## Anatomizing the Mathematical Disabilities in Studentsbiological Factors, Gender Factors, Environmental Factors

Shreya Bhawra, Shiv Kumar Sharma\*

Department of Mathematics, UIS, Chandigarh University, Gharuan, Mohali, Punjab-140301, India

\*Corresponding Author

## **ABSTRACT**

Mathematical disabilities have been conceptualised in the literature. In this study, we analyse the several aspects of how the students with mathematical disabilities are different from the low cognitive skills. Also, we have considered the co-relation of a range of factors like- gender factors, biological factors, and the environmental factors in the students with mathematical disabilities. The overall purpose of the study is to bring more comprehensive and effective ways and dimensions to make the mathematical learning more efficient to the students with disabilities. To do this, the studies have been deeply analysed and are well go troughed with a deeper insight. The results found out are: 1) It is exceedingly difficult to differentiate the students with mathematical disabilities and those with the students having typical development (TD) difficulties. The gender plays an extraordinarily complex interplay in different situations. 3) The different environmental situations are further a key factor for the impact of disabilities in students. In addition to this, we studied how the mathematical learning can be correlated with the other subjects for better learning. To analyse this, STEM education was taken in the consideration for more analyses.

**Keywords:** Mathematical disability; Typical Developmental (TD) difficulties; STEM education; Gender differences.



© 2022 Copyright held by the author(s). Published by AIJR Publisher in "Book of Abstracts of the 2<sup>nd</sup> International Conference on Applied Mathematics and Computational Sciences (ICAMCS-2022), 12–14 October 2022. Organized by the DIT University, Uttarakhand, India.

DOI: 10.21467/abstracts.138 ISBN: 978-81-957605-2-7 (eBook)