



Academic Achievement of Class Xi Students in Mathematics in Relation to their Achievement Motivation

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ABSTRACT

Mathematics is fundamental to national prosperity in providing tools for understanding Science, Engineering, technology and economics. Mathematics therefore is taught and constitutes important part of school curriculum till secondary stage. Previous M.P. Board class tenth board exam result has showed that the maximum percentage of students either belong to lower percentage or failure. Subject like Mathematics need more motivation to learn and understand the complexity of problem. The researcher studied the relationship of academic achievement in mathematics of class XI students in relation to achievement motivation. Researcher collected the information from randomly selected 75 students each from govt. and private schools, total 150. On analyzing the data positive and significant correlation was found between achievement in Mathematics and achievement motivation.

KEYWORDS: Academic achievement, Class XI students, Mathematics and achievement motivation

Introduction:

According to NCFE 2005- Developing children's abilities for Mathematization is the main goal of Mathematics education. Now a days scope of Mathematics is not limited to the engineering field only but is opened for some other fields including commerce. Still a larger percentage of students try to get rid of Mathematics after class 10th.

In order to make learning in the subject meaningful, it is necessary that the students are motivated before they are made to learn anything. Motivation is the basic activity for creating interest and an essential condition of learning. Achievement motivation is the key factor in achieving success in any task we perform. Whatever one learns, motivation plays a dominant role in making to learn that thing. Motivation and learning are interdependent. If one wants to learn something, one should try to develop interest in that through motivation. In subject like Mathematics achievement motivation may play a significant role in learning concepts and scoring good marks in the exam. The researcher studied the relationship of academic achievement in Mathematics in relation to their achievement motivation.

Academic achievement:

An academic achievement is something you do or achieve at school or college or university level in class. In Indian school education system referring MP board of Secondary education exam, scores in exam of students is synonymous to academic achievement. In the present study the researcher considered students' class X board exam result as academic achievement.

Class XI students:

In the present study students opted Mathematics as one of the subject in class XI are considered.

Achievement motivation:

According to Moris and Maurice "Achievement motivation is the expectancy of finding satisfaction in mastering challenging and difficult performances. Achievement motivation is motivation to perform specific tasks for which there is a standard of excellence against which results can be judged." In the present study the researcher considered score obtained in achievement motivation scale by Beena Shah as achievement motivation.

Objectives:

Main objective of the study is to compare the achievement motivation of - boys and girls, students of govt. and private schools and to find the relationship between academic achievement in Mathematics and achievement motivation.

Hypothesis:

Researcher framed null hypotheses.

Research design:

Survey method was applied by the researcher.

Sampling:

For testing the hypotheses of the study, researcher randomly collected the information from 150 Mathematics students studying in class XI. Sample includes boys, girls of govt. and private schools.

Tools used:

Achievement motivation scale by Dr. Beena Shah for measuring achievement motivation and class X board exam marks in Mathematics as academic achievement in Mathematics.

Statistical analysis and interpretation:

Table 1 : Comparison of achievement motivation (Boys and Girls, Students of govt. and private school)

Variables	N	Mean	SD	t-value	significance
Boys	88	98.72	7.31	0.69	Not Significant
Girls	62	97.95	6.07		
Govt. school	75	98.96	6.95	1.0	Not significant
Private school	75	97.85	6.67		

Table 1 clearly shows that both groups that boys and girls, students of govt. and private schools do not differ in their achievement motivation, significantly. But high mean score of boys shows that they are little bit better in their achievement motivation score than girls. This might be because of more career consciousness in boys than girls. On the other hand govt. school students are better in achievement motivation mean score than students of private school. This may be due to the fact that the students belonging to govt. school mostly belong to economically weaker section and they might be considering academic success and vocational achievement as a source of improving their status in the society.

Table 2 : Correlation between academic achievement in Mathematics and achievement motivation

Variables	N	Nature	r	Significance
Achievement in Mathematics Vs Achievement motivation	150	Positive	0.33**	Significant
Govt. school Achievement in Mathematics Vs Achievement motivation	75	Positive	0.27*	Significant
Private school Achievement in Mathematics Vs Achievement motivation	75	Positive	0.44**	Significant

Table 2 clearly shows that correlation between achievement in Mathematics and achievement motivation of overall (150) students found to be significant at 0.01 level. When both groups analysed individually in the case of govt. and private school students shows positive significant correlation between achievement in Mathematics and achievement

motivation. Thus it can be said that motivated students try to overcome the difficulties in learning Mathematical concept, as a result of which a better achievement in Mathematics. Also table shows that though coefficient of correlation is significant in both govt. and private school group but in case of private school correlation is better than that of govt. school group. This may be due to the fact that students studying in private school are better in converting their motivated behavior to marks in Mathematics than students of govt. school.

Conclusion:

It can be concluded that boys are more motivated than girls. Boys are

more conscious about their career and thus more motivated for need of vocational achievement. Also, govt. school students shows better achievement motivation score than private school students. Mostly students studying in govt. schools belong to weaker economic section, as a result of which they seem to be more career conscious and want to establish themselves through good performance in Mathematics. Positive and significant correlation between achievement in Mathematics and achievement motivation shows that motivated learner understands the mathematical concept easily and perform better in exam.

REFERENCES

- Anastasi, Anne & Urbina, Susana (2003). Psychological testing. New Delhi: Pearson education pvt. Ltd. | Arora, SK (1998). How to teach Mathematics. Bhiwani: Shanti Publishers | Atkinson, John W (1964). An introduction to motivation. New Delhi: East West press pvt. Ltd. | Desai, D.B. and Ameeta, Govind (1979). Studies in achievement motivation, Centre for advanced studies in education. MS university of baroda. | McClelland, DC (2003). The achievement motive. New York: Academic press. | NCERT, fifth survey of educational research, (1988-1992), volume II | NCERT, sixth survey of educational research, (1993-2000), volume II | Rathaiah, L and Rao, D Bhaskara (1994). Achievement correlates. Ambala Cantt: The Indian publications | Taylor, Dallas (2001). Factors that influence student motivation. Dissertation abstracts international. |