Adolescent Perspectives on Stereotypes of Girls in Math

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Girls' beliefs about math and formation of math identity begin long before college, yet almost all studies examining stereotypes about girls in math and the impact on math identity therein have been conducted with college-age women. This study addresses this gap by exploring whether and to what degree adolescent girls endorse stereotypes about girls in math. Adolescent girls in honors and regular math, grades 7 to 9 at a private all-girls school in the northeast US were surveyed about six stereotypes prominent in the research literature. On average, students endorsed all six stereotypes to some degree (interest, M = 2.59 SD = .28; innate ability, M = 2.43 SD = 0.32; effort, M = 2.55 SD = 0.39; judgment home, M = 2.43 SD = 0.65; judgment school, M = 2.48 SD = 0.39; cultural norms, M = 2.35 SD = 0.38). Interest and effort yielded the highest levels of stereotype endorsement, $F(4,384) = 2.92$, $p < 0.05$. There were no significant differences in stereotype endorsement comparing students taking honors or regular math. Middle school students' stereotype endorsement scores were higher for judgment in school (M = 2.55, SD.19) and cultural norms (M =2.28, SD = .09) as compared to high school students (M = 2.41, SD = .10), $t(96) = 1.70$, $p<.10$, and M =2.42, SD=.20), $t(96) = 1.79$, $p<.10$ respectively). Overall, these results indicate the importance of capturing the voices, feelings, and beliefs about stereotypes in math of adolescent girls as the results are not entirely consistent with the wider research literature which focuses on college-age women. However, these findings are limited as they do not reflect the population of girls in the US which may have implications for the interpretation of these findings. Implications for middle and highschool math education are discussed.

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