CLUSTER INNOVATION CENTRE
(UNIVERSITY OF DELHI)
M.Sc. (Mathematics Education)
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Aspirations and challenges of students pursuing mathematics in higher education

(**A research dissertation submitted at Cluster Innovation Centre, University of Delhi**)

Abstract

The quantitative study on the concept of aspirations and challenges of students pursuing mathematics at higher education in India seeks to answer two questions: What are the aspirations and motivation of students pursuing mathematics in higher education? , What Makes Mathematics Difficult as a Subject for Most Students in Higher Education? Through investigating the reasons behind students' choice to study mathematics, educators and policymakers can customize teaching methods and resources to more closely match their goals. Advanced mathematics is an abstract subject with a fast-paced setting that many students find challenging. This might impede their academic development and cause them to lose interest in the subject. By recognizing these difficulties, teachers can modify their approach to be more helpful and efficient. Quantitative research methods will be employed in this study to gain a holistic understanding of the goals and obstacles faced by students pursuing advanced mathematics. Using structured surveys, this method will gather numerical data in order to spot trends and patterns. After data collection and data analysis, key challenges identified include a lack of resources and support (30%), time management difficulties (23.3%), understanding complex concepts (16.7%), test anxiety (16.7%), and problem-solving (13.3%). Moreover, 33.33% of students frequently face difficulties in

seeking help, 30% occasionally, 26.67% rarely, and 10% never. The study concludes that educational institutions must enhance support services, improve teaching strategies, and raise awareness of mathematics' practical and fundamental roles to better support students in their academic and career pursuits in mathematics.

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