

## **ABSTRACT**

The purpose of this study was to learn about the underlying factors that might help to explain differences in performance and engagement among middle school girls in mathematics. The study employed a qualitative approach to observe and listen directly to the voices of middle school girls and their parents and math teacher as they reflected on their experiences and thoughts about the girls' performance in and long-term goals related to mathematics. My goal was to hear what forces were working in and around the girls that might lead them to engagement or disengagement with mathematics.

Through the use of journals, interviews, and classroom observations, I collected data on six adolescent girls attending a middle school in a small New England city. The data collected were viewed through several lenses including the triads created by parent-student-teacher and the triads of "high-performing" and "low-performing" girls. Six themes emerged: factoring in the algebra class; finding seats; relating to the teacher; social networking and engagement; untangling performance and engagement; and structuring class. These themes helped to explain some of the differences between the girls' performance in and engagement with mathematics. In addition, they suggested that the concept of engagement was contextual and somewhat elusive. The study raised questions about where engagement was taking place (in school or out, in math or another class), whether it was a solitary endeavor or a social creation, and the complex relationship between engagement and performance. Further longitudinal work with girls and young women as they progress through school will be important to the understanding of how, why and when girls engage or disengage from the study of mathematics.