

# MATHEMATICAL ACHIEVEMENT OF 8<sup>TH</sup> CLASS STUDENTS IN RELATION TO EDUCATIONAL ASPIRATION

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## ABSTRACT

*The main objective of the study was to study Mathematical Achievement of 8<sup>th</sup> class students in relation to Educational Aspiration. To achieve the objective of the study, Mathematics Achievement Test (MAT) by Dr. L.N. Dubbey (1996) and Educational Aspiration Scale (EAS) by Dr. V.P. Sharma and Dr. Anuradha Gupta (1987) were used. The sample consisted of 200 students of 8<sup>th</sup> class selected randomly from Private Schools of Moga District of Punjab. The sample was equally categorized between Boys and Girls. It was further equally categorized between Rural and Urban also. Results revealed that there is significant relationship between Mathematical Achievement and Educational Aspiration of 8<sup>th</sup> class students. Both the variables highly correlated with each other. Further there is no significant difference in the mean scores of Mathematical Achievement of Boys and Girls but there is significant difference in the mean scores of Mathematical Achievement of rural and urban students of 8<sup>th</sup> class. Rural students shows better Mathematical Achievement than Urban students. Results further revealed that there is no significant difference in the mean scores of Educational Aspiration of boys and girls of 8<sup>th</sup> class students. There is also no significant difference in the mean scores of Educational Aspiration of rural and urban students of 8<sup>th</sup> class.*

*Keywords: Mathematical Achievement, Educational Aspiration*

## INTRODUCTION

Mathematics is regarded as the father of all sciences. Mathematics is the way to settle the mind in a habit of reasoning. Mathematical Achievement refers to the attainment of Mathematical abilities and skills. Mathematical Achievement is the amount of success of an individual in the field of

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mathematics. Mathematical ability is the power of solving with speed and accuracy the difficult and complex problems. Mathematical achievement is essentially cognitive in character. It includes problem solving ability, clear expression of thoughts, logical reasoning etc. Educational aspiration is a strong desire to reach something high. Educational aspiration has been identified as a key strategy for widening educational participation in lifelong learning process. It is the means by which an individual attain the highest position in the educational field in which they work. According to Walberg (1989) "Educational Aspiration is a strong desire; an eagerness to learn. Young people's aspiration guide, what students learn in school, how they prepare for adult life and what they eventually do." Educational aspiration affects the whole education. Here is an important question. How much educational aspiration affects the mathematical achievement of 8<sup>th</sup> class students? So to answer this question small but significant efforts were taken by investigator to find out the relationship between mathematical achievement and educational aspiration of 8<sup>th</sup> class students.

## **OBJECTIVES OF THE STUDY**

**The study was carried out with the following Objectives:-**

1. To study the Mathematical Achievement of 8<sup>th</sup> class students.
2. To study the Mathematical Achievement of 8<sup>th</sup> class students with respect to gender.
3. To study the Mathematical Achievement of 8<sup>th</sup> class students with respect to locale.
4. To study the Educational Aspiration of 8<sup>th</sup> class students.
5. To study the Educational Aspiration of 8<sup>th</sup> class students with respect to gender.
6. To study the Educational Aspiration of 8<sup>th</sup> class students with respect to locale
7. To study the relationship between Mathematical Achievement and Educational Aspiration of 8<sup>th</sup> class students.

## **HYPOTHESES OF THE STUDY**

**The main hypotheses of the present study were:-**

1. There will be no significant difference in the mean scores of Mathematical Achievement of 8<sup>th</sup> class students with respect to gender.
2. There will be no significant difference in the mean scores of Mathematical Achievement of 8<sup>th</sup> class students with respect to locale.
3. There will be no significant difference in the mean scores of Educational Aspiration of 8<sup>th</sup> class students with respect to gender.
4. There will be no significant difference in the mean scores of Educational Aspiration of 8<sup>th</sup> class students with respect to locale.
5. There will be no significant relationship between Mathematical Achievement and Educational Aspiration of 8<sup>th</sup> class students.

## **METHODOLOGY**

In the present study descriptive survey method was employed in order to know the Mathematical Achievement and Educational Aspiration of 8<sup>th</sup> class students of private schools of Moga district of Punjab. Relationship between these variables were calculated by Pearson's Product Moment Method of correlation. In order to know the significant difference between the mean scores of both variables, the statistical technique 't'-ratio was employed.

## **SAMPLE**

The present study was conducted on random sample of 200 students of 8<sup>th</sup> class of private schools of Moga District of Punjab. The study was equally balanced between 100 boys and 100 girls. The study was further equally balanced between 100 rural and 100 urban students.

## **TOOLS USED**

1. Mathematics Achievement Test (MAT) by L.N. Dubbey (1996)
2. Educational Aspiration Scale (EAS) by Dr. V.P. Sharma and Dr. Anuradha Gupta (1987)

## **STATISTICAL TECHNIQUES USED**

Mean, S.D., 't'-ratio and Co-efficient of correlation (r)

**ANALYSIS AND INTERPRETATION OF DATA**

**Table – I showing the Mean, S.D., S.ED. and 't'- ratio of Mathematical Achievement of 100 boys and 100 girls of 8<sup>th</sup> class.**

Group	N	Mean	S.D.	S.ED.	't'- Value	Level of Significance
Boys	100	11.16	3.88	0.6	0.8	Non- Significant difference at 0.05 level and 0.01 level of significance
Girls	100	11.64	4.58			

From table 1 it is found that 't'-value of Mathematical Achievement of 100 boys and 100 girls of 8<sup>th</sup> class students is .0.8 which is non-significant at 0.05 level and 0.01 level of significance.

Hence Hypotheses –I There will be no significant difference in the mean scores of Mathematical Achievement of 8<sup>th</sup> class students with respect to gender is accepted.

**Table – II showing the Mean, S.D., S.ED. and 't'- ratio of Mathematical Achievement of 100 rural and 100 urban students of 8<sup>th</sup> class.**

Group	N	Mean	S.D.	S.ED.	't'- Value	Level of Significance
Rural	100	12.64	4.32	0.59	3.83	Significant difference at 0.05 level and 0.01 level of significance
Urban	100	10.38	3.96			

From table II it is found that 't'-value of Mathematical Achievement of 100 rural and 100 urban students of 8<sup>th</sup> class is 3.83 which is significant at 0.05 level and 0.01 level of significance.

Hence Hypotheses –II There will be no significant difference in the mean scores of Mathematical Achievement of 8<sup>th</sup> class students with respect to locale is rejected.

**Table – III showing the Mean, S.D., S.ED. and 't'- ratio of Educational Aspiration of 100 boys and 100 girls of 8<sup>th</sup> class.**

Group	N	Mean	S.D.	S.ED.	't'- Value	Level of Significance
Boys	100	40.55	8.35	1.27	1.69	Non- Significant difference at 0.05 level and 0.01 level of significance
Girls	100	42.7	9.55			

From table III it is found that 't'-value of Educational Aspiration of 100 boys and 100 girls of 8<sup>th</sup> class is 1.69 which is non-significant at 0.05 level and 0.01 level of significance.

Hence Hypotheses –III There will be no significant difference in the mean scores of Educational Aspiration of 8<sup>th</sup> class students with respect to gender is accepted.

**Table – IV showing the Mean, S.D., S.ED. and 't'- ratio of Educational Aspiration of 100 rural and 100 urban students of 8<sup>th</sup> class.**

Group	N	Mean	S.D.	S.Ed.	't'- Value	Level of Significance
Rural	100	42.4	8.55	1.27	1.22	Non- Significant difference at 0.05 level and 0.01 level of significance
Urban	100	40.85	9.45			

From table IV it is found that 't'-value of Educational Aspiration of 100 rural and 100 urban students of 8<sup>th</sup> class is 1.22 which is non-significant at 0.05 level and 0.01 level of significance.

Hence Hypotheses –IV There will be no significant difference in the mean scores of Educational Aspiration of 8<sup>th</sup> class students with respect to locale is accepted.

**Table – V showing the Coefficient of Correlation between Mathematical Achievement and Educational Aspiration of 8<sup>th</sup> class students.**

S. No.	Group of Variables	N	'r'	Level of Significance
1	Mathematical Achievement	200	0.987	Significant at 0.05 level and 0.01 level of significance
2	Educational Aspiration	200		

From Table – V it is found that coefficient of correlation (r) between Mathematical Achievement and Educational Aspiration of 8<sup>th</sup> class students is 0.987 which is significant at 0.05 level and 0.01 level of significance. Thus it indicates that there is significant relationship between Mathematical Achievement and Educational Aspiration of 8<sup>th</sup> class students.

Hence hypothesis-V There will be no significant relationship between Mathematical Achievement and Educational Aspiration of 8<sup>th</sup> class students is rejected.

## MAJOR FINDINGS

On the basis of results obtained during the course of the present investigation the following major findings has been drawn:-

- There exists no significant difference in the mean scores of Mathematical Achievement of Boys and Girls of 8th class.
- There exists significant difference in the mean scores of Mathematical Achievement of Rural and Urban students of 8th class.
- There exists no significant difference in the mean scores of Educational Aspiration of Boys and Girls of 8th class.
- There exists no significant difference in the mean scores of Educational Aspiration of Rural and Urban students of 8th class.
- There exists significant relationship between Mathematical Achievement and Educational Aspiration of 8th class students.

## EDUCATIONAL IMPLICATIONS

- These results will give immense help to researchers, guidance workers, teachers and school counselors to develop suitable methods of teaching.
- It helps the teachers to develop healthy environment in the class room.
- It helps the teachers and parents to know about the importance of Educational Aspiration among students.
- These results will give immense help to the teachers to develop good attitude and logical reasoning among students.
- It helps the teachers to motivate the students and aspire them so that they can achieve high.
- The present study helps the teachers to develop the all-round personality of the students.
- It helps the teachers and parents to channelizing the energy of

their wards in constructive, creative and productive areas so that their potential can be better utilized.

- This problem has practical implications also. Thus it can play a pivotal role in the field of education.
- It will help the teachers, parents and administrators to find out the reasons behind low achievement of students in mathematics.

## CONCLUSION

It is concluded that there is significant relationship between Mathematical Achievement and Educational Aspiration of 8<sup>th</sup> class students. Both variables are positively correlated with each other. It means Educational Aspiration affects the Mathematical Achievement of 8th class students. If the student has high Educational Aspiration then their Mathematical Achievement will be high but if their Educational Aspiration is low then their Achievement in mathematics will be low.

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