

## ABSTRACT

The current study (1) examined the associations among academic engagement from others (i.e., mothers, fathers, siblings, professors, close friends, and romantic partners) and Mexican-origin college students' ( $N = 261$ ) academic persistence via their college self-efficacy and school belonging and (2) investigated whether these associations differed based on students' level of academic vulnerability (i.e., participation in developmental education courses). Several relations differed based on students' level of academic vulnerability. For example, some relations (e.g., mothers' academic engagement to persistence intentions via college self-efficacy) were only related when students were academically vulnerable. These findings highlight the importance of tailoring intervention programs to students' level of academic vulnerability.

## INTRODUCTION

**Hypothesis 1: Important others' academic engagement will be positively related to Mexican-origin college students' academic self-efficacy and sense of school belonging.**

- ❖ Cultural values emphasize strong ties to family members (Knight et al., 2010). Further, students' sense of unity with their families extends to others outside their families (Arevalo et al., 2016).
- ❖ Important others' academic engagement positively relates to students' academic self-efficacy and sense of school belonging (Ali et al., 2005; Cartmell, 2015; Delgado et al., 2016; Komarraju et al., 2010; Gloria et al., 2005; Weihau et al., 2009).

**Hypothesis 2: Higher levels of academic self-efficacy and school belonging will relate to higher intentions to persist in college.**

- ❖ Higher levels of college self-efficacy related to greater intentions to persist in college (Baier et al., 2016; Gloria et al., 2005).
- ❖ A sense of belonging was positively related to college retention from freshmen to sophomore year (Soria & Steblton, 2012).

**Hypothesis 3: The relations between academic engagement and academic self-efficacy and sense of school belonging will be stronger for students who are academically vulnerable.**

- ❖ Enrollment in developmental education courses is an indicator of academic vulnerability (Tinto, 2012).
- ❖ Students who are academically vulnerable have the most to benefit from their relationships with others (Crisp & Nora, 2010).

## METHOD

### Participants & Procedure

- ❖ 261 Mexican-origin college students between 18 and 25 ( $M = 19.80$ ,  $SD = 1.67$ )
  - ❖ US born: 83% Students; 41% Mothers; 36% Fathers Gender: 79% female
- ❖ Participants were recruited with flyers distributed at student organization meetings, during class announcements, and via email.
- ❖ Data were collected via a 45-minute online survey.
- ❖ Students received \$10 for their participation.

### Measures

- ❖ Cronbach's alphas for measures of perceived *academic engagement* from mothers, fathers, siblings, professors, close friends, and romantic partners (Wolf et al., 2009), *course self-efficacy* (Solberg, O'Brien, Villareal, Kennel, & Davis, 1993), *school belonging* (), and *intentions to persist* (Pascarella & Terenzini, 1980) were all above .71.
- ❖ *Academic vulnerability* was measured utilizing students' enrollment in developmental education courses.
- ❖ Control variables included students' age, gender (0 = female; 1 = male), and mothers' and fathers' educational attainment.

## RESULTS

- ❖ We estimated multi-group path models in *Mplus* using maximum likelihood with robust standard errors.
- ❖ The model was a good fit to the data,  $\chi^2(67) = 75.07$ ,  $ns$ , CFI = .95, RMSEA = .03.
- ❖ For college students who were academically vulnerable, the following paths were significant:
  - ❖ Mothers' engagement to persistence via college self-efficacy ( $\beta = .10$ ,  $SE = .03$ , CI (95%) = .05, .21)
  - ❖ Fathers' engagement to persistence via college self-efficacy ( $\beta = -.04$ ,  $SE = .02$ , CI (95%) = -.12, -.01)
  - ❖ Professors' engagement to persistence via school belonging ( $\beta = .07$ ,  $SE = .03$ , CI (95%) = .03, .16).
- ❖ For students who were not academically vulnerable, there was a significant indirect path from romantic partner engagement to academic persistence via school belonging, ( $\beta = .06$ ,  $SE = .02$ , CI (95%) = .02, .13).
- ❖ The indirect paths from mothers' engagement to persistence via school belonging ( $\beta = .08$ ,  $SE = .03$ , CI (95%) = .02, .14) and from professors' engagement to persistence via college self-efficacy were significant for both groups ( $\beta = .10$ ,  $SE = .03$ , CI (95%) = .04, .16).

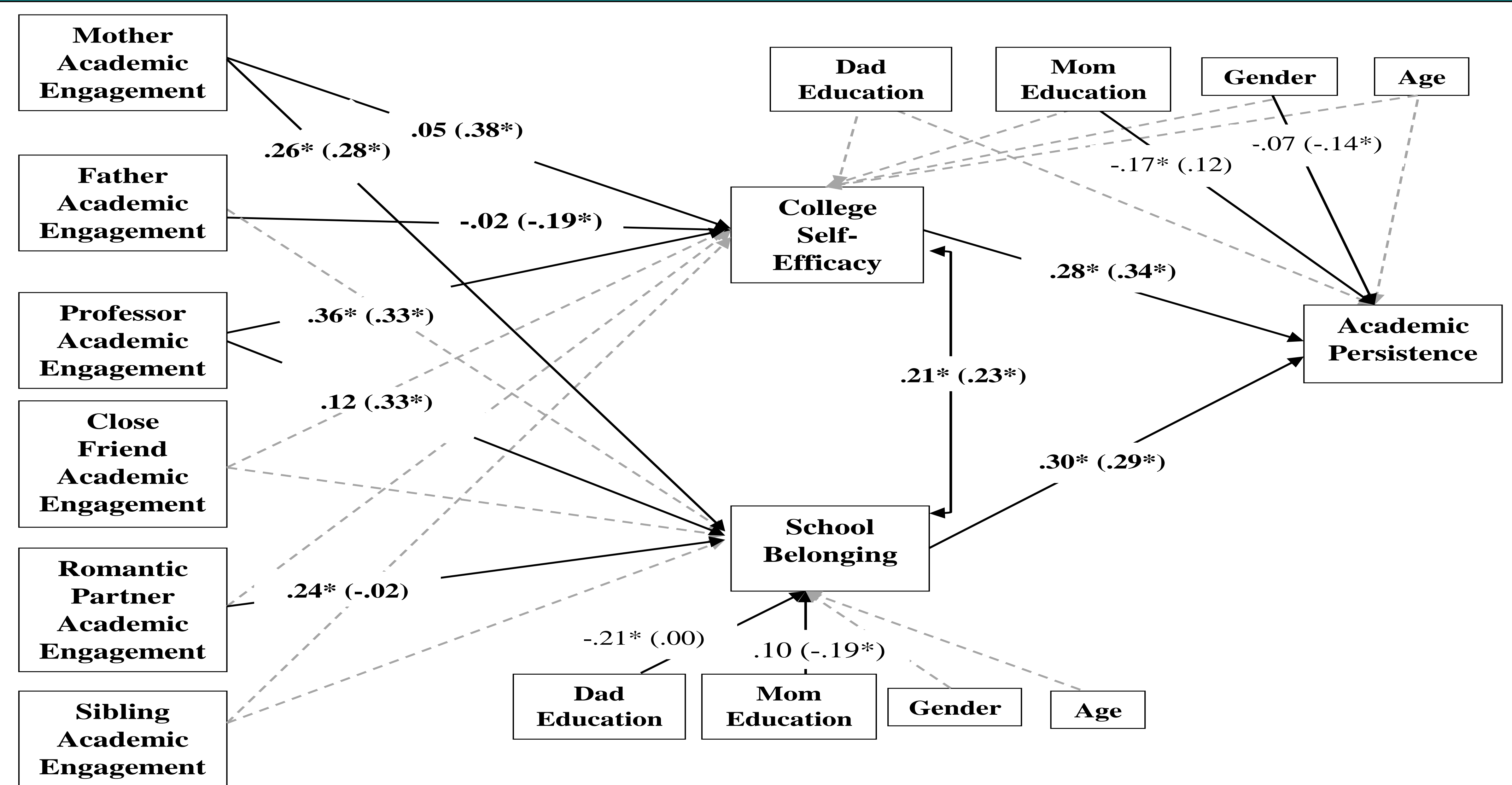


Figure 1. Partially-constrained model, with standardized estimates, controlling for college student age and gender, and mothers' and fathers' levels of education on course self-efficacy, sense of school belonging, and academic persistence. Only significant paths for controls are included in figure. \* $p < .10$ ; \* $p < .05$ ; \*\* $p < .01$ . Numbers in parentheses represent estimates for college students who are academically vulnerable (i.e., enrolled in developmental education courses).

## DISCUSSION

- ❖ The current study demonstrates the importance of examining the role of multiple important others and outlines how variations in students' academic experiences alter the relations between important others' academic engagement and academic outcomes.
- ❖ The negative relation between fathers' academic engagement and college self-efficacy emerged only when students were academically vulnerable. This is important to note because when students are in high stress environments, the type of academic engagement that fathers are providing (e.g., advice and guidance) may be interpreted by students as confirmation of their academic failures (Leung et al., 2010).
- ❖ Furthermore, findings have critical implications for intervention and prevention efforts designed to facilitate Mexican-origin college students' academic success.
  - ❖ It is necessary to include mothers and professors in any endeavors to promote Mexican-origin college students' academic outcomes.
  - ❖ Treat mothers and fathers differently.
  - ❖ Tailor programs based on students' level of academic vulnerability.
- ❖ The current study is not without its limitations. A larger, more diverse sample of Mexican-origin college students would enable future researchers to determine the generalizability of the current findings.