

Critical Analysis of Literature Review of Study on Probable Reasons of Students Struggling with Mathematics

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Abstract: *One of the main objectives of the literature review is to provide a context for the research. It puts the current research in perspective and shows how it relates to what has been done before. It also identifies the gaps in the existing body of knowledge and helps to formulate new research questions. The literature review is an important process that helps researchers to develop a better understanding of their topic and the existing body of knowledge on it. It also helps them to identify potential problems and issues that may need to be addressed in their research study. The purpose of a literature review is to collect relevant, timely research on the chosen topic, and synthesize it into a cohesive summary of existing knowledge in the field. This then prepares us for making our own argument on that topic, or for conducting our own original research.*

Keywords: Critical analysis, Literature review

I. REVIEW OF RELATED LITERATURE

INDIAN STUDIES

(1) Researcher: K. Abdul Gafoor, Associate Professor, and AbidhaKurukkan, Research Scholar, University of Calicut

Title of research: Why High School Students Feel Mathematics Difficult? An Exploration of Affective Beliefs

Mathematics is an indispensable subject of school curriculum and is important in daily living as well as in the study of other subjects. However, there is a common belief that the majority of the students dislike mathematics, owing to an array of factors related to instruction and learners' cognitive, affective and psychomotor attributes, subject matter and the learning environment. The researcher carried out a study to find out the affective factors influencing learning of school mathematics as perceived by the learners. Based on his study, the researcher concluded that Mathematics is considered a difficult subject by most of the students due to aversive teaching style, difficulty in following the instruction, difficulty in understanding the subject, and difficulty in remembering its equations and ways to solve problems. That implies, students dislike mathematics as they perceive it as a difficult subject

(2) Researcher: Mohit Shukla, Certified Corporate Trainer at Dr. Reddy's Foundation

Title of research: Why Indian students lack in mathematics?

Mathematics has always been considered as one of the core subjects in the education system. It is a subject that is used in every aspect of life, and it is the foundation for many other disciplines. However, in India, many students struggle with mathematics, and this has been a cause of concern for parents, teachers, and policymakers. This article explores some of the reasons why Indian students lack in mathematics. As per the study, there are several reasons why Indian students lack in mathematics. These include rote learning, lack of conceptual understanding, poor teaching methodology, limited resources, cultural mind-set, and an exam-oriented education system.

(3) Researcher: By edsys

Title of research: Math phobia: Causes and remedies

Mathematics, for many students, is no less furious than a demon. Many students feel sleepy as soon as they open the Mathematics book. Their score in mathematics is very low. They just give up saying that they can't do it. Unfortunately, math avoidance leads to less competency, exposure and math practice, leaving students more anxious

and mathematically unprepared to realize learning goals. This results in Math phobia. Various solutions have been provided by the researcher to help students overcome Math phobia.

(4) Researcher: By Track Training

Title of research: Why Students Struggle with Math

Many children have mathematical problems but some students find it much harder than others. These may otherwise be bright children who have a great understanding of logic and reasoning but still fail spectacularly on homework, tests, and quizzes. Over time, repeated mathematical poor performance can cause a student to become disheartened and believe that he or she is “dumb” or not good at the specific topic. Furthermore, as Math is cumulative, falling back might mean that a learner forgets much of what is taught. It’s important to have basic math skills, no matter what profession a person chooses to pursue. This article discusses why recognizing problems early on is important. With the right balance of classroom accommodation and learning strategies, each student will reach their full potential in mathematics.

STUDIES ABROAD

(1) Researcher: Jair J. Aguilar, The University of Texas TGV, TX, USA Title of research: High School Students’ Reasons for disliking Mathematics: The

Intersection Between Teacher’s Role and Student’s Emotions, Belief and Self-efficacy

The study presented here depicts the reasons for high school students to have a negative attitude toward mathematics. The students were asked to rate mathematics in comparison to other subjects like history, physics, or computer science. In addition, they were asked about their attitude, beliefs, and motivations toward mathematics. To this end, a convergent parallel mixed-method approach was implemented using a questionnaire that combines open-ended, closed-ended (e.g., forced ranking scale, or multiple and single responses), and Likert scale items. One of the main reasons for student’s reluctance toward mathematics is their lack of understanding and self-perception of low content knowledge, which let them to have a negative perception. Students stated that their negative perception was not new, but instead something they knew since elementary.

(2) Researcher: Samlesh Chand, Kaylash Chaudhary, Avinesh Prasad, Vishal Chand, Ministry of Education, Heritage and Arts, Suva, Fiji.

Title of research: Perceived causes of student’s poor performance in Mathematics: A case study at Ba and Tavua secondary schools

Poor achievement in mathematics is an issue of great concern for many countries across the globe. Fiji is one of the countries in the South Pacific experiencing the same trends, pressures, and concerns. A study was carried out by the researcher to seek the views of stakeholders (students, teachers, heads of departments, and school heads) with regards to the causes of poor achievement in mathematics at the senior grades of secondary schools in the districts of Ba and Tavua, Fiji. The study found that students had a negative attitude and perception toward mathematics.

Americans continually score either in the mid- or bottom-tier when it comes to math and science compared to their international peers. Students have a fundamental misunderstanding of what math is and what it can do. A lot of mistakes come from worrying too much about rote memorization and speedy problem-solving and from students missing large gaps in a subject that is reliant on learning concepts sequentially. The way to address this is to provide a learning environment for everyone that moves at their own pace, to make sure to fill in the gaps, and to catch those lapses in understanding before they get out of control.

Mathematics is often considered to be one of the most challenging subjects for students. Recent surveys report that 37% of teens aged 13-17 found math to be harder than other subjects – the highest ranked overall. There may be a number of reasons, from attention difficulties to learning gaps from past math classes or even just lack of practice. The article discusses the common reasons students struggle with math, and how to find the right help you need to succeed.

Studies show that math is one of the few disciplines that is accessible to all students, no matter their natural abilities. Being good at math is 1% inspiration and 99% perspiration. While natural talents and abilities will give some students an edge, math is really just about practice. That means that everyone can do well at math, despite what they might believe. Having a ‘can do’ attitude is the most important factor in math success.

II. CONCLUSION

The researcher reviewed studies conducted by Indian researchers and Foreign researchers on the topic related to his action research project. Review of related literature provided an overview of the current state of knowledge on the topic. It helped to provide an insight into the methodological approaches used in previous studies. It also helped to identify potential sources of data and information and provided a better understanding of the research methods and techniques that are most appropriate for the project.

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