

Mathematics Phobia among the Degree Students of Jorhat and Golaghat District of Assam: A Study

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Abstract: This paper discusses about the Mathematics anxiety of degree students of Jorhat and Golaghat district of Assam. The study tries to know the cause of Mathematics Phobia. The study was conducted through survey by distributing questionnaires among the degree students of 4 selected colleges of Jorhat and Golaghat district.

Keywords: Mathematics, phobia, reason, remedies, popularization

1. Introduction

Mathematics is often called the queen of sciences. Mathematics is now a language, an way of life. Mathematics today is working as tools and techniques because of which mathematization in the sciences of all forms including social science. That is why we can call mathematics today a “powerful force”.

Large number of students has a fear and anxiety towards Mathematics and find difficulties in understanding it and treat it as a hard subject and hence a Mathematics phobia is created among them. Mark H. Ashcraft defines maths anxiety as “a feeling of tension, apprehension, or fear that interferes with maths performance”. The first maths anxiety measurement scale was developed by Richardson and Suinn in 1972. Since this development, several researchers have examined maths anxiety in empirical studies.

Ashcraft (2002) suggests that highly anxious maths students will avoid situations in which they have to perform mathematical calculations. Unfortunately, maths avoidance results in less competency, exposure and maths practice, leaving students more anxious and mathematically unprepared to achieve. In college and university, anxious maths students take fewer maths courses and tend to feel negative towards maths.

Mathematics phobia grows gradually among the students due to some reasons like lack of sufficient number of good mathematics teacher, influence of Mathematics phobia already existing among students and in the society, lack of sufficient number of Mathematics book in the libraries and practical classroom facilities in colleges etc.

2. Objective

- To find the basic reasons of Mathematics phobia among the students.
- To find the remedies to reduce Mathematics phobia.
- To find some steps for popularization of Mathematics among the students.

3. Methodology

The study has been limited to the degree students (science stream) of 4 selected colleges of Jorhat and Golaghat district. The selected colleges are as follows:

1. J.B. college, Jorhat
2. D.K.D College, Dergaon
3. D.R. College, Golaghat
4. D.C.B. College, Jorhat

The study was conducted through questionnaires based survey. For collecting data the Interview Method was also used. The questionnaire was distributing in 4 selected colleges of Golaghat and Jorhat district of Assam, out of these all the colleges responded positively i.e. response rate has been 100%.

Table 1: Document Collection of 4 Selected Colleges

Name of the colleges	No of Maths major students	No. Of students taking Maths as core subject	No of students don't taking Mathematics
J.B.College	78	220	202
D.K.D.College	46	145	109
D.R.College	52	124	154
D.C.B.College	37	98	132

Figure1: DOCUMENT COLLECTION OF 4 SELECTED COLLEGES

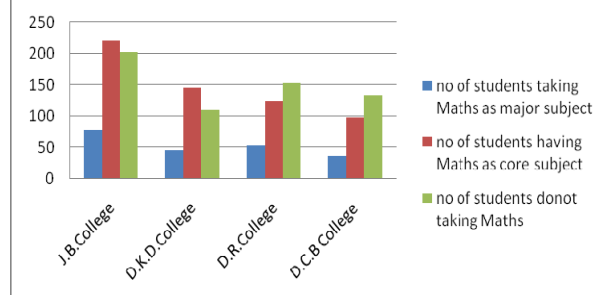


Figure 1: Collection of Documents in Colleges

Table1 shows that 15.25% students take Mathematics as major subject. 42.01% take Mathematics as core subject and 42.73% do not take Mathematics.

Table 2: Cause of Mathematics phobia

Name of colleges	Lack of sufficient no. Of teachers	Mathematics phobia already existing among students	Lack of sufficient no. Of books	Lack of practical classroom facilities	Maths is something only geniuses Can do
	No. of respondent				
J.B. College	35	76	97	74	13
D.K.D. College	23	47	46	52	18
D.R. College	31	49	58	39	8
D.C.B. College	22	26	47	34	23

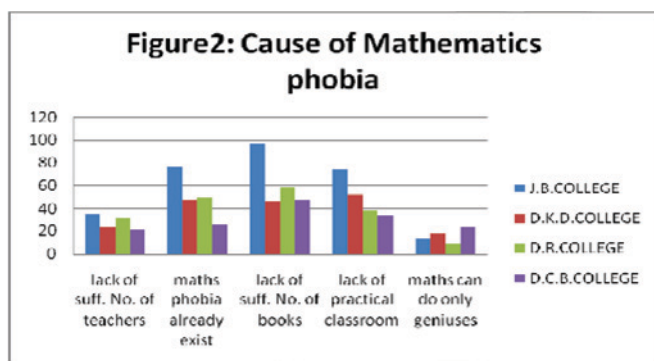


Figure 2: Cause of Mathematics Phobia

Table 2 shows that lack of sufficient number of Mathematics related books is a major cause of Mathematics phobia.

4. Finding

1. Out of 1397 students only 15.25% take Mathematics as major subject, 42.01% take Mathematics as core subject, 42.73% do not take Mathematics.
2. 13.46% believe that lack of sufficient no. Of teachers is a cause of Mathematics phobia.
3. 24.23% believe that Mathematics phobia already existing among students.
4. 30.35% mention that lack of sufficient no of Mathematics books in the college library.
5. 24% mention that lack of practical classroom facilities is one of the causes of Mathematics phobia.

5. Suggestion

Mathematics phobia can be reduced by some measure like:

1. Providing special training to the Mathematics teachers
2. Appointing sufficient number of teachers in colleges having efficiency and comprehensive knowledge in Mathematics.
3. Providing Mathematics laboratory and introducing practical classes in Mathematics.
4. Mathematics can be popularized by establishing Mathematics club and holding discussion regarding the importance and application of Mathematics.
5. Mathematics can also be popularized by Quiz competition, Mathematics Olympiad among the students.

6. Conclusion

Claudia Zaslavsky contends that math has two components. The first component, commonly focused on in many schools, is to calculate the answer. This component also has two subcomponents, namely the answer and the process or method used to determine the answer. Focusing more on the process or method enables students to make mistakes, but not 'fail at math'. The second component is to understand the mathematical concepts that underlay the problem being studied. "... and in this respect studying mathematics is much more like studying, say, music or painting than it is like studying history or biology." Students learn best when math taught in a way that is relevant to their everyday lives. Students enjoy experimenting. To learn Mathematics in any depth, students should be engaged in exploring, conjecturing and thinking as well as in rote learning of rules and procedures.

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