

Abstract

DISSERTATION: Math Teachers Who Don't Like Math: A Narrative Inquiry into the Mathematics Experience of Early Childhood and Elementary Educators Who Dislike Mathematics

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Although early childhood and elementary educators teach mathematics to children, many of them possess negative attitudes and beliefs about mathematics such as math anxiety and low mathematics self-concept. Understanding how those attitudes and beliefs developed is critical in order to effect change. This study explored the mathematics experience of 11 current and future early childhood and elementary teachers who disliked mathematics. Interview data was analyzed using both narrative and thematic approaches, and findings from both approaches were interpreted collectively through the lens of Bronfenbrenner's bioecological theory of human development. Results indicate that negative experiences with teachers, prolonged comparisons with peers, and a sense of failure led to the development of a negative mathematics identity. Encouragement from a caring teacher, usually during college, resulted in most participants beginning to change their mathematics identity in a positive direction. In contrast to the effective process of developing a mathematics identity, a lack of regular interactions with mathematics over time may explain underdeveloped mathematical understandings. Results of this study have implications for all teachers of mathematics as well as for those who set policies in mathematics education.