Study of academic achievement of higher secondary school students belonging to rural area of Patan district

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Abstract
The present paper aimed at measuring the Academic Achievement of High secondary level students in rural area of patan district. A survey of 317 sample from rural area were conducted. One principle variable- 'Academic Achievement 'was considered. Researcher collected academic score from the X classes. Mean and SD as Descriptive Statistics, and 't' test as Inferential Statistics were employed to find the significance of difference among the gender towards the Academic Achievement. Finally found the significant difference from null hypotheses.

Keywords: academic achievement, high secondary students and rural area

1. Introduction

Achievement refers to the knowledge attained or skill development in school subjects usually designated by test scores or by marks assigned by the teachers or by both. According to Carter V. Good (1973), achievement means accomplishment or proficiency or performance in a given skill or body of knowledge, help in declaring the examine successful or unsuccessful choosing the students for various professional and academic courses and selecting the candidates for different jobs. Suppose one have a choice of three video games to play. One game is easy, all know one can get a high score on it; so could anyone else. The second game is more difficult, all are not sure how well one would do. The third is so difficult that all are sure one would lose quickly, as most people do. Which does one choose. Most people prefer the difficult but not impossible game, especially people with a strong need for achievement. When people receive feedback on their performance, such as "You got 82% correct on the first test", those with a strong need forchievement usually increase their efforts, no matter what the results were. Apparently, they interpret almost any feedback as meaning that they have room for improvement and need to try harder. People with a need for achievement or a high fear of failure react to feedback by decreasing their efforts. The feedback either tell them that they are achieving their modest goals or that they are failing and may as well quit. Evaluation of learning outcomes of the students by measuring their academic achievement, the appropriateness of the methods of imparting knowledge may be judged. In the present socio economic and cultural context, academic achievement is of paramount importance and the schools place great emphasis on it. At all school levels there exist enormous differences in the academic attainment of students ranging from high to low. Progress in future to a great extent depends upon the academic attainment of the students. It has to be pointed out that though

several attempts have been made to study the impact of non-intellectual factor on achievement in general, no concrete attempt has been made to study how much variance in achievement is accounted for environmental factors, study habits and self esteem. According to Elizabeth B. Hurlock (1989), the term "Academic Achievement" is nothing but scholastic achievement or educational attainment, which refers to the gains, got by the pupils as a result of education in educational institution. The academic achievement level of the students is judged by the marks that the students have scored in different test and examinations. Achievement tests attempt to measure what an individual has learnt – his or her present level of performance. Most of the tests used in schools are achievement tests. They are particularly helpful in determining individual or group status in academic learning. Achievement test scores are used in placing, advancing or retaining students at particular grade levels. They are used in diagnosing strengths and weaknesses, and as a basis for awarding prizes, scholarships or degrees. Frequently, achievement test scores are used in evaluating the influences of courses of study, teaching methods and other factors considered to be significant in educational practice. In using tests for evaluative purpose, it is important not to generalize beyond the specific elements measured. For example, to identify effective teaching exclusively with the limited products measured by the ordinary achievement test would be to define effective teaching. It is essential that researchers recognize that the elements of a situation under appraisal need to be evaluated on the basis of a number of criteria, not merely on a few limited aspects.

Factors affecting Academic Achievement
As a general rule, there is no single process or event, which is controlled by a single factor. Likewise, student's achievement is also controlled by a group of factors, which are almost

similar to those affecting achievement. More conveniently all these factors can be put under different categories such as psychological factors, social factors, familiar factors etc. For the present investigation, the investigator chooses psychological factors such as adjustment, self- concept, problem behavior and life stress of the higher secondary students. It is vital to explain these factors for providing a clear-cut picture of the chosen problem under investigation. So considering Academic achievement as the variables and a relative study of it among the students of Higher Secondary Schools of North Gujarat, Patan District can be selected as the area of interest.

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1.1 Review of related literature

Thakkar (2013) conducted a study of academic achievement, adjustment and study habits of rural and urban students. The objectives of study were*:* (1) to find out the academic achievement of rural and urban students. (2) to compare the study habits of rural and urban students with their academic achievement. (3) to know the relationship between adjustment and academic achievement of rural and urban students and (4) and to compare the effect of therapeutic training on the students of both the segments of society. The present study is an experimental type. The sample comprised of 200 students from rural and urban locality of standard IX were selected by using simple random sampling technique. To all members of the group, 16 sessions of one hour were given as therapeutic training consisted of imparting the knowledge of good study habit. Tools used were Adjustment Inventory by M.N. Palsana, Study Habits Inventory by M.N. Palsana and Academic Achievement scores on the basis of their two unit tests, semester or terminals and final examinations.

Venita Singh (2011) conducted a study on achievement motivation and parental background as the determinants of students' academic achievement. The study was to determine the achievement motivation and parental background as the determinants of students' academic achievement. The study was to find out the relationship between students' academic achievement and their achievement motivation.

Navang (2010) did a comparative study of the socio-economic and home factors affecting the academic achievement of boys and girls in the rural and urban areas. The objectives were (i) to study the effect of socio-economic status on the academic achievement of boys and girls in city, town and village areas, (ii) to study the relationship between the number of siblings and academic achievement and (iii) to study the relationship between home work and academic achievement. The study employed survey method. The tools used were; (i) The socio-economic status scale, (ii) The exposure to mass media scale, (iii) An interview schedule. The statistics used were (i) Standard deviation (ii) Mean (iii) "t" test (iv) Product movement correlation. The major findings were; (i) Socio-economic status did not affect academic achievement. (ii) The number of siblings seemed to affect performance and (iii) Regularity in doing home work helped achievement.

Webster and Bertha (2014) conducted a study on the effects of adolescent's classroom perceptions on motivation and achievement in the classroom. The research examined whether there existed any interaction between classroom perception and gender. Students' perception is influenced by a variety of factors like students' abilities, self-efficacy, intrinsic goals, learning strategies, interests and also the qualities of teachers. A quasi- experimental design was used to study the multiple variables of classroom perception. Results indicated no sex differences in motivation and classroom perception.

Branda Carol, Adams and Cumming Ham (2012) conducted a study on the relationship between school culture and student achievement. The objective was to conduct a study on the relationship between school culture and student achievement Samples were taken from 61 elementary schools. Tool employed was survey instrument to 102 elementary schools. Results showed that there was a relationship between the overall culture of collegiality and the self-efficacy of the elementary school in this study and the reading achievement of students in those schools.

Camahalan Faye Marsha (2014) did a study on effects of self-regulated learning on mathematics achievement of selected Southeast Asian Children. This research was based on the conceptual framework that students' low mathematics achievement in school is related to their poor study habits. The main result supported self-regulated learning theory that states that when students are given opportunities to self-regulate and explicitly taught of self-regulated learning strategies, academic achievement is more likely to be positively affected. The study confirmed that students as active agents of their behaviors could be trained to be responsible learners and thus acquired the goal of life-long education which is learning not just "what" to learn but more importantly "how" to learn.

1.2 Objectives

1. To know the academic achievement of higher secondary male students.
2. To know the academic achievement of higher secondary female students.
3. To compare status of academic achievement between male and female students ☐of higher secondary schools.

1.3 Null Hypothesis

**HO.1:** There is no significant difference between academic achievement of male and female students.

1.4 Methodology: To conduct the present research successfully the researcher has employed the descriptive research method and its approach is Quantitative for measuring the Academic Achievement of High secondary level learners.

1.4.1 Variables: The Academic achievement subject among High secondary level learners was considered as the dependent variable and male and female students as the independent variable in this study.

1.4.2 Population: It is a case Study. The research has selected the population From Patan district. So, all The High secondary Level students of rural area in Patan district are selected as population.

1.4.3 Sample: Total 317 sample has taken for the present Study where 149 boys & 168 girls) from the high secondary level school.
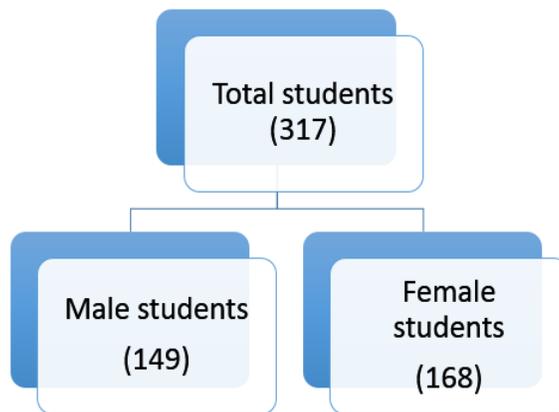
Fig 1

1.4.4 Statistical procedure: For this present study, Mean, SD (Descriptive stat.) and t test, (Inferential stat.) were employed and also 0.05level of Significance was used to test the hypotheses. Data was with the help of inventory.
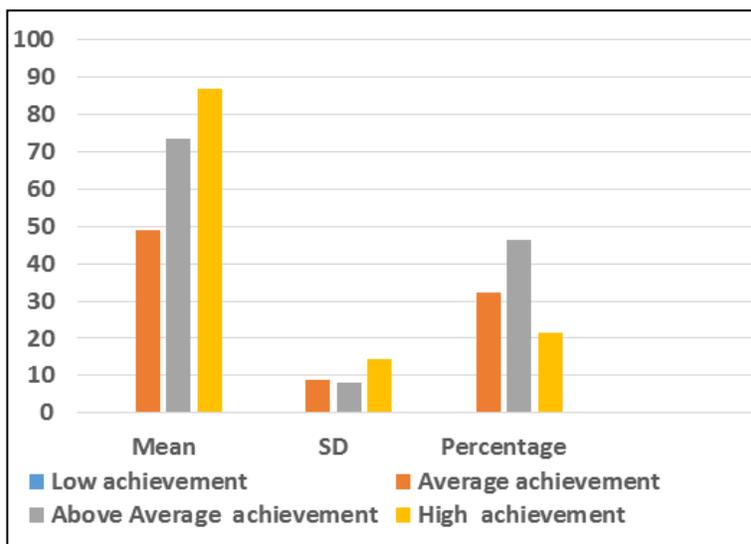
1.5 Analysis and Interpretation
Objective 1: To know the academic achievement of higher secondary male students.

Table 1:- indicates Percentile wise distribution of academic achievement of the male higher secondary students.

Sr. No	Category	Range of percentile	Male sample (N = 149)	Mean	SD	Percentage%
1.	Low achievement	Below 33	0	0	0	0
2.	Average achievement	33 to 60	48	49.01	8.91	32.2
3.	Above Average achievement	60 to 85	69	73.4	7.93	46.3
4.	High achievement	Above 85	32	87.00	14.50	21.4

The above table presents the academic achievement score distribution of the sample of male higher secondary students. The mean for 'average achievement' is 49.01, above average achievement is 73.4 and for 'high achievement is 87.
SD for 'average achievement' is 8.91, above average achievement is 7.93 and for 'high achievement is 14.50.
It may be observed from the score distributions that majority of the students come under the category of 'Above Average achievement' with percentage of 46.3. Only 21.4 percent students have 'High achievement'. The percentage of students with 'Average achievement' is 32.2. The table indicates that no student has 'low achievement' as their academic achievement

The graphical representation of the percentage of students showing different levels of academic achievement helps us to see things in a better way.

Fig 2

Objective 2: To know the academic achievement of higher secondary female students.

Table 2: indicates Percentile wise distribution of academic achievement of the female higher secondary students.

| Sr. No	Category	Range of percentile	Female sample (N = 168)	Mean	SD	Percentage%
1.	Low achievement	Below 33	0	0	0	0
2.	Average achievement	33 to 60	58	53.45	8.30	34.5
3.	Above Average achievement	60 to 85	66	73.72	6.86	39.2
4.	High achievement	Above 85	44	91.27	4.60	26.1

The above table presents the academic achievement score distribution of the sample of female higher secondary students. The mean for 'average achievement' is 53.45, above average achievement is 73.72 and for 'high achievement is 91.27.
SD for 'average achievement' is 8.30, above average achievement is 6.86 and for 'high achievement is 4.60.
It may be observed from the score distributions that majority of the students come under the category of 'Above Average achievement' with percentage of 39.2. Only 26.1 percent students have 'High achievement'. The percentage of students with 'Average achievement' is 34.5. The table indicates that no student has 'low achievement' as their academic achievement
The graphical representation of the percentage of students showing different levels of academic achievement helps us to see things in a better way.
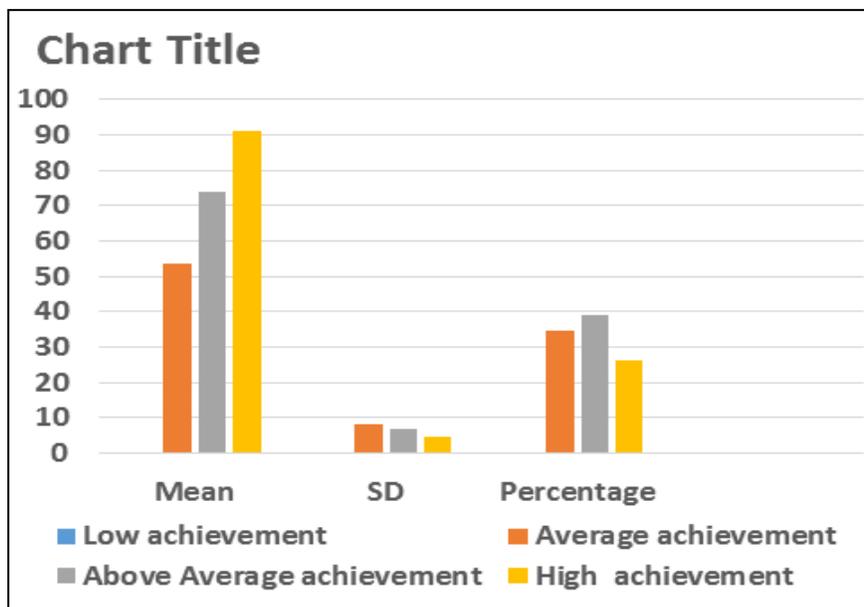
Fig 3

Objective 3
To compare status of Academic achievement between male and female students of higher secondary schools.

HO.1 (Hypothesis): There is no significant difference between academic achievement of male and female students. To achieve this hypothesis, the t-test was applied and the results are presented in the following tables.

Table 3: For t value related to academic achievement of male and female students.

Summary		
	Male	**Female**
Mean	68.839	70.5485
Variance	281.1496	300.1361
Stand. Dev.	16.7675	17.3244
N	149	168
T	-0.8902	
degrees of freedom	315	
critical value	1.968	

The means of male and female 2 are not significantly different at $p<0.05$

From the results of the above table, it can be seen that, No significant difference was observed between male and female scores of Academic achievement according to data collected (t= -0.8902, $p < 0.05$) at 0.05 level of significance. Hence, the null hypothesis is accepted and alternative hypothesis is rejected. It means that, the mean male and female scores of Academic achievement of higher secondary schools are similar.

Findings
There is no significant difference observed between male and female students for academic achievement.

2. Conclusion and education implication
Present study provides to know the academic achievement of High secondary level students. After finishing the statistical analysis Researcher has reached in the generalization. This study clearly shows that male and female students do not differ significantly with respect ot their mean score on academic achievement. Still female students show higher academic achievement as compared to their male counterparts. It clearly shows that it is essential to improve the academic achievement of male students also. The time which the male students devote for their studies must be increased. Various innovative method of teaching such as personalized system of interaction, programmed instruction, discussion method and team teaching must be employed by the teachers so that students may develop their interest in difficult subjects. Teacher should assist the students by framing them a time table for study and instruct them to follow it. Various audio-visual teaching aids must be used in order to enhance the academic achievement of students. Also it is the duty to the parents to check that their wards do not study in places of distraction and disturbances.

3. References

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