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Sophia T. Santillan and **Victoria Akin*** (toriakin@math.duke.edu), 120 Science Drive, 117 Physics Building, Campus Box 90320, Durham, NC 27708, and **Lauren Valentino**. *An Engineer, a Mathematician, and a Sociologist (all Women) Walk into a ~~B~~ Classroom...*

Middle school is a critical point in adolescent development during which stereotypes and cultural norms can dampen many girls' interest in math and STEM. Factors affecting this trend include a lack of female STEM role models, and math-specific beliefs, mindsets, and values. Duke Girls Exploring Math (DukeGEM), created by an interdisciplinary research team, is a program designed to address the gender gap in math by hosting innovative weekend and summer workshops for local middle school girls. These workshops are unique in that they combine collaborative mathematics problem solving with interactive discussions of the socio-cultural factors that affect STEM persistence. DukeGEM employs a social identity approach to nurture STEM-compatible beliefs alongside a rich problem-based mathematics curriculum to bridge the gender gap in math and STEM. Each spring semester workshop includes a hands-on math puzzle to be tackled in groups, and a gender-and-STEM activity/discussion that focuses on improving participants' math identity. Summer workshops also include visits to female-led Duke STEM labs. Early data demonstrated increases in both math performance and average math confidence. Participants also showed an increased belief that innate sex differences do not cause the gender gap in STEM. (Received September 07, 2020)