



Appearance-Related Math Stereotypes and Gender: The Role of the “Unattractive Math Nerd” Archetype in Adolescents’ Math Engagement

Anne J. Maheux,¹ Laura Widman,² & Sophia Choukas-Bradley¹

¹University of Pittsburgh, ²North Carolina State University



Introduction

Appearance-related math stereotypes assume that math professionals are unkempt, **uninvested in their appearance**, unattractive, and, for women, unfeminine.¹ These stereotypes may affect adolescents’ math motivation, particularly given that **adolescent girls are socialized to prioritize appearance.**²



© Paramount Pictures Corporation

Research Aims

- (1) Is endorsement of the *appearance-related math stereotype* associated with math outcomes?
- (2) Does this association depend on one’s gender?

Methods

Participants

High school students in the Southeastern U.S. ($n = 166$, $M_{age} = 17.1$, 43% girls, 50% White, 29% Hispanic, 26% Black) completed self-report surveys in a classroom setting.

Measures

Appearance-Related Math Stereotypes: Students indicated endorsement of the stereotype that people who enjoy and excel in math are typically unattractive (e.g., *Girls/boys who are into math are not usually very attractive*) and not invested in their appearance (e.g., *People who really value their physical appearance don’t tend to be ‘math people’*; 6 items; $\alpha = .89$).

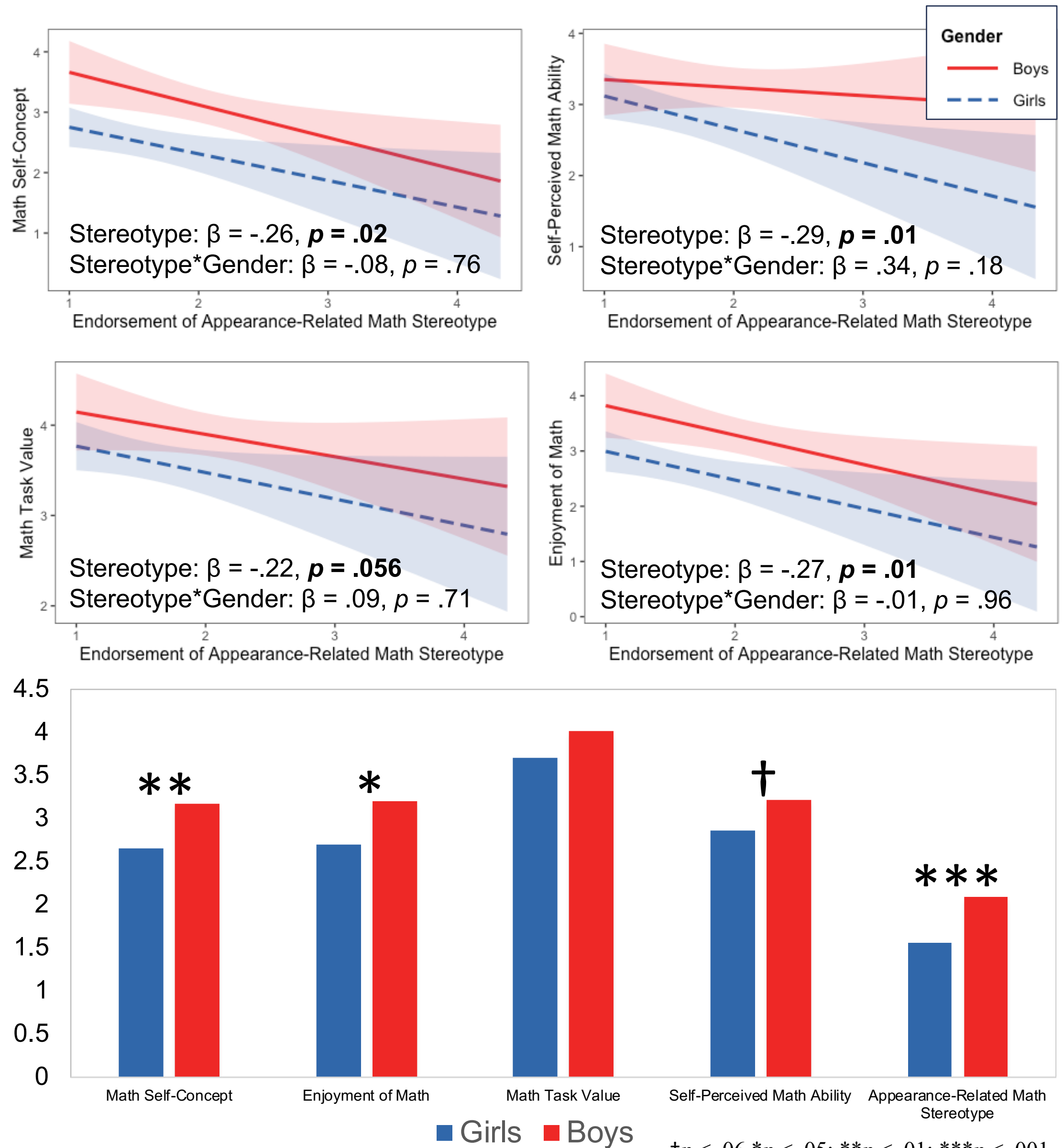
Math Outcomes: Students indicated their enjoyment of math (1 item), math ability (1 item), math task-value³ (2 items; $\alpha = .87$), and math self-concept⁴ (2 items; $\alpha = .78$).

Responses: 1 = *strongly agree* to 5 = *strongly disagree*.

ajm303@pitt.edu | amaheux@gmail.com

[1] Cheryan, Plaut, Handron, & Hudson, 2013 [2] Jones, Vigfusdottir, & Lee, 2004 [3] Wigfield & Eccles, 2000 [4] Marsh, 1986

Results



Discussion

More work is needed to determine if and how gender differences in awareness and endorsement of appearance-related math stereotypes exist. Understanding the role of these stereotypes may help ameliorate the growing gender gap in math-intensive STEM fields.