

## Causes of Poor Performance in Mathematics from the Perspective of Students, Teachers and Parents

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### Abstract

The current study was particularly designed to know the underlying causes behind low achievement in mathematics by covering the perception of teachers, parents and students. District Faisalabad (N=600) was chosen as the population of the study. Sample size was comprised of n=200 students (100 girls and 100 boys) belonging to class two to matriculation, n=200 teachers (100 females and 100 males) and n=200 parents (100 mothers and 100 fathers) which were chosen by using a simple random sampling method. A structured questionnaire with close ended form of questions for collecting specific information was developed on the basis of 5 point Likert Scale such as strongly agreed (1), agreed (2), not sure (3), disagreed (4), and strongly disagreed (5). After that, collected data was tabulated and results were interpreted through descriptive statistics by using SPSS (Statistical Package for the Social Sciences). Mean values, frequencies, standard deviations and percentages were also found to highlight the results. The study revealed strictness while teaching mathematics as the major cause of low achievement in mathematics by the perception of students and lack of exercise as a major cause by the perception of teachers. Likewise, lake of attention as a major cause was revealed by the perception of parents.

**Keywords:** Mathematics; Low Achievement; Education; Student.

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## **1. Introduction**

Bright future of a country depends upon the educational system that builds morality and behaviors of its citizens which in depths requires attractive investment in education at global scale [1]. Education is considered as the optimal instrument that is used for the integration of the individual's with the society for the sake of developing national goals and achieving high levels of progress, promotion of unity, self-actualization and strive for political constancy, social evolution, economic welfare, scientific standards, cultural consciousness and technological progress and for acquiring such multi tasks mathematics is studied as fundamental component of education [2]. In spite of the significant role that mathematics plays, most of the students find it difficult subject to pass and continue it at graduate levels and one of the most common reasons behind this discontinue and failure in mathematics directly shoves the attention of educators towards poor mathematical background at secondary level. Developed countries have benefited holistically from its well versed educational population while most of the countries need to be well educated people not only in the traditional fields but also in the scientific and technical fields that are required on utmost basis for the progress of a country. Education in mathematics is a bed rock and an indispensable tool for scientific technological and economic advancement of any nation[3].Mathematics works as a tool to understand many other subjects and languages. In a broad sense, it forms the basis of many of the sciences, such as science, physics, engineering and astronomy. Mathematics is taught to motivate the masses which allows for advancement in technology as well as in science and technology [4]. Things ranging from the hydrogen bomb to compact discs would not have been possible to build without knowledge of mathematics and imparting such a magnifying, and dynamic series of logical based knowledge is to be done through developing and promoting positive mathematical attitudes amongst students regardless of their cultural and social differences [5].

Mathematics is the common knowledge that is required in taking admission for engineering, technical, social sciences and even musical education. Mathematical knowledge plays a crucial role in understanding the contents of other school subjects such as science, social studies and even music and art. Science and technology play a vital role in the economic growth and development of a country which ultimately will set a stream line of a modern civilization. Mathematics serves all most in all fields of science and technology [6]. Mathematics and science has inverse relationship. The discipline of science cannot take even a step forward without the help of mathematics. High mathematical achievements drag the scientific patterns and schemes towards high societal standards that ultimately convert the dark way of progress into bright way of progress. Achievements in science and technology largely depend on the broad range of mathematical discipline [7].Likewise there is an inverse relation between mathematical achievements and high achievers while low achievers need to be exposed to comprehensive counseling and remedial programmers based on their individual levels of capabilities, abstract abilities and special programs. The concept of learning by doing coined by John Dewey works well in learning abstract and logical concepts of mathematics [8].Most of the times in opponnet situations self-worth protective students knowingly and consciously withdraw their efforts of achieving high performance in mathematics as low ability of low achievers reveal inefficiency that hearts self-worth theory [9].

It is common belief of educationists that no one can make progress in any field until having the basic knowledge of mathematics. Mathematics plays its vital role in all the multi disciplines of societal development and can be

called as 'the queen of science' the main driving force behind all scientific discoveries. The universe can't be read until we become familiar with the characters in which it is written and surely it is written in mathematical language, and the letters are triangles, circles and other geometrical figures, without which means it is humbly impossible to comprehend even a single word. Mathematics explores new patterns of facts by its reasoning and logics. It is the foundation of science and technology and no enterprise can escape the mathematical applications. High level of achievement in mathematics enables the complex democratic states to be done critical technological functioning properly.

Mathematics is considered as part and parcel of human thought and logic, and integral to attempts at understanding the world and ourselves. We know that mathematical knowledge is fundamental, but alas, it is poorly taught in elementary schools and ultimately mathematical performance remains down to mark leading towards lower ability of individuals in accordance with their actual abilities [10]. Students, particularly girls run away from mathematics. This difficulty reaches at its peak when it is taught by un-qualified and non-professional teachers. Attractive and impressive are not used to teach mathematics and ultimately its results are shown in the failure of students. Several factors such as learner's interest, lack of qualified teachers, improper curricula and school environment are responsible for the poor achievement in the mathematics by the students. Teaching mathematics is a complex matter while lack of student's interest on the other hand probably overwhelms the abilities of adults and ultimately causes as one of the most important factors for poor performance in mathematics [11]. By developing and raising level of student's interest and involvement means how much time, energy and effort they devote towards achieving high goals in mathematics as learning process is fast and instinctual on one hand while on the other hand the belief that supports the idea based on working without strategy and planning for the sake of improving mathematical abstract and logical fundamental concepts works efficiently in most situations [12].

Parents and government both agree that the investment on education especially on adults is not giving desired output due to their lacks in understanding mathematical terms and its concepts along with deficiencies in representing and retrieving fundamental numerical facts and figures that ultimately hinder in the way of gaining improvement in mathematics by the perspective of adult students and acquiring high standards in mathematics by the perspective teachers and its country as well [13]. Low performance in mathematics may be dealt with special instructions and programs designed to meet the special or additional needs of individual's for developing essential mathematical skills [14]. Teachers of mathematics are also not satisfied with the performance of the students in the mathematics. Low achievement in mathematics is a great matter of disappointment [15]. Meta cognitive trainings enable the low achievers to make progress in mathematics and solve the same number problems on the post-test as the normal achievers solve on the pre-test [16]. Poor mathematical academic performance is also seen in secondary school students. Failure in mathematics at elementary and secondary levels is really frustrating for all. Most of the students at all levels find mathematics as a difficult and boring subject and develop feelings of inferiority, hesitation and complex. They have outright fear when they confront mathematics. Such a situation directly hinders in the way of their learning progress as they actually do not actually learn the stuff meant of mathematics while motivational studying environment and level of interest play vital role in achieving high goals especially in mathematics. Student's learning environment and the way of stimulating them in accordance with their interests and tendencies will automatically lead them towards their

performance based destination that will surely reduce the level of frustration amongst all [17]. The main reason for failure in mathematics is directly related to the development of curriculum and the ways teachers teach mathematics in the classes. Different teaching approaches, techniques, methods and ways can influence the outcomes in mathematics. The students who study through boarding schools perform better in mathematics than those students who study non boarding schools inspite of having adequate facilities with enough resources [18].

Teachers who teach mathematics have no or little training in mathematics and the school managements either lack funding or do not spend their budgets wisely considering mathematical trainings for their mathematical teachers a matter of utmost importance and ultimately mathematical teachers neither come to know the underlying meanings behind mathematical terms nor teach them when their students confront with the mathematics. Mathematics is not taught by giving proper understanding of reasoning and logics to the students and it is because of shortage of mathematical equipment in the class rooms. As all mathematics is symbolic logic. Most of the mathematics teachers do not make the teaching of mathematics practical and exciting as they do not have competencies to teach mathematics dynamically which leads towards negative attitudes amongst pupils implying improper guidance by the teachers as well [19]. Parent's desire of seeing their children with prosper understanding and application of mathematical concepts does not come true because they directly put all the responsibility of teaching mathematics on the shoulders of teachers and they themselves do not make much of their efforts to develop and draw their kid's interests towards learning of mathematics either by using analogies or by magical activities thus kids automatically find mathematics as a daunting subject.

Disappointment in the achievement of mathematics is highly seen when it is argued that students no longer need to learn how to compute as calculators are widely available. No doubt, it is true but the students are badly required to receive thorough grounds of basic mathematical skills. Lack of fundamental mathematical conceptual based play materials, lack of basic guidelines, typical teaching methodologies, poor mathematical background and excessive use of advanced computation systems lead student's down to mark achievement in mathematics [20]. In fact, real mathematical trait is rare to be developed amongst students. Nearly 90 percent of high school graduates in America are bored by math, science and engineering and have no interest in STEM (science, technology, engineering, mathematics). They buy costly smart phones and tablets but do not pursue the skills necessary to build them. Teacher's view point regarding the issue of lacks and deficiencies that hinder in the high levels of mathematical achievements may smooth the way on which the vehicle of mathematics can run and ultimately lead towards its destination. Likewise, the parents opinion may water a dead leaf that in response of it will grow up and up even highly as palm tree. Let us leave the matter of utmost priority upon the students who may lead the problem towards its gorgeous standards.

### ***1.1 Rationale of the study***

There was a great need to investigate the causes of low achievement in mathematics in Pakistani society. This study will help the teachers, parents and students to know the underlying causes that hinder high achievement in mathematics. The teachers as well as parents will be able to deal their kids with a deeper sense of multi variables that may increase or decrease level of achievement in mathematics. There is no doubt that due to, lack of awareness, lack of patience, financial problems and especially of illiteracy, the parents and teachers themselves

neither find the ways which may boost the mathematical functioning of their kids nor apply the fundamental mathematical magic and ultimately high mathematical achievements become a threat for all. However in Pakistani society, this issue does not take keen and thorough interest of researchers. The current study was planned bearing in mind to find out the factors which destroy or exploit the efforts done by the teachers and parents either bitterly or on the bottom level which results low progress in mathematics by the students. The study was an effort to explore the causes of low achievement in mathematics for the sake of teacher's guidance as well as parental awareness. It will give us a humble knowledge about the causes that create hurdles in the way of getting high achievements in mathematics. It will open new horizons for the new researchers. The findings will be helpful for the teachers and parents to introduce some new strategies for the betterment of such a community in Pakistan.

## **2. Objective of the study**

The study sought to explore the major causes of low achievement in mathematics by the perception of students, teachers and parents.

## **3. Limitations of the study**

As small size of the sample and sub-samples used in the study, therefore the findings of this study therefore will have limited generalizability.

### ***3.1 Delimitations of the study***

The researchers delimited the investigation in the Faisalabad District to explore the causes of low achievement of students in mathematics in schools. For this, perception on the causes of poor performance in mathematics from 200 students, 200 teachers and 200 parents were viewed in the study.

## **4. Methods**

### ***4.1 Participants***

District Faisalabad (N=600) was chosen as the population of the study. Sample comprised of n=200 students (100 girls and 100 boys) belonging to class two to matriculation, n=200 teachers (100 females and 100 males) and n=200 parents (100 mothers and 100 fathers) which were chosen by using a simple random sampling method. A structured questionnaire for collecting specific information was developed on the basis of 5 point Likert Scale such as strongly agreed (1), agreed (2), not sure (3), disagreed (4), and strongly disagreed (5).

### ***4.2 Sampling technique***

A simple random sampling method was used to select the sample.

### ***4.3 Research design***

The design of the current study was descriptive and quantitative in its nature. Quantitative research was chosen for its ability to enable the study's findings to be generalized to other districts. The quantitative methodology was also found useful in the study because it enabled the researchers to investigate the perception of 600 respondents on the causes of poor performance in mathematics. Students, teachers and parents of District Faisalabad were chosen as the population of the study. Sample size was comprised of n=200 (students), n=200(teachers) and n=200 (parents). The study was settled for the survey research design. The use of the survey research design enabled the researchers to gather widespread perceptions of the respondents on the studied phenomenon. The study employed a simple random sampling technique to select the respondents because it permitted every pupil an equal opportunity of participating in the study. The researcher used a questionnaire with a mixed bag of close-ended questions and tow open-ended questions to collect data from the respondents. Close- ended questions enabled the researchers to collect pre-determined respondents' opinion regarding the studied phenomena. A structured questionnaire on the basis of 5 point Likert Scale such as strongly agreed (1), agreed (2), not sure (3), disagreed (4), and strongly disagreed (5) for data collection was used as sub-type of research design.

#### ***4.4 Research instruments***

In the current study, the measurement of standard deviation was used to quantify the amount of variation or dispersion of the given set of variables.

#### ***4.5 Procedure of the study***

In order to accomplish the requirements of the current research, District Faisalabad (N=600) was chosen as the population of the study. Sample comprised of n=200 students (100 girls and 100 boys) belonging to class two to matriculation, n=200 teachers (100 females and 100 males) and n=200 parents (100 mothers and 100 fathers) which were chosen by using a simple random sampling method. A structured questionnaire for collecting specific information was developed on the basis of 5 point Likert Scale such as strongly agreed (1), agreed (2), not sure (3), disagreed (4), and strongly disagreed (5). After that, collected data was tabulated and results were interpreted through descriptive statistics by using SPSS (Statistical Package for the Social Sciences). Mean values, frequencies, standard deviations and percentages were also found to highlight the results.

#### ***4.6 Data collection and analysis***

Data was gathered by means of a questionnaire which was largely made up of close-ended questions. The questionnaire was chosen because it has the ability to reach many respondents who live at widely dispersed addresses and preserves anonymity which encourages greater honesty. However, the questionnaire generally has a low response rate and is inflexible in that it does not allow ideas or comments to be explored in-depth and many questions may remain unanswered. The researchers distributed the questionnaire to the various schools and collected it after a week through the heads of schools. Data collected from the questionnaires yielded descriptive statistics around the variables and inferential implications from them derived and recorded. Statistical significance of the data was determined through descriptive statistics by using Statistical Package for

the Social Sciences (SPSS).

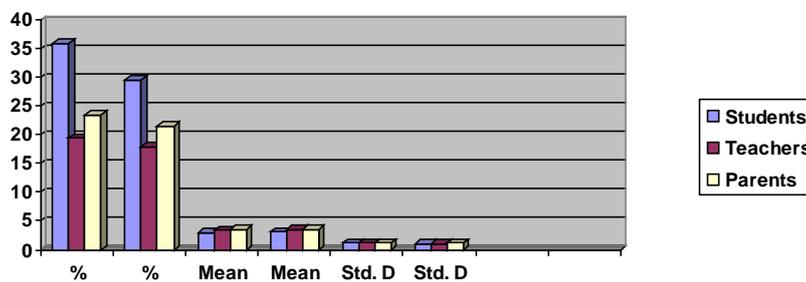
**5. Descriptive statistics of results**

The study set out to explore the causes of poor performance in mathematics. This section is presented in two sections; I) presentation of data and ii) discussion on the presented data. As figure 1 exposes high percentage of the six main causes comprising first two by the perception of students, the other two by the perception of teachers and the last two by the perception of parents with mean values and dispersion of data values.

**Table 1**

Variables	Numbers	Minimum Value	Maximum Value	Mean Values	Standard Deviations	Percentages
Strictness	200	1.00	5.00	2.9000	±1.12531	36.0
Agree	200	1.00	5.00	3.1450	±1.09084	29.5
Tables	200	1.00	5.00	3.3700	±1.17473	19.5
Exercise	200	1.00	5.00	3.5950	±1.04712	18.0
Activities	200	1.00	5.00	3.5250	±1.19436	23.5
Attention	200	1.00	5.00	3.5750	±1.15805	21.5

The above mentioned data is presented through the following chart defining strictness as the major cause by the perception of students who are strongly agreed on the view point that mathematics is really a difficult subject and hard to master in it. On the other hand, the data presents lack of interest, willingness, intention and help from others in learning tables hinder to achieve high performance in mathematics by the perception of teachers. Students do not rehearse and work on mathematical problems that coherently lead them towards their poor achievement in mathematics. Likewise, the data presents lack of attention as the secondary major cause following by the primary major cause of insufficient presence and involvement of students in different magical activities that undoubtedly provide enough mathematical understanding to them by the perception of parents.



**Figure 1:** Chart defining causes of low performance in mathematics by the perception of students, teachers and parents.

As table 2 reveals, 50% of the respondents were girls (students) and 50% were boys (students).

**Table 2:** Composition of sample by gender on the basis of student’s perception (N=200)

Gender	Frequency	Percentage
Girls	100	50
Boys	100	50
Total	200	100

**Table 3:** Responses (frequency and percentage) to the multi variables (N=200)

Variables		SA	A	NS	DA	SDA
Week	F	50.0	9.0	47.0	69.0	25.0
	P	25.0	4.5	23.5	34.5	12.5
Principles	F	56.0	4.0	48.0	75.0	17.0
	P	28.0	2.0	24.0	37.5	8.5
Help	F	50.0	6.0	32.0	73.0	39.0
	P	25.0	3.0	16.0	36.5	19.5
Material	F	53.0	19.0	29.0	62.0	37.0
	P	26.5	9.5	14.5	31.0	18.5
Work	F	34.0	9.0	44.0	62.0	51.0
	P	17.0	4.5	22.0	31.0	25.5
Games	F	40.0	23.0	37.0	68.0	32.0
	P	20.0	11.5	18.5	34.0	16.0
Learn	F	24.0	8.0	37.0	93.0	38.0
	P	12.0	4.0	18.5	46.5	19.0
Like	F	31.0	6.0	45.0	74.0	44.0
	P	15.5	3.0	22.5	37.0	22.0
Interest	F	39.0	5.0	43.0	84.0	29.0
	P	19.5	2.5	21.0	42.0	14.5
Comfortable	F	38.0	6.0	53.0	71.0	32.0
	P	19.0	3.0	26.5	35.5	16.0
Avoid	F	38.0	14.0	47.0	62.0	39.0
	P	19.0	7.0	23.5	31.0	19.5
Advantages	F	40.0	14.0	35.0	63.0	48.0

	P	20.0	7.0	17.5	27.0	24.0
Mother	F	33.0	8.0	39.0	78.0	42.0
	P	16.5	4.0	19.5	31.5	21.0
Father	F	57.0	7.0	44.0	54.0	38.0
	P	28.5	3.5	22.0	39.0	19.0
Strictness	F	72.0	17.0	39.0	58.0	14.0
	P	36.0	8.5	19.5	27.0	7.0
Agree	F	58.0	9.0	49.0	63.0	21.0
	P	29.5	4.5	24.5	31.0	10.5
Narrate	F	47.0	19.0	21.0	65.0	48.0
	P	23.5	9.5	10.5	32.5	24.0
Easily	F	28.0	18.0	58.0	57.0	39.0
	P	14.0	9.0	29.0	28.5	19.5

As table 4 reveals, 50% of the respondents were female (teachers) and 50% were male (teachers).

**Table 4:** Composition of sample by gender on the basis of teacher’s perception (N=200)

Gender	Frequency	Percentage
Females	100	50
Males	100	50
Total	200	100

**Table 5:** Responses (frequency and percentage) to the multi variables (N=200)

Variables		SA	A	NS	DA	SDA
Difficult	F	11.0	9.0	54.0	75.0	51.0
	P	5.5	4.5	27.0	37.5	25.5
Understanding	F	7.0	6.0	27.0	75.0	85.0
	P	3.5	3.0	13.5	37.5	42.5
AV Aids	F	17.0	1.0	36.0	79.0	67.0
	P	8.5	0.5	18.0	39.5	33.5
Visual Aids	F	18.0	7.0	31.0	83.0	61.0

	P	9.0	3.5	15.5	41.5	30.5
Psychology	F	17.0	7.0	28.0	92.0	56.0
	P	8.5	3.5	14.0	46.0	28.0
Bore	F	22.0	14.0	42.0	58.0	64.0
	P	11.0	7.0	21.0	29.0	32.0
Tables	F	39.0	12.0	51.0	59.0	39.0
	P	19.5	6.0	25.5	29.5	19.5
Concepts	F	24.0	13.0	40.0	69.0	54.0
	P	12.0	6.5	20.0	34.5	27.0
Activity	F	28.0	19.0	52.0	61.0	40.0
	P	14.0	9.5	26.0	30.5	20.0
Formulas	F	30.0	23.0	49.0	63.0	35.0
	P	15.0	11.5	24.5	31.5	17.5
Cooperates	F	19.0	5.0	33.0	78.0	65.0
	P	9.5	2.5	16.5	39.0	32.5
Exercise	F	36.0	1.0	52.0	65.0	46.0
	P	18.0	0.5	26.0	32.5	23.0
Instantly	F	22.0	1.0	62.0	68.0	47.0
	P	11.0	0.5	31.0	34.0	23.5
Methodology	F	30.0	12.0	25.0	65.0	68.0
	P	15.0	6.0	12.5	32.5	34.0
Use	F	21.0	8.0	58.0	61.0	52.0
	P	10.5	4.0	29.0	30.5	26.0
Complete	F	17.0	10.0	44.0	85.0	44.0
	P	8.5	5.0	22.0	42.5	22.0
Questions	F	28.0	9.0	62.0	67.0	34.0
	P	14.0	4.0	31.0	33.5	17.0

As table 6 reveals, 50% of the respondents were mothers (parents) and 50% were fathers (parents).

**Table 6:** Composition of sample by gender on the basis of parent's perception (N=200)

Gender	Frequency	Percentage
Mothers	100	50
Fathers	100	50
Total	200	100

**Table 7:** Responses (frequency and percentage) to the multi variables (N=200)

Variables		SA	A	NS	DA	SDA
Give	F	18.0	6.0	20.0	77.0	79.0
	P	9.0	3.0	10.0	38.5	39.5
Through	F	20.0	15.0	57.0	50.0	58.0
	P	9.9	7.0	28.1	24.6	28.6
Take	F	34.0	2.0	42.0	51.0	71.0
	P	17.0	1.0	21.0	25.5	35.5
Approach	F	28.0	10.0	30.0	60.0	72.0
	P	14.0	5.0	15.0	30.0	36.0
Regularly	F	34.0	3.0	33.0	70.0	60.0
	P	17.0	1.5	16.5	35.0	30.0
Syllabus	F	32.0	11.0	43.0	57.0	57.0
	P	16.0	5.5	21.5	28.5	28.5
Environment	F	29.0	7.0	39.0	53.0	72.0
	P	14.5	3.5	19.5	26.5	36.0
Cooperate	F	28.0	8.0	27.0	68.0	69.0
	P	14.0	4.0	13.5	34.0	34.5
Activities	F	47.0	4.0	47.0	44.0	58.0
	P	23.5	2.0	23.5	22.0	29.0
Rules	F	28.0	5.0	39.0	53.0	75.0
	P	14.0	2.5	19.5	26.5	37.5
Homework	F	21.0	10.0	34.0	54.0	81.0
	P	10.5	5.0	17.0	27.0	40.5
Keenly	F	34.0	3.0	19.0	77.0	67.0
	P	17.0	1.5	9.5	38.5	33.5
Attention	F	43.0	4.0	41.0	58.0	54.0
	P	21.5	2.0	20.5	29.0	27.0
Awareness	F	21.0	5.0	45.0	62.0	67.0
	P	10.5	2.5	22.5	31.0	33.5
Performance	F	21.0	11.0	25.0	49.0	94.0
	P	10.5	5.5	12.5	24.5	47.0
Abilities	F	31.0	8.0	31.0	53.0	77.0
	P	15.5	4.0	15.5	26.5	38.5
Passion	F	20.0	9.0	28.0	54.0	89.0
	P	10.0	4.5	14.0	27.0	44.5

## **6. Discussion**

The information from this study revealed that the majority of students agree that mathematics is naturally a very difficult subject. This may reveal that the students have a fear for mathematics. There is need for developing genuine attitudinal change as it may bring about interest and positive attitudes towards the subject. Such an attitude does not allow the students to acquire knowledge in the particular subject as mathematics. If a student has a positive attitude towards mathematics he / she will not only enjoy studying it but will also derive satisfaction from the knowledge of mathematical ideas he/ she gains. Findings of the study also reveal that the participants believed that the strictness in any case affect their performance in mathematics. Interest on a sustained basis is very important if students are to acquire the necessary skills in mathematics. As more time passing with mathematical materials and magic games and brain efforts that students invest in the learning process and the more intensely and sharply they engage themselves in the chain of learning concrete concepts, the greater will be their mental growth and ultimate achievement.

The study also revealed that teachers used learning methods that learners did not easily understand and ultimately unable to follow the abstract theories when teaching mathematics. Some of the methods teachers used to teach mathematics do not help students develop conceptual understanding of mathematics. The study also revealed that the majority of the participants indicated that their teachers were not having enough potential to teach mathematics. Teachers need to be true guiders and facilitators for teaching mathematics to their students. Teachers need to impart new knowledge in a clear and charming way by using multi A.V Aids. Most of the mathematics teachers do not make the teaching of mathematics practical and exciting and this leads to negative attitudes and ultimately low performance in mathematics by the students.

Teachers need to develop healthy and comfortable circumstances while delivering lessons in mathematics to overcome the difficulty of the students and protecting them from becoming dull and getting boredom. This will surely decrease the level of frustration amongst the students and ultimately teachers methodology will be developed which will smoothen the way to understand child's psychology. As the researchers recommend that the students need to be actively engaged in the learning of mathematics rather than just being listeners and observers of the teaching of the subject in their classes.

Findings of the study also revealed that participants comprising mothers and fathers felt that the students were not given keen and thorough attention to overcome their difficulty in mathematics and were not assigned homework on regular basis that surely enhances fundamental mathematical knowledge. The findings of the study also revealed that most of the participants did not get enough support from their parents or guardians when they were doing homework of mathematics. Home background and community values can make effective learning that leads towards high achievements.

## **7. Conclusion**

By giving the background of the above mentioned results, the researchers state the following conclusions:

The students strongly agree that mathematics is naturally a difficult subject and through strictness it can never

be taught. Evidence of the study exposes the view point of teachers who find lack of exercise and drill a major cause affecting the acquisition of concrete and abstract mathematical concepts while the parents consider the low level of student's attention as a major cause hindering high achievement in mathematics.

## **8. Recommendations**

Based on the results and conclusions of the study, the researchers put forth the underlying recommendations:

Understanding of mathematics should be given through clearing the concept of logic and reasoning to the students.

Teachers should assign home task to their children in order to develop self-efficacy and sense of mastery in them and parents should give them proper time and attention in order to understand their problems in mathematics in their actual essence.

Both teachers and parents should try to frank with the students in order to develop confidence in them regarding to minimize the threat of becoming dull and passive in mathematics. Furthermore, the teachers and parents should inculcate charming methods to enhance the mathematical capabilities of the students so they can become best in mathematics.

The findings will help teachers as well as parents in treating the kids with a deep sense of responsibility and child psychology. It will also be helpful for teachers and parents in designing and reviewing their teaching patterns related to such children who have low achievement in mathematics. Both will realize their important role in bringing out the inner qualities and hidden talents of the children on the surface of success by making the subject of mathematics interesting as well as understandable for the children.

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