

“IT IS SO HARD AND DIFFICULT; IT MAKES ME FAIL”: VOICES OF NAMIBIAN HIGH SCHOOL STUDENTS WHO EXPERIENCE DIFFICULTY LEARNING MATHEMATICS

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The problems associated with difficulty in learning mathematics often begin in elementary school. This implies that students experiencing Mathematics Learning Difficulties (MLD) may have poor mathematics foundations. This paper, considering the relevance of personal beliefs to student learning and academic success, builds upon the ideas of Perry (1970) and Hofer and Pintrich (2002). Personal beliefs are realized through thoughts, actions, or motivation of the individual, and generate behaviour, attitudes, and habits. The paper examines the voices of 28 eleventh-grade (ages 16-18) Namibian students (10 males and 18 females) from four northern regions of Namibia. The students all voluntarily identified themselves as experiencing MLDs, and were from different socio-economic backgrounds. In the Namibian context, students are not streamed in their mathematics classrooms by ability. Instead, Namibia mandates that all post-secondary mathematics classrooms be inclusive. Within this context, the research questions are: What are the beliefs about mathematics of Namibian high school students experiencing mathematics difficulties? And, How do the students perceive the impact of their beliefs on their own learning of mathematics? Through semi-structured interviews, students shared their personal beliefs and histories about learning mathematics such as personal use and reasons why they experience difficulty within an inclusive setting. A coding framework was used to facilitate a thematic analysis of the transcripts. Analysis revealed four themes: (i) the impact of learning mathematics on future career prospects, (ii) fear of failure, (iii) whether mathematical achievement is dependent on innate ability, and (iv), students' utility and interest in mathematics. For future research, longitudinal studies are needed to see how personal beliefs influence academic performance of students with MLD and examine the consequence of belief changes.

References

- Hofer, B. K. & Pintrich, P. R. (2002). *Personal epistemology: The psychology of beliefs about knowledge and knowing*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Perry W. G. (1970). *Forms of intellectual and ethical development in the college years*. New York: Holt, Rinehart and Winston.