# A Review Paper on Affective Domains in Mathematics Education

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Article Info	Abstract	
Page Number: 2115-2118	In this review paper we will discuss about affective issues which play	
Publication Issue:	important role in learning of mathematics. Mathematics classes relate to	
Vol. 71 No. 4 (2022)	students enthusiasm towards mathematics to report their cognitive	
	achievements. There are Current efforts to reform the mathematics	
Article History	curriculum place special importance on the role of affect. There is	
Article Received: 25 March 2022	centrality of affective issues in its recent National Council of Teachers of	
Revised: 30 April 2022	Mathematics has standards in curriculum and evaluation. Two major aims	
Accepted: 15 June 2022	stated that it deals in guidance of the students understanding the importance	
Publication: 19 August 2022	of Mathematics and enhance students' courage.	
	There is focus on Affect in increasing research on mathematics education.	
	Attitude towards mathematics is based on two beliefs firstly it relates to	
	achievement and second affective outcomes. Attitude is also measured by	
	questionnaires and we can say these questionnaires also include anxiety	
	and confidence in mathematics .Non routine problems, attack willingly on	
	active learners of mathematics.	
	In learning of mathematics, so when teacher discussion mathematics	
	classes it relates to students enthusiasm towards mathematics to report	
	their cognitive achievements. There are various techniques and concepts	
	of mathematics teaching on affective domain. It will relate strong	
	relationship between student and teacher.	
	Keywords: Affective domain, methods, research.	

#### **INTRODUCTION**

Beliefs in mathematics have considerable attention a period of time. The National Assessment of education progress has included items related to beliefs about mathematics. In the current time student believe that mathematics is based on rules, system and as well as important. The beliefs about mathematics is not may be emotional but it generates more reaction to mathematics task and it is believed that maths is not important, simple and it is only based on logical reasoning. So therefore both teachers and students have became an important part of education in mathematics.

#### LITERATURE REVIEW

The research on beliefs, attitude, and emotions was outlined in general overview of research on the affective domain. There are implications for mathematics education. It begins with area that have common with traditional foci of the affective domain in mathematics education like confidence and self respect. Later we can also deals with new concept of mathematics education. In this paper there is research on attitude towards mathematics which had long history and positive or negative feelings relates to affective responses.

Attitude towards mathematics involve enjoy doing geometry, not liking story problems, also very eager to know about topology and found distraction while doing algebra so attitude towards mathematics is one-dimensional and there are various kinds of mathematics as well different kind of feelings towards every type of mathematics.

Emotional reaction of the student is not a major factor on affect in mathematics education. There is various types of studies that looked upon processes engaged in mathematics learning. Studies in mathematics also focus on emotional reaction and these reactions don't appear in researches which are focused on their literary work.

Category	Examples
Beliefs	
About mathematics	Based on rules
About self	Able to solve problems
About mathematics teaching	Teaching is telling
About the social context	Learning is competitive
Attitudes	Dislike geometric proof
Enjoy Problem solving	
Emotions	Joy in solving non-routine
	Problem

We have various concepts from affective domains:

### Confidence

Confidence in learning of mathematics education has played vital role. Also, different methods are used to assess confidence. So confidence relates with positivity of achievement in mathematics and builds strong relationship with correlation in studies at secondary school level. Confidence builds class interaction between student and teachers. Some recent studies also continue with result pattern.

### Self concept

Self concept is thought of confidence learning in mathematics. Relationship of self concept is positive. Studies of self concept is used only by quantitative method but much of work is done in qualitative study for further knowledge and to experience difference between self concept

and way it shows difference between performance in mathematics. For example student with poor self concept in mathematics they need help in changing beliefs about mathematics as a discipline as well as seeing themselves in competent learner of subject.

## Self efficiency

Self concept is notion of self efficiency. Basically self efficiency is student's activities which choose to participate how much effort they expand and how long they sustain in activities. It's concluded the relationship between self efficiency and performance in mathematics.

### DISCUSSION

Affective domain has quantitative research. It has variety of technique and made contribution in field. Various researchers talked about strength and weaknesses of qualitative methods in education. Affective factors visible in classrooms focus on teaching of mathematics education and Teachers. Teacher in classroom deals with the emotions of mathematics learning. Data was also obtained by careful observation of classroom during the complete academic year. To develop belief in mathematics teachers worked with students. Teachers are very explicit and has desire to justify answer of mathematics problems. The result of classrooms was students showed lot of satisfaction and enthusiasm of problem solving.

During the problem solving identifiers focus on study of affective characteristics of classrooms of teachers. Each mentor was observed 5 to 7 times over course of semesters. While doing interview with teachers helped to identify strategies that creates positive affective environment in classrooms. For example teachers build good relationship in class by working hard. They tend to be friendly rather than formal and shared their personal experiences of problem solving with students to make it easier for them. These teaching and study of teachers provide useful information on beliefs; emotions and attitudes play important part in mathematics educations.

These studies of children learning shows that affect plays important role in students' mathematical performance. The observation conclude student enjoy problem solving task, and so basically the main purpose of this review paper to conclude children's development of story problems and encouraged student for affective reaction to the problems. They are give opportunity express their feelings and some children respond quite freely and some has intense emotional reactions, it includes like few discover their own new knowledge about mathematics and some discover negative reaction to the problems.

A variety of studies had concluded that affective factors are an important part of this review paper. Beliefs and emotion has contribute to difficulty of young children's they are being unsuccessful in mathematics. So the other studies have suggested usual methods that can be adapted to appropriate attention to the role of affect in learning of mathematics.

## CONCLUSION

In this review paper we have discussed about affective domain in mathematics education. Affect had little impact on curriculum development or teacher education programs in mathematics. But major difficulty on affect is not usually being grounded in strong theoretical foundation. People who work on affect are generally unrelated of studies on issues like motivation, attitude and attributions. Hence, affective studies appear to be not connected with one another.

There are many things which can be done to enhance state of affairs. So in this researchers had focused that affective issues need to be more aware about their research. An affective issue is meaning full way in studies and the researchers also focus on affect rely on measures of achievements. There are number of research question where different perspective is needed. So basically there is one way beliefs in mathematical educations. Attitude and emotion of mathematics education need to be analyzed.

In this it has been researched importance of relationship of affective responses to order of higher thinking skills. Efforts on curriculum placed special emphasis on solving non routine problem, on applying mathematics in new situations and communication regarding mathematical problems.

The rapid increase or improvement in technological support for mathematical education is leading to changes in organization of classrooms and mathematical tasks. So there are significant changes in mathematics teaching. Change in curriculum wills belief to have change mathematics education and more opportunities for positive emotional experiences in mathematics education. It has also been believed that research should help to guide effort to increase positive affective responses to mathematics to creative use of technology.

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