

## Study the Academic Achievement of Secondary School Students in Relation to Gender

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### Abstract

The present study was carried out to determine the relationship between gender and academic achievement of secondary school students. This study was conducted on a sample of 40 secondary schools (20 from each district) from Lakhimpur and Dhemaji districts of Assam by using a random sampling method. The researcher personally collected data from 10<sup>th</sup> grade students of both districts. The calculated data was statistically analyzed for these purposes, Mean and SD as Descriptive statistics and 't' Test as Inferential Statistics were calculated. Based on the findings of the study, it was revealed that the academic performance of secondary school students of Dhemaji district was better than Lakhimpur district of Assam.

**Key words:** Secondary School, Academic Achievement, Gender.

### 1.0: Introduction

The world is becoming very competitive as far as career prospects are concerned. Education is the key to all development and to solve all problems of life. It helps not only in building up an individual's personality, character and intelligence but also his productive capacity and his ability to perform who is physically strong, mentally well equipped, emotionally balanced and with the right attitude towards life. Secondary education is the connecting link between primary education and higher education. Both primary education and higher education are closely related to secondary education as it is a bridge between these two. In fact it is the stepping stone to university education and other professional education. In today's world, Secondary education has a vital mission of creating a bright future for individuals and nation's.

Academic achievement plays a significant

role in the teaching learning process. It is a key to measure one's potentialities and capabilities. Trow (1956) defined academic achievement as "knowledge attaining ability or degree of competence in school tasks usually measured by standardized tests and expressed in a grade or units based on pupils' performance". Crow and Crow (1969) "Academic achievement means the extent to which the learner is profiting from instruction in the given area of learning. Achievement is reflected by the extent to which skill of knowledge has been acquired by a person through the training imparted to him."

A number of studies have indicated the academic achievement of the students. Tripathy, (1962) conducted a study on the relationship between management and academic achievement of secondary education. It found that as a result of poor and imaginative management in most of the schools surveyed and developed financial

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conditions, caused deterioration in the standard of teaching, degradation in the tone and morale of the school and resulted in indiscipline among the pupils. Most schools lack suitable equipment. The study found that the system of school management is highly responsible for the good academic achievement of schools. **Hirunval, (1980)** made a study on classroom climate in relation to academic performance. The findings revealed that classroom climate has a positive relationship to pupils' academic performance. Classroom climate in urban schools is better than in rural schools. **Mishra (1986)** conducted a study on intelligence affecting academic performance of students in relation to gender. In which he found that intelligence positively affected academic performance of the students and as compared to the boys the academic performance of the girls were far superior to the performance of the boys. **Kour and Gill, (1993)** conducted a study on sex differences in academic achievement in different subjects of rural and urban students. Results show that in total achievement and all the subjects Punjabi, Mathematics and Science boys are better than girls. There are no gender differences in performance in English, urban students score better than their rural counterparts in all the four subjects as well as the total achievement **Tok, Boa Reena (2005)** did a study on creative thinking ability among the school going adolescents of A.P. in relation to some variables. The study indicated that creative ability and academic achievements are related to each other and a positive relationship has been found. It was found that there is a significant difference in the creative ability of male and female

adolescents belonging to rural and urban high and low socio-economic status

## 2.0: Statement of the Problem

The present study is entitled as:

“Study the Academic Achievement of Secondary School Students in Relation to Gender”

## 3.0: Objective of the Study

The following objectives has formulated for the present study –

1. To study the Academic Achievement of 10<sup>th</sup> grade Students in Lakhimpur and Dhemaji districts of Assam
2. To find out the academic achievement of male and female 10<sup>th</sup> grade students in Lakhimpur and Dhemaji districts of Assam.

## 4.0: Hypotheses of the Study

1. There is no significant difference in the academic achievement of male 10<sup>th</sup> grade students in Lakhimpur and Dhemaji districts of Assam.
2. There is no significant difference in the academic achievement of female 10<sup>th</sup> grade students in Lakhimpur and Dhemaji districts of Assam.

## 5.0: Methodology

The study was descriptive in nature which explored the relationship between the gender and academic achievement of 10<sup>th</sup> grade students. This study was conducted on a sample of 40 secondary schools (20 from each district) from Lakhimpur and Dhemaji districts of Assam by using a random sampling method. The researcher personally collected data from 10<sup>th</sup> grade students of both districts.

### 6.0: Statistical technique used

To find out the relationship between the gender and academic achievement the calculated data was statistically analyzed for these purposes, Mean and Standard Deviation as Descriptive Statistics and 't' Test as Inferential Statistics were calculated.

### 7.0: Sample

Sample of the present study consisted of 798 10<sup>th</sup> grade students of Lakhimpur and Dhemaji districts of Assam.

### 8.0: Analysis and Interpretation of data

**Objective-1:** Academic Achievement of 10<sup>th</sup> grade Students in Lakhimpur and Dhemaji districts of Assam

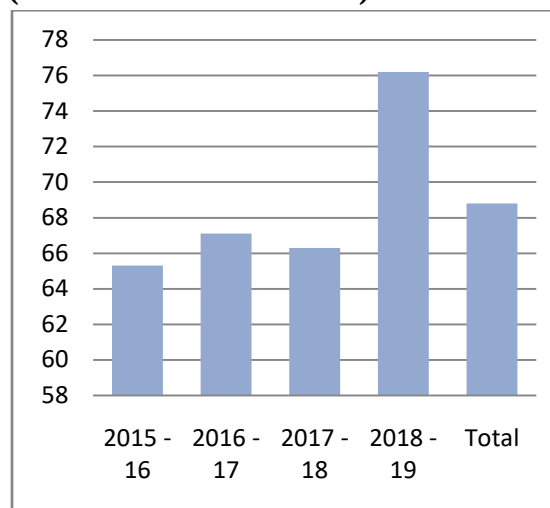
The objective of the present study is concerned with the academic achievement of 10<sup>th</sup> grade students in Lakhimpur and Dhemaji districts of Assam. To analyze this objective the researcher collected academic scores of 10<sup>th</sup> grade students of Lakhimpur and Dhemaji districts of Assam from the academic year 2015-16 to 2018-19 and detail analysis is given below:

**Table-1: Total number of 10<sup>th</sup> grade students passed in Lakhimpur district of Assam from (2015-16 to 2018-19)**

| Year                  | 2015 - 16 | 2016 - 17 | 2017 - 18 | 2018 - 19 | Total | SD    |
|-----------------------|-----------|-----------|-----------|-----------|-------|-------|
| <b>Total appeared</b> | 660       | 686       | 688       | 698       | 2732  | 61.73 |
| <b>Total passed</b>   | 431       | 460       | 456       | 538       | 2485  | 69.54 |
| <b>Percentage</b>     | 65.3      | 67.1      | 66.3      | 76.9      | 66.03 |       |

Source: Inspector of the schools

**Figure-1: Figure showing the Pass Percentage of secondary 10<sup>th</sup> grade students in Lakhimpur district of Assam. (From 2015-16 to 2018-19)**



It is observed from the above table that the pass percentage of 10<sup>th</sup> grade students varies from 65.3% to 76.2% from the year 2015-16 to 2018-19. This reveals that the pass percentage of 10<sup>th</sup> grade students of Lakhimpur district was fluctuating.

**Table-2: Year wise Summary of the total Academic Achievement Mean Score and Standard Deviation of 10<sup>th</sup> grade students in Lakhimpur district of Assam (From 2015-16 to 2018-19)**

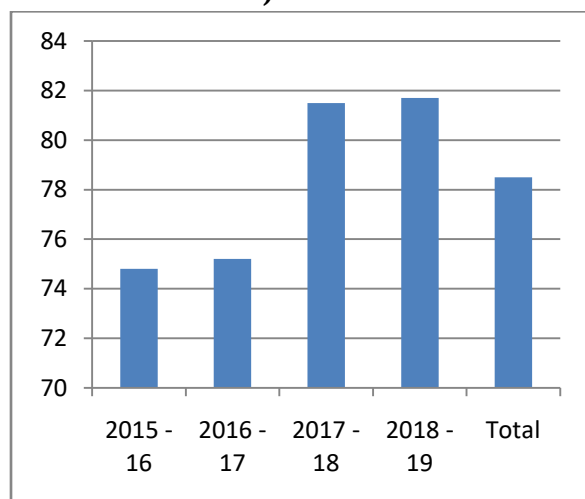
| Year    | N   | M      | SD    |
|---------|-----|--------|-------|
| 2015-16 | 660 | 261.01 | 75.62 |
| 2016-17 | 686 | 273.32 | 61.73 |
| 2017-18 | 688 | 248.78 | 69.54 |
| 2018-19 | 698 | 262.08 | 66.03 |

From the above table, It was found that the academic achievement mean scores of 10<sup>th</sup> grade students in Lakhimpur district came out to be 261.01, 273.32, 248.78 and 262.08 in the year 2015-16, 2016-17, 2017-18 and 2018-19 respectively.

**Table-3: Total number of 10<sup>th</sup> grade students passed in Dhemaji district of Assam from (2015-16 to 2018-19)**

| Year           | 2015 - 16 | 2016 - 17 | 2017 - 18 | 2018 - 19 | Total |
|----------------|-----------|-----------|-----------|-----------|-------|
| Total appeared | 516       | 640       | 649       | 660       | 2465  |
| Total passed   | 386       | 481       | 529       | 539       | 1935  |
| Percentage     | 74.8      | 75.2      | 81.5      | 81.7      | 78.5  |

Source: Inspector of the schools

**Fig-2: Figure showing the Pass percentage of 10<sup>th</sup> grade students passed in Dhemaji district of Assam. (From 2015-16 to 2018-19)**

From the above table it is observed that the pass percentage of 10<sup>th</sup> grade students gradually increased from 74.8% to 81.7% from the year 2015-16 to 2018-19. This reveals that the pass percentage of 10<sup>th</sup> grade students of Dhemaji district was increased. Thus reveals that, the results of Dhemaji district were better than Lakhimpur district of Assam in these respective years.

**Table-4: Year wise summary of the academic achievement mean score and standard deviation of 10<sup>th</sup> grade students in Dhemaji district of Assam (From 2015-16 to 2018-19).**

| Year    | N   | M      | SD    |
|---------|-----|--------|-------|
| 2015-16 | 516 | 346.03 | 93.37 |
| 2016-17 | 640 | 306.30 | 76.97 |
| 2017-18 | 649 | 300.38 | 75.83 |
| 2018-19 | 660 | 301.47 | 82.27 |

From the above table it is observed that the academic achievement mean scores of 10<sup>th</sup> grade students in Dhemaji district came out to be 346.03, 306.30, 300.38 and 301.47 in these four years.

**Objective-2:** To find out the academic achievement of 10<sup>th</sup> grade male students in Lakhimpur and Dhemaji districts of Assam.

**Hypothesis:** There is no significant difference in the academic achievement of 10<sup>th</sup> grade male students in Lakhimpur and Dhemaji districts of Assam.

The researcher analyzed the academic achievement of male and female 10<sup>th</sup> grade students of Lakhimpur and Dhemaji districts separately.

**Table-1: Summary of academic achievement mean scores, SD and t-value of 10<sup>th</sup> grade male students in Lakhimpur and Dhemaji districts of Assam.**

| Year    | Districts | N   | M      | SD    | SE   | df  | t-value |
|---------|-----------|-----|--------|-------|------|-----|---------|
| 2015-16 | Lakhimpur | 310 | 258.14 | 75.63 | 6.89 | 56  | 13.09*  |
|         | Dhemaji   | 258 | 348.34 | 88.55 |      | 6   |         |
| 2016-   | Lakhimpur | 341 | 270.21 | 64.10 | 5.44 | 672 | 7.19*   |

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|                 |               |          |            |           |          |          |            |
|-----------------|---------------|----------|------------|-----------|----------|----------|------------|
| 17              | Dhem<br>aji   | 33<br>3  | 309<br>.37 | 76.<br>73 |          |          |            |
| 20<br>17-<br>18 | Lakhi<br>mpur | 34<br>4  | 247<br>.67 | 68.<br>35 | 5.<br>58 | 66<br>8  | 9.5<br>9*  |
|                 | Dhem<br>aji   | 32<br>6  | 301<br>.26 | 76.<br>12 |          |          |            |
| 20<br>18-<br>19 | Lakhi<br>mpur | 33<br>3  | 261<br>.50 | 61.<br>84 | 5.<br>37 | 67<br>1  | 6.1<br>8*  |
|                 | Dhem<br>aji   | 34<br>0  | 294<br>.69 | 76.<br>51 |          |          |            |
| To<br>tal       | Lakhi<br>mpur | 13<br>28 | 259<br>.37 | 67.<br>94 | 2.<br>94 | 25<br>83 | 17.<br>64* |
|                 | Dhem<br>aji   | 12<br>57 | 311<br>.29 | 81.<br>38 |          |          |            |

**\*Significant at 0.05 levels****Interpretation:**

The table reveals that the computed t-values came out to be 13.09, 7.19, 9.59 and 6.18 for the years 2015-16, 2016-17, 2017-18 and 2018-19 respectively in case of the academic achievement of 10<sup>th</sup> grade male students of Lakhimpur and Dhemaji districts of Assam. All these calculated values are greater than the criterion t-value 1.96 at .05 level of confidence for 665, 702, 681 and 609 df. Therefore, the formulated hypothesis “there is no significant difference in the academic achievement of 10<sup>th</sup> grade male students of Lakhimpur and Dhemaji districts of Assam” gets rejected. Thus it is interpreted that there was a difference in the academic achievement of 10<sup>th</sup> grade male students in Lakhimpur and Dhemaji districts of Assam. From the above table, it is clearly indicated that the academic performance of male students of Dhemaji district was better than the Lakhimpur district of Assam in these four academic years.

**Hypothesis:** There is no significant

difference in the academic achievement of 10<sup>th</sup> grade female students in Lakhimpur and Dhemaji districts of Assam.

**Table-2: Summary of academic achievement mean score, SD and t-value of 10<sup>th</sup> grade female students in Lakhimpur and Dhemaji districts of Assam.**

| Ye<br>ar        | Distri<br>cts | N        | M          | SD        | S<br>E<br>D | df       | t-<br>val<br>ue |
|-----------------|---------------|----------|------------|-----------|-------------|----------|-----------------|
| 20<br>15-<br>16 | Lakhi<br>mpur | 35<br>0  | 263<br>.55 | 75.<br>64 | 7.<br>05    | 60<br>6  | 11.<br>38*      |
|                 | Dhem<br>aji   | 25<br>8  | 343<br>.73 | 98.<br>07 |             |          |                 |
| 20<br>16-<br>17 | Lakhi<br>mpur | 34<br>5  | 276<br>.39 | 59.<br>22 | 5.<br>36    | 65<br>0  | 4.9<br>6*       |
|                 | Dhem<br>aji   | 30<br>7  | 302<br>.96 | 77.<br>22 |             |          |                 |
| 20<br>17-<br>18 | Lakhi<br>mpur | 34<br>4  | 249<br>.90 | 70.<br>80 | 5.<br>67    | 66<br>5  | 8.7<br>5*       |
|                 | Dhem<br>aji   | 32<br>3  | 299<br>.49 | 75.<br>64 |             |          |                 |
| 20<br>18-<br>19 | Lakhi<br>mpur | 36<br>5  | 262<br>.61 | 69.<br>72 | 6.<br>01    | 68<br>3  | 7.6<br>6*       |
|                 | Dhem<br>aji   | 32<br>0  | 308<br>.66 | 87.<br>53 |             |          |                 |
| To<br>tal       | Lakhi<br>mpur | 14<br>04 | 263<br>.12 | 69.<br>68 | 3.<br>05    | 26<br>10 | 16.<br>12*      |
|                 | Dhem<br>aji   | 12<br>08 | 312<br>.25 | 85.<br>97 |             |          |                 |

**\*Significant at 0.05 levels****Interpretation:**

The table reveals that the computed t-values came out to be 11.38, 4.96, 8.75 and 7.66 for the years 2015-16, 2016-17, 2017-18 and 2018-19 respectively in case of the academic achievement of 10<sup>th</sup> grade female students of Lakhimpur and Dhemaji districts of Assam.

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All these calculated values are greater than the criterion t-value 1.96 at .05 level of confidence for 606, 650, 665 and 683 df. Therefore, the formulated hypothesis “there is no significant difference in the academic achievement of 10<sup>th</sup> grade female students of Lakhimpur and Dhemaji districts of Assam” gets rejected. And it is interpreted that there is a difference in the academic achievement of 10<sup>th</sup> grade female students in Lakhimpur and Dhemaji districts of Assam. From the above table, it is clearly indicated that the academic performance of female students of Dhemaji district is better than the Lakhimpur district of Assam in these four academic years.

### 9.0: Finding and Conclusion

The findings of the study revealed that the academic performance of 10<sup>th</sup> grade students of Dhemaji district was better than Lakhimpur district of Assam above mentioned years. The male 10<sup>th</sup> grade students have lower academic performance in comparison to female 10<sup>th</sup> grade students in both districts. It means, the standard of academic achievement differs from female students to male students. Females were sincere in their efforts when compared to their male counterparts. Females are more active to plan ahead, set academic goals and put efforts into achieving their goals. Government also provides more opportunities for female education. As a result, we see that female literacy rate is increasing day by day than male counterparts.

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