

TITLE: The relationship between girls' academic outcomes and participation in positive youth development programs

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Introduction: Women continue to score lower on standardized mathematics tests and to report lower academic confidence compared to their male peers (Huguet & Régner, 2007). In order to address this disparity, some positive youth development organizations have created academic programming that targets girls. Cool Girls, Inc., is dedicated to the self-empowerment of girls in Atlanta, Georgia and their programming includes weekly tutoring sessions and life skills workshops. Some members attend Cool Tech, a technology education program that teaches girls about interesting science, technology, engineering, and mathematics (STEM) topics. In the present study, we expect that participation in Cool Girls will be associated with larger gains in scholastic competence and self-reported math GPA compared to a comparison group. Further, we expect that Cool Tech participation moderates this association.

Method: Using a quasi-experimental study design, we administered pre- and post-test surveys to 216 Cool Girls participants and to a comparison group composed of 92 girls from local Atlanta schools (overall $N = 308$, ages 8-15, 79.5% African American, 94.9% receive free/reduced lunch). The questionnaires included items that assessed scholastic competence and mathematics class grades. The final analyses will include ANCOVAs to examine group differences from pre- to post-test in scholastic competence and math GPA among comparison, Cool Girls, and Cool Tech participants. In addition, we will conduct a hierarchical linear regression to examine whether participating in Cool Tech moderates the relationship between participation in Cool Girls and the above academic outcomes.

Results: Overall, academic outcomes were high among Cool Girls participants (scholastic competence $M = 3.24$, math GPA $M = 3.15$), comparisons (scholastic competence $M = 3.33$, math GPA $M = 3.23$) and specifically among the Cool Tech participants (scholastic competence $M = 3.42$, math GPA $M = 3.20$). Further, preliminary analyses indicate a significant positive correlation between scholastic competence and Cool Tech participation ($r = .16, p < .05$).

Discussion/Conclusion: Previous research has documented significant improvements in academic outcomes for females participating in girls-focused STEM programs (Kerr & Kurpius, 2004). The present study will help elucidate the effectiveness of Cool Girls' programming at improving girls' academic confidence and math test scores.

References

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