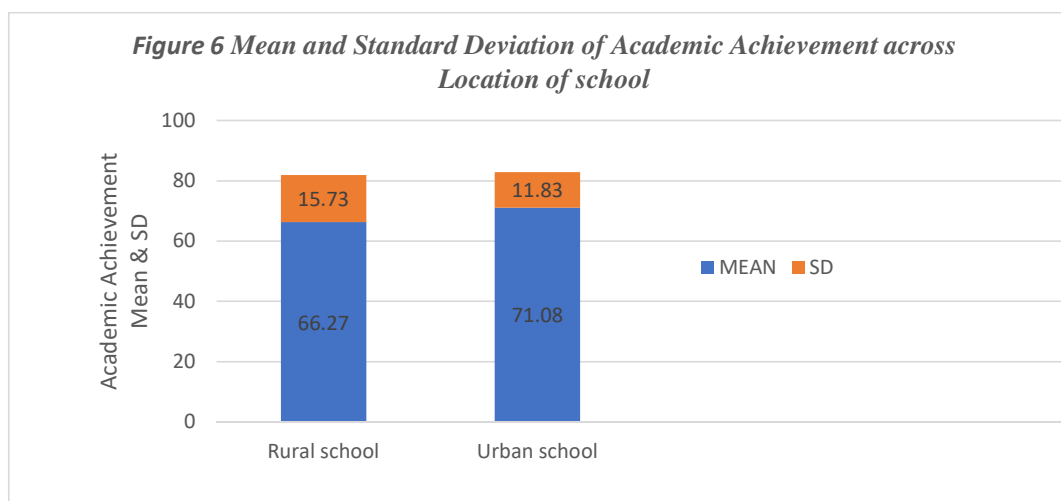


Table 9 reports the mean, standard deviation, and significance of the difference between the means of Academic achievement based on school location. A significant difference has been found ($t = 2.90$) in respect of academic achievement between students studying in rural schools ($M = 66.27$, $SD = 15.73$) and urban schools ($M = 71.08$, $SD = 11.83$). As $p < .01$, it can be stated that the results are statistically significant at a .01 level of significance. Therefore, H_02 is accepted and concluded that there is no significant difference between the academic achievement of secondary school students based on the school's location. The results follow Alam (2016), Johnson (1998), and Sunil Kumar (2012) who noticed a significant difference in the academic achievement of students based on the location of the school. The results are not in accord with Lawrence & Jesudoss (2011) who did not find a significant difference in students' academic achievement based on school location.

H₀₃ There is no significant difference between the Academic achievement of secondary school students studying in Govt. and private schools of Uttarkashi.

Table 10 Difference between Means of Academic achievement based on type of school

Variables ↓	<i>N</i>	<i>M</i>	<i>SD</i>	<i>df</i>	<i>t</i>	Level of significance
Govt. school	165	61.18	13.67	284	11.22	$p < .01$
Private school	121	77.14	10.34			

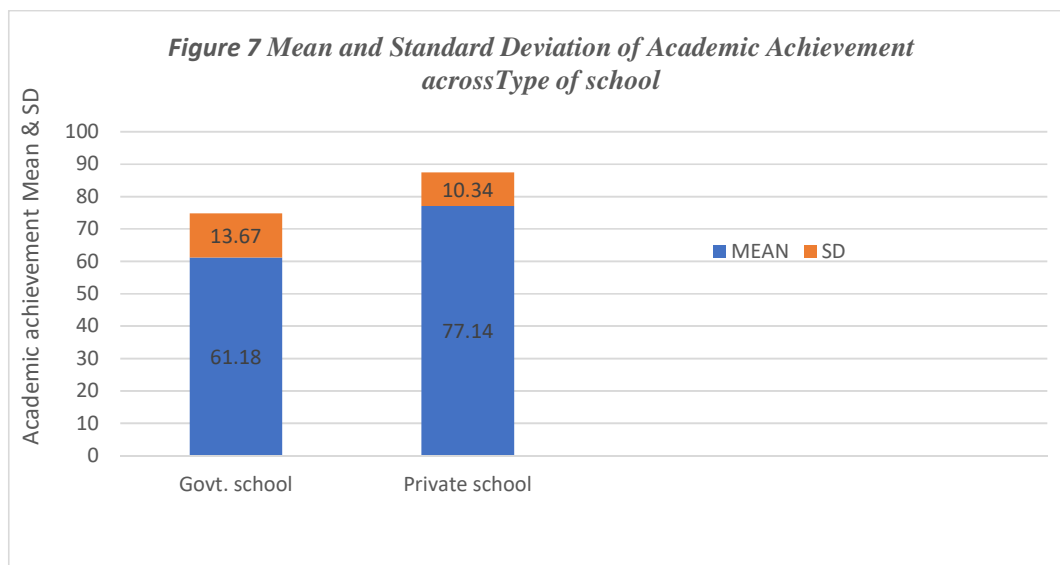


Table 10 reports mean, standard deviation and significance of difference between the means of Academic achievement on the basis of type of school. Significant difference has been found $t(284) = 12.25$ in respect of academic achievement between students studying in Govt. schools ($M = 61.18$, $SD = 13.67$) and private schools ($M = 77.14$, $SD = 10.34$). As $p < .01$, so it can be stated that results are statistically significant at .01 level of significance. Therefore, H_03 is rejected. As mean score of academic achievement of students studying in private schools is higher than Govt. schools it is concluded that academic achievement of students studying in private secondary schools is higher than academic achievement of students studying in Govt. schools. Khullar (2016), Sunil Kumar (2012), Panda (1998), Ganie & Ganai (2021) found results in tune with present findings which states that there is significant difference in academic achievement of students on the basis of Govt-non-Govt. school.

Findings and discussion

Based on the above statistics and discussion, it is interpreted that there is no significant difference between males and females in respect of academic achievement. The reason may be awareness about educational importance among students, and their parents. Also, equal opportunities and participation of male and female students in curricular and co-curricular activities may be another reason.

There is a significant difference between academic achievement of rural and urban students' as well as between academic achievement of private and Govt. students. The reason might be in present time majority educated parents prefer to admit their wards in private schools, especially those who belong to high or middle economic status. They give full support to their children even at home like arranging tuitions, helping in homework, providing reference books, mobile and internet facilities etc in comparison to parents who belong to low economic status. Mostly students in Govt. schools belong to the low-income group, who are not able to help their children in their studies either for being less educated or lack of time and provide other facilities. Besides this, Uttarkashi district is a hilly area. Most of the part of Uttarkashi is rural and only few areas are urban. The students living in rural areas have to cover a long distance to reach their schools. Moreover, there is lack of basic educational facilities and environment nearby their homes. Even, parents expect their children to help in household chores like

bringing grass for cattle from jungle, preparing food, buying daily use things from market etc. This leaves them with less time for studies. Education becomes a secondary thing for them.

Conclusion

The findings ascertained that academic achievement of urban and private school students is significantly higher as compared to rural and Govt. school students respectively. Academic achievement is very important as it is the most basic thing which tells about some of the traits like intelligence, interest, attitude, hard work, learning etc. Govt., parents, educational institutions and researchers should take note of it, try to find out the reasons and minimise the difference.

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