Cluster Innovation Centre
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Discovering Economically Disadvantaged Students' Perception Towards Mathematics

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Abstract

Mathematics plays a pivotal role in developing critical thinking, problem-solving, and logical reasoning abilities in students. However, providing quality mathematics education to all students, including those from economically disadvantaged backgrounds, remains a significant challenge. This study aimed to investigate the perceptions of economically disadvantaged students towards mathematics and explore their experiences in learning the subject. A descriptive research design was employed, involving 53 male students from grade 10 belonging to the economically weaker section (EWS) in Delhi. Data was collected through a questionnaire comprising both objective (Likert scale) and subjective questions, allowing for statistical analysis and thematic exploration of students' responses. The findings revealed a generally positive perception of mathematics among the participants, with the majority (94%) recognizing its usefulness in real life and 66% expressing enjoyment in studying the subject. However, challenges were also identified, including difficulties in understanding certain concepts like geometry, lack of consistent practice, and insufficient teacher support. Thematic analysis highlighted the importance of a solid conceptual foundation, the significant role of teacher support in fostering confidence, and the impact of external factors like large class sizes The study has implications for curriculum design, teacher training, resource allocation, parental involvement, and policy considerations. Suggestions include incorporating real-life examples, promoting active learning strategies, providing professional development for teachers, reducing class sizes, and encouraging community engagement. By addressing these aspects, educators and policymakers can work towards creating a more inclusive and supportive learning environment for economically disadvantaged students in mathematics. This research contributes to a deeper understanding of the perceptions and experiences of economically disadvantaged students in mathematics education, highlighting areas for improvement and potential interventions to enhance their academic achievement and overall learning experience.