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# Ethnic Pride, Self-Esteem, and School Belonging: A Reciprocal Analysis Over Time

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School belonging (i.e., social connectedness to school) has positive implications for academic achievement and well-being. However, few studies have examined the developmental antecedents of school belonging, particularly for students of Mexican origin. To address this gap in the research literature, the present study examined reciprocal relations between school belonging and two self-affirmation beliefs—self-esteem and ethnic pride—using data from a longitudinal study of Mexican-origin students followed from fifth to ninth grade (N = 674,  $M_{\rm age}$  at Wave 1 = 10.4 years, 50% girls). Furthermore, we evaluated whether the associations were stronger for boys than girls. Using multiple group analysis in a structural equation modeling framework, results indicate that, among boys, ethnic pride was prospectively associated with increases in self-esteem was associated with increases in school belonging was bidirectional. For girls, ethnic pride was prospectively associated with later school belonging. Discussion focuses on the gender differences in observed effects and implications for school programs and interventions.

Keywords: ethnic pride, Mexican American adolescents, school belonging, self-esteem

Previous research suggests that feelings of school belonging promote positive academic outcomes (Juvonen, 2006) and wellbeing (Shochet, Smith, Furlong, & Homel, 2011). An individual's perceived sense of school belonging includes the significance placed on school (Roeser & Eccles, 1998), feeling connected to school (Neel & Fuligni, 2013), and identifying with conventional school goals, such as doing well in school (Voelkl, 2012). Although studies have identified environmental factors that may contribute to school belonging (e.g., school safety; Juvonen, 2006), we know little about why some students develop a strong sense of school belonging whereas others do not. An improved understanding of environmental and individual difference factors that promote school belonging will aid in the development of more effective programs designed to increase academic involvement and achievement.

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Latinos have a growing presence in the United States (Pew Research Center, 2009) and represent over 50% of the schoolaged youth in California, where the present study was conducted. Latino youth (80% of whom are of Mexican origin in California) often face limited educational opportunities (Yosso & Solórzano, 2006) and experience relatively low levels of school connectedness (Lucile Packard Foundation for Children's Health, 2015). Furthermore, although school belonging and achievement generally decline after elementary school (Eccles & Roeser, 2011), having strong school connections has the potential to promote academic success (Juvonen, 2006). We sought to understand what factors promote strong school connections among Mexican-origin youth.

The current study examined self-esteem and ethnic pride—two self-affirmation beliefs that undergo considerable development in the transition to adolescence. We proposed that self-esteem and ethnic pride should promote school belonging over time among ethnic minority adolescents. We also examined longitudinal associations between ethnic pride and self-esteem. Guided by previous theory and research (Juvonen, 2006; Phinney, 1991; Rivas-Drake, Seaton, et al., 2014; Spencer, 2006), we evaluated a conceptual model (Figure 1), which predicts that ethnic pride will contribute to the development of both self-esteem (Path A) and school belonging (Path B) from late childhood to adolescence among Mexican-origin youth. Self-esteem also was expected to promote school belonging (Path C). The model considers the possibility that school belonging will promote relative increases in later ethnic pride (Path D) and self-esteem (Path E) in a reciprocal process (Sameroff, 2009).

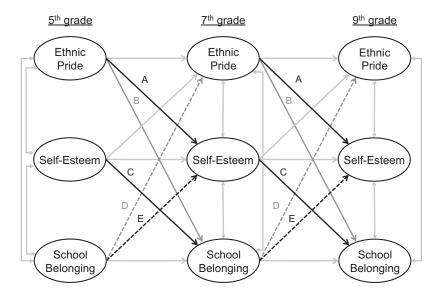


Figure 1. Conceptual model for the longitudinal associations between ethnic pride, self-esteem, and school belonging from fifth to ninth grade.

#### Theoretical Approaches and Empirical Findings

The transactional process model describes how interconnections between the child and environment inform developmental pathways (Sameroff, 2009). Children actively engage with their environment, inasmuch as the environment shapes them. As proposed in the transactional process model (Sameroff, 2009), examining reciprocal effects can inform developmental continuities and discontinuities as well as interdependent processes between the child and experiences in their environment, such as school. Thus, examining the reciprocal effects among ethnic pride, self-esteem, and school belonging will help inform the degree to which these constructs reflect the development of the self during a critical period in adolescence. The transactional process model serves as a general framework to examine bidirectional child and environment processes.

Our study is also informed by Spencer's (2006) Phenomenological Variant of Ecological Systems Theory (PVEST) emphasizing that observable and perceived experiences with others shape the self. Based on the PVEST, youth make meaning of their identities as they make meaning of their interactions with others in social contexts, including school. Mexican-origin youth in the United States navigate what their ethnic heritage means to them as they encounter social environments in school. Experiencing positive school social environments, reflected in high school belonging levels, would be expected to be positively associated with youths' sense of self, as reflected in their self-esteem and ethnic group pride. Particularly in the face of stressful experiences that challenge well-being (e.g., school transitions accompanied by typically declining school belonging), youth may turn to support systems (e.g., teachers, parents, peers) to resolve these challenges, resulting in adaptive (or maladaptive) coping that promotes positive (or negative) identity responses such as increased (or decreased) ethnic pride and self-esteem (Swanson et al., 2003, p. 749). We propose that one potential benefit for ethnic minority youth to adapting positively to these school transitions and maintaining higher levels of school belonging is higher self-esteem and ethnic pride. In addition, the PVEST delineates feedback processes, such that emerging identities can also predict an individual's inclination to reactive coping strategies, such as positive school attitudes, that leverage how individuals perceive stressful experiences (Swanson et al., 2003, p. 749), similar to what is proposed in the transactional process model (Sameroff, 2009). Based on the PVEST and the transactional model, perceived positive experiences in school (e.g., school belonging) promote positive self-perceptions (e.g., self-esteem, ethnic pride), and vice versa.

The transition to adolescence is accompanied by potentially stressful cognitive and biological changes, as well as changes in peer networks, family dynamics (e.g., more conflict), and school demands (Eccles & Roeser, 2011). School transitions also may present opportunities for positive change (Benner, 2011; Eccles & Roeser, 2011), as students negotiate potential challenges and respond adaptively (Spencer, 2006; Swanson et al., 2003). We examine whether the associations among the study variables persist in the transitions to middle school (i.e., seventh grade for the majority of participants) and high school (i.e., ninth grade). We consider two perspectives. First, school belonging increasingly depends on peer norms that may include deviant behavior into adolescence (Galván, Spatzier, & Juvonen, 2011; Juvonen, 2006). Thus, self-esteem and ethnic pride may be weakly associated with school belonging in the transition to high school-when high school academic norms may conflict with deviant peer norms and be more strongly associated with school belonging in the transition to middle school-when deviant behaviors may not be as normative among peers. Second, the constructs of interest all have relative stability into adolescence. Although self-esteem and school belonging generally decline and ethnic identity increases into adolescence (Eccles & Roeser, 2011), there is evidence that these constructs are stable over time in individuals (Robins, Trzesniewski, & Donnellan, 2012; Umaña-Taylor, Vargas-Chanes, Garcia, & Gonzales-Backen, 2008). For example, people who have

high self-esteem at one point tend to have high self-esteem at a later point. Thus, we may instead expect that the relations among the study variables will be robust across the school transitions. Precisely because the associations among the variables in this study across these school transitions have not been examined, we consider whether the associations we predict will persist or weaken in the transitions from fifth to seventh and from seventh to ninth grade.

In the following sections, we review research on how ethnic pride and self-esteem, two self-affirming identities, may impact school belonging. Second, we consider the association between ethnic pride and self-esteem for Mexican-origin youth. Third, we review how gender may modify the associations between ethnic pride, self-esteem, and school belonging. Fourth, we present the study hypotheses.

#### Positive Self-Affirmation and School Belonging

Most research on factors predicting school belonging has considered possible environmental influences (e.g., school safety, teacher-student interactions, peer support), but the role of individual characteristics has been largely overlooked (Juvonen, 2006; Okagaki, 2006). Research on individual characteristics that may promote school belonging should increase our understanding of the possible array of sources of influence on connectedness to school. We consider the association between two positive selfaffirming identities—self-esteem and ethnic pride—and school belonging across time. Self-esteem and ethnic pride are both associated with positive adjustment among Mexican-origin adolescents (Berkel et al., 2010; Orth, Robins, Widaman, & Conger, 2014; Ruiz, Roosa, & Gonzales, 2002), and we propose that they provide a basis for fostering a sense of belonging in school. We also examine whether school belonging might promote these selfaffirming identities in a reciprocal process, given that positive environmental experiences and social contexts may also support adaptive coping that promotes positive self-identities (Sameroff, 2009; Spencer, 2006).

**Self-esteem and school belonging.** Juvonen (2006) proposed that student self-worth precedes feelings of belonging in school. Theorists also argue that *self-esteem*, a global evaluation of one's worth (Harter, 2006; Ruiz et al., 2002), should help set the stage for developing positive school ties, social connections, and peer relationships (Donnellan, Trzesniewski, Robins, Moffitt, & Caspi, 2005; Rosenberg, 1965). Furthermore, a positive self-identity is thought to promote positive social coping and belonging in social environments according to the PVEST (Spencer, 2006; Swanson et al., 2003). Examining how self-esteem and school belonging relate across different school transitions would also describe the process at a critical time, when school belonging and achievement typically decline (Eccles & Roeser, 2011). Surprisingly few studies have examined the association between self-esteem and school belonging. Among ethnically diverse youth in sixth grade, selfesteem and school connectedness were concurrently and positively associated (Witherspoon, Schotland, Way, & Hughes, 2009). Among Latino sixth-grade students, peer self-concept (an aspect of self-worth) positively predicted later school bonding (Morrison, Cosden, O'Farrell, & Campos, 2003). These studies suggest that self-esteem may contribute to student feelings of school belonging, supporting Path C in Figure 1. We expect that self-esteem helps

create a basis for children to develop positive social ties and a sense of belonging in school, as previously proposed (Rosenberg, 1965).

Based on the PVEST model (Spencer, 2006; Swanson et al., 2003), proposing that perceived and observed experiences shape the self, a students' perceived sense of belonging to school could help shape their own emotional adjustment and self-esteem (Path E, Figure 1). Some studies, for example, have found negative longitudinal associations between school belonging and depressive symptoms (De Wit, Karioja, Rye, & Shain, 2011; Shochet, Dadds, Ham, & Montague, 2006; Shochet et al., 2011), anxiety (Shochet et al., 2006), and emotional distress (Resnick et al., 1997). Other research demonstrates a positive association between teacher support and later self-esteem (De Wit et al., 2011). And although Latino youth experience relatively low levels of school belonging (Lucile Packard Foundation for Children's Health, 2015), to our knowledge there are no studies testing the association between school belonging and self-esteem across time specifically among Mexican-origin youth. Given the longitudinal design of the present study, we are able to evaluate the degree to which the association between self-esteem and school belonging represents a transactional process between the perceived environment and individual well-being, consistent with Sameroff's (2009) and Spencer's (2006) theoretical frameworks.

Ethnic pride and school belonging. Previous research (e.g., Phinney, Horenczyk, Liebkind, & Vedder, 2001; Wong, Eccles, & Sameroff, 2003) and theory (Spencer, 2006) suggests that ethnic pride has a positive influence on academic achievement for youth from ethnic minority backgrounds. The present study focuses on ethnic pride, sometimes referred to as ethnic affirmation or belonging, which is an aspect of ethnic identity that represents positive attitudes toward one's ethnic group (Phinney, 1990). Mexican American youth who feel proud of their ethnic background likely feel worthy of being treated well and capable of doing well in school. For instance, Juvonen's (2006) proposal that self-worth precedes school belonging suggests that a positive sense of ethnic pride, which encompasses ethnic group-worth and selfworth, could contribute to school belonging for students of color. Although theoretical frameworks have implied that feelings of worth related to one's ethnicity relate to academic processes (García Coll et al., 1996; Spencer, 2006; Swanson et al., 2003), an empirical account of the association between ethnic pride and belonging in school has been left unexamined. The present study addresses this research gap and considers transitions into middle school and high school that may influence the proposed processes. For example, during these potentially challenging transitions, a healthy sense of ethnic pride may help maintain feelings of school belonging, which in turn, may help minority youth avoid declines in academic performance associated with these transitions (Eccles & Roeser, 2011).

The few studies that have examined the association between ethnic identity or pride and school belonging suggest that ethnic pride may provide a positive avenue for developing a sense of belonging in school (e.g., Rivas-Drake, Seaton, et al., 2014), supporting Path B in Figure 1. For example, among ninth-grade students of different ethnic backgrounds (including some of Mexican heritage), greater ethnic identification was associated with higher school adjustment (e.g., identifying with school, feeling respected and valued in school; Fuligni, Witkow, & Garcia, 2005).

Similar findings have been reported for African American youth (Dotterer, McHale, & Crouter, 2009), Latino and African American adolescents (Oyserman, 2008), and Mexican-origin children (Brown & Chu, 2012). These findings are aligned with the PVEST, proposing that youth's ethnic identity, a positive coping response, and school engagement, a positive coping strategy, are related (Spencer, 2006, p. 719).

However, there also are theoretical reasons to suggest that school belonging could promote students' sense of ethnic pride. The PVEST, for instance, proposes that individual experiences shape the self (Spencer, 2006; Swanson et al., 2003). Particularly for Mexican-origin students and students of color who may face unique challenges of being underrepresented in the educational pipeline (Yosso & Solórzano, 2006), experiences in school that validate the students' identities may promote the development of ethnic affirmation, which would be considered an adaptive identity response in the PVEST (Spencer, 2006; Swanson et al., 2003). For example, in a qualitative study of Mexican American adolescents in tenth grade, Gonzalez (2009) found that positive experiences in school can strengthen the ethnic self-identities of Mexican-origin students by providing an environment that promotes diversity and acceptance (Path D, Figure 1). Similarly, validation theory suggests that school environments that promote and validate student identities in school may contribute to students' identity development and ethnic affirmation (Rendón Linares & Muñoz, 2011). Thus, we propose that a sense of belonging in school will have a positive impact on ethnic pride (Path D). We investigate the degree to which ethnic pride predicts school belonging, and vice versa, as part of a transactional process (Sameroff, 2009) to understand possible continuities and discontinuities between the child and experiences in their environment. Specifically, the association between school belonging and ethnic pride represents a possible interdependent process between experience and child, as suggested in the transactional process model (Sameroff, 2009).

#### Self-Esteem and Ethnic Pride in Adolescence

In theory, self-esteem should contribute to many facets of wellbeing for children and adolescents (Harter, 2006; Orth & Robins, 2014; Ruiz et al., 2002). Similarly, positive ethnic affect appears to be an important resource for positive adjustment among youth of color (Phinney, 1991; Rivas-Drake, Syed, et al., 2014). Selfesteem likely derives from a variety of identities and for youth from ethnic minority backgrounds, this includes positive perceptions of one's ethnic group (Phinney, 1991; Umaña-Taylor, Diversi, & Fine, 2002). Indeed, it would be difficult to imagine that a young person with negative feelings about such a core component of identity as ethnic group membership could have a highly positive evaluation of personal worthiness. Consistent with this idea, several studies have shown that a positive ethnic identity (measured as ethnic affirmation/belonging, exploration, and/or achievement/resolution) relates to higher self-esteem among adolescents from Latino and other ethnic backgrounds (Guilamo-Ramos, 2009; Kiang & Fuligni, 2010; Phinney et al., 2001; Rivas-Drake, Seaton, et al., 2014; Rivas-Drake, Syed, et al., 2014; Umaña-Taylor et al., 2002). Although these findings suggest that ethnic pride predicts later self-esteem, most studies have relied on cross-sectional research designs (see Umaña-Taylor et al., 2002, for a review), obscuring the directionality of this association.

Furthermore, some studies have tested but failed to find the proposed association (Umaña-Taylor et al., 2008; Wong et al., 2003), particularly in longitudinal analyses (Rivas-Drake, Seaton, et al., 2014). The present study allows us to further evaluate the longitudinal association between ethnic pride and self-esteem among Mexican-origin youth.

Consistent with the transactional model (Sameroff, 2009), which proposes that reciprocal effects can inform continuities and discontinuities in development, we also examine whether self-esteem predicts the development of ethnic pride over time. Global self-esteem may have top-down (spillover) effects on how an individual perceives and evaluates other aspects of the self (Robins, Tracy, & Trzesniewski, 2008), including ethnic pride. Especially given the mix of longitudinal findings regarding the hypothesis that ethnic pride should promote global self-esteem, additional research is needed to test this prediction across time. The study design allows us to test the robustness of the association between ethnic pride and self-esteem.

#### **Gender Differences**

Most findings reported thus far have either controlled for gender or evaluated mean level gender differences. For instance, Guilamo-Ramos (2009) found that adolescent Latina girls had higher ethnic pride than did adolescent Latino boys (7.5% were of Mexican heritage and the majority [82%] was of Dominican or Puerto Rican heritage). Many studies document that boys typically report higher self-esteem than do girls (Trzesniewski, Donnellan, & Robins, 2013). One study found that although girls had higher school belonging than boys, only girls' school belonging levels declined during high school (Neel & Fuligni, 2013). However, other studies have not found gender differences in ethnic pride (Phinney et al., 2001), self-esteem (Wong et al., 2003), or school belonging (Witherspoon et al., 2009; Wong et al., 2003).

Regardless of main effects of gender, some studies suggest that ethnic identity may serve different functions for girls and boys, and consequently some of the associations in this study might vary between boys and girls. For example, Mandara, Gaylord-Harden, Richards, and Ragsdale (2009) found that African American boys (but not girls) with a positive racial identity were less likely to be depressed. Other studies have identified associations between racial discrimination (unfair treatment related to one's ethnic identity and often experienced in school contexts) and academic adjustment that are present for Latino-origin boys, but not girls (Alfaro, Umaña-Taylor, Gonzales-Backen, Bámaca, & Zeiders, 2009; Cooper & Sánchez, 2016). Thus, gender may differentially shape the school experiences of boys and girls from ethnic minority backgrounds, perhaps because males of color face negative stereotypes and have (on average) lower school attainment, compared with females of color (Lee & Ransom, 2011; Sáenz & Ponjuan, 2011). These gendered experiences may help shape the extent to which boys and girls from ethnic minority backgrounds experience school and community spaces as welcoming. We tentatively predict that boys, compared with girls, may be particularly sensitive to variations in self-affirmation and its relationship with school belonging; that is, the associations between self-esteem or ethnic pride and school belonging may be stronger for boys than girls. We examine these possibilities based on prior research suggesting that the association between ethnic identity or discrimination (often in

school contexts) and well-being tends to be stronger for boys than girls of color (e.g., Alfaro et al., 2009; Cooper & Sánchez, 2016; Mandara et al., 2009).

#### **Study Hypotheses**

Based on prior theoretical (Juvonen, 2006; Rendón Linares & Muñoz, 2011; Sameroff, 2009; Spencer, 2006) and empirical literature, this study evaluated four hypotheses:

Hypothesis 1: Self-esteem will positively influence school belonging during the transition from late childhood to adolescence (Path C, Figure 1). Because some research suggests that school belonging is a precursor to overall well-being (Path E; Eccles & Roeser, 2011), we also examine the possibility of a bidirectional association between school belonging and self-esteem across time (Paths C and E).

Hypothesis 2: Ethnic pride will positively influence school belonging during the transition from late childhood to adolescence (Path B). However, youth ethnic pride may also be influenced by experiences in school (Path D). Thus, we examine the possibility of a bidirectional association between school belonging and ethnic pride across time (Paths B and D).

Hypothesis 3: Ethnic pride will positively influence youth self-esteem during the transition from late childhood to adolescence (Path A). Although we test the alternative possibility that self-esteem will predict later ethnic pride, in theory we expect positive feelings about one's ethnicity to be based more on experiences in the culture than on global self-worth. Specific feelings of pride regarding one's ethnicity should promote overall self-worth.

Hypothesis 4: We expect that ethnic pride and self-esteem will be more strongly associated with each other and with school belonging for boys compared with girls. Thus, we will test models examining the moderating role of gender.

Finally, we test whether the predicted associations will hold from fifth to seventh and seventh to ninth grade. We tentatively expect the relations will be robust across these transitions given the relative stability of the constructs across time (Eccles & Roeser, 2011; Robins et al., 2012; Umaña-Taylor et al., 2008), but consider whether the associations would weaken in the transition to high school. We control for family income and child nativity in our models because research suggests that socioeconomic status is associated with self-esteem (Ruiz et al., 2002; Rumbaut, 2005), and child nativity is associated with ethnic identity (Rumbaut, 2005).

#### Method

#### **Participants and Procedures**

Data come from the California Families Project, a longitudinal study of 674 Mexican-origin children ( $M_{\rm age}=10.4$  years, 50% girls) attending the fifth grade at the beginning of the investigation. The children were drawn at random from student rosters provided by two school districts, one in each of two cities in a metropolitan area of Northern California. The larger city has approximately

470,000 total population (23% of Mexican origin), and the smaller has approximately 55,000 total population (44% of Mexican origin; U.S. Census Bureau, 2010). Sixty-eight percent of the students came from the larger school district, 32% from the smaller. The families of these children were then recruited by telephone or, for cases without a listed phone number, by a recruiter who went to their home. Of the eligible families, 72.5% agreed to participate in the study. All family members were of Mexican origin as determined by their ancestry and self-identification as being of Mexican heritage. The focal child had to be living with his or her biological mother. Two-parent (82% of the sample) or single-mother (18% of the sample) families were eligible to participate.

In the current analyses, we included data collected during fifth, seventh, and ninth grades. The retention rate was 90% of the original sample in the ninth-grade assessment. Attrition analyses showed that adolescents who did not participate in the last wave of the study were not significantly different from those who remained in the study in terms of demographic characteristics (i.e., family income, parent education, gender; p > .05).

Trained research staff interviewed the participants in their homes using laptop computers. Interviewers were all bilingual, and most were of Mexican heritage. They received 2 weeks of training and continuing supervision in the field to ensure that they complied with a standardized set of interviewing procedures. Two separate home visits were conducted during fifth, seventh, and ninth grades. The two visits, each lasting 2 to 3 hr, usually occurred within a 2-week period to accommodate participating families' availability and ease the burden from the length of the interviews. Parent and adolescent interviews were conducted separately in different areas of the home, by two different interviewers. Interviews were conducted in Spanish or English based on participant preference. As reimbursement for participating, children received \$50 each year and parents received \$75 each, for fifth grade, and \$100 each for the seventh and ninth grades.

#### Measures

Native Spanish speakers from the project research staff translated the English measures to Spanish, and then an independent group of bilingual staff members back-translated the measures from Spanish to English to assure that the original meaning of each item was maintained. During the first wave of data collection, 85% of participating youth chose to participate in English and 15% of youth chose to participate in Spanish. Interviewers had access to both English and Spanish questions; if the participant needed translation, either language could be referenced.

School belonging. School belonging was measured with seven items tapping students' closeness to school and commitment to conventional school goals (e.g., "You look forward to going to school," "You do not care much for school [reversed coded]," "You like to do well in school."). These items came from the School Attachment Scale (see Gonzales et al., 2008, for scale information), which was developed to assess general engagement in school. The items were rated on a 4-point scale, ranging from 1

<sup>&</sup>lt;sup>1</sup> In auxiliary analyses, we found nonsignificant correlations between the percentage of Hispanic students in schools attended by participants and the study variables, suggesting that the study variables were similar across a range of ethnic variation in schools.

(not at all true) to 4 (very true), with higher scores indicating a stronger sense of belonging in school (Cronbach's  $\alpha s = .60-.79$ ). For each wave of assessment (fifth, seventh, and ninth grades), the scale items were converted into three parcels by randomly assigning items to create indicators for the school belonging latent factor (standardized factor loadings ranged from .71 to .84). Parceling helps decrease measurement error and increase reliability of the latent variable (Kishton & Widaman, 1994; Little, Cunningham, Shahar, & Widaman, 2002). There was adequate evidence that the underlying structure of school belonging was unidimensional; using single items, rather than parcels, resulted in adequate model fit in fifth (comparative fit index [CFI] = .94, root mean square error of approximation [RMSEA] < .06), seventh (CFI = .96, RMSEA < .06), and ninth grade (CFI = .97, RMSEA < .08). We used parcels in our analytic approach because parceling reduces the indicator-to-sample ratio and number of parameter estimates (Little, Rhemtulla, Gibson, & Schoemann, 2013). Given the large number of constructs being estimated in the model, parceling is a preferred and appropriate analytical technique.

**Self-esteem.** Adolescents reported their global self-esteem in fifth, seventh, and ninth grades, using the six-item General Self-Esteem scale of the Self-Description Questionnaire II-Short (e.g., "You can do things as well as most people," "Overall you are a failure [reverse coded]; Marsh, Ellis, Parada, Richards, & Heubeck, 2005). The items were rated on a 4-point Likert-type scale, ranging from 1 (*not at all true*) to 4 (*very true*), with higher scores indicating higher levels of self-esteem (Cronbach's  $\alpha$ s = .68–.76). These scale items were converted into three parcels by randomly assigning items to create indicators for the latent factor of self-esteem (standardized factor loadings ranged from .79 to .88).

Ethnic pride. Mexican American ethnic pride was assessed using six items, reported by participants in fifth, seventh, and ninth grades. Two items came from a scale that has been used successfully in other studies with Mexican American adolescents (Berkel et al., 2010; Knight et al., 2010; Thayer, Valiente, Hageman, Delgado, & Updegraff, 2002): "You like people to know that your family is Mexican or Mexican-American," and "You feel proud to see Latino actors, musicians and artists being successful." The other four items were adapted from the Ethnic Affirmation and Belonging subscale from the Multigroup Ethnic Identity Measure developed by Phinney (1990), and used in previous studies of Mexican American adolescents (Berkel et al., 2010; Knight et al., 2010): "You feel good about your cultural or ethnic background," "You are happy that you are Mexican or Mexican American," "You have a lot of pride in your Mexican roots," and "You feel a strong attachment towards your own ethnic group." The items were rated on a 4-point Likert-type scale, ranging from 1 (not at all true) to 4 (very true), with higher scores indicating higher levels of ethnic pride (Cronbach's  $\alpha s = .75-.88$ ). These scale items were converted into three parcels by randomly assigning items to create indicators for the latent factor of ethnic pride (standardized factor loadings ranged from .64 to .88).

**Family income.** Mothers reported their family's total income on a 20-point scale with \$5,000 increments (M = \$30,000 - \$35,000, SD = \$15,000 - \$20,000). Family income was assessed in fifth grade with a single item used to identify a latent variable in the structural equation models (SEMs) used to test study hypotheses. The single item factor loading was fixed to one and the variance of that item was fixed to zero, a common practice to

identify a latent variable with a single indicator (Coffman & MacCallum, 2005).

**Child gender and nativity.** Adolescent-reported gender and mother-reported child nativity were assessed at the first time point. Seventy-one percent of participating children were born in the United States, and 29% were born in Mexico.

#### **Analysis Plan and Model Fit**

All models were tested using SEMs estimated with Mplus 7.4 (Muthén & Muthén, 1998–2015). To account for missing data, we used full information maximum likelihood estimation (FIML; Muthén & Muthén, 1998–2015); FIML fits models directly to the data, uses all available data, and only drops cases when information is missing on all data points (there were no such cases). FIML produces less biased and more reliable results compared with listwise or pairwise deletion methods (Widaman, 2006). The chi-square test of model fit ( $\chi^2$ ), the CFI (Bentler, 1990), the Tucker-Lewis Index (TLI; Tucker & Lewis, 1973), and RMSEA (Browne & Cudeck, 1993) were used to assess model fit. Model fit was considered good (acceptable) if the CFI and TLI were close to or above .95 (at least .90) and the RMSEA was less than .06 (less than .08; Hu & Bentler, 1999).

We tested for measurement invariance across gender before testing for measurement invariance across time for the latent constructs of school belonging, ethnic pride, and self-esteem. Testing for measurement invariance evaluates whether a scale assesses the same construct across groups (i.e., boys and girls; Widaman & Reise, 1997) or across each time point (Widaman, Ferrer, & Conger, 2010). The simplest form of invariance is configural, which entails unconstrained factor estimates (i.e., freely estimated factor estimates across groups and/or time). We compared the change in fit from this configural model to a weak invariance model, which entails invariant factor loadings across time (i.e., equally estimated factor loading estimates across groups and/or time). We next compared this weak invariance model with a strong invariance model, which entails invariant factor loadings and measurement intercepts (i.e., equally estimated factor loading and intercept estimates across groups and/or time). We compared a strong invariance model to a strict factorial invariance model, which entails invariant factor loadings, measurement intercepts, and unique variances (i.e., equally estimated factor loading, intercept, and variance estimates across groups and/or time). In each step, a nonsignificant change in model fit suggests that the model with additional constraints fits the data as well as the model with fewer constraints and thus, the model with additional constraints is preferred according to parsimony (i.e., the simplest model). Model fit indices are also evaluated for each test of measurement invariance. Strict invariance is preferred when establishing longitudinal measurement invariance, although strong invariance enables appropriate tests of equality of relations among latent variables (Widaman et al., 2010).

For all individual latent constructs, we found evidence for strict measurement invariance across gender groups (all models showed adequate fit: CFI > .99, TLI > .99, RMSEA < .05). In sum, measurement invariance tests suggested no gender differences in the measurement properties of school belonging, ethnic pride, and self-esteem. This finding allowed us to conduct a multiple group analysis by gender for the structural parameters in the SEM. For all latent constructs, we also found evidence for strong measurement invariance over time for self-esteem (CFI = 1.0, TLI = 1.0, RMSEA = .02), ethnic pride (CFI = .99, TLI = .99, RMSEA = .04), and school

belonging (CFI = 1.0, TLI = .99, RMSEA = .02), showing adequate model fit. Residuals from each self-esteem parcel were auto-correlated across waves. Similarly, residuals from each school belonging and ethnic pride parcel were auto-correlated across waves.

We tested the relations shown in Figure 1, using a cross-lagged latent panel SEM. Because we had established the existence of strict measurement invariance across gender, we tested whether the associations in the model operated similarly for males and females using multiple-group analysis. Similarly, establishing at least strong measurement invariance across time allowed us to test whether the crosslagged effects significantly varied from year to year by constraining them to be equal over time and comparing resulting changes in model fit. If a model with a constrained path over time or across females and males did not fit significantly worse than a model with an unconstrained path based on tests of chi-square change, the more parsimonious constrained path was kept in the model. This step was taken for all possible paths first, testing for gender and time-lagged differences. For example, Path A (Figure 1) from fifth to seventh grade was constrained to be equal between boys and girls; if constraining Path A to be equal did not significantly worsen the fit compared with a model with an unconstrained Path A, then the more parsimonious constrained Path A (i.e., equally estimated between boys and girls) was kept in the model. As another example, Paths B were constrained to be equal across time (from fifth to seventh grade and from seventh to ninth grade); if constraining these B paths to be equal did not significantly worsen the fit compared with a model where the B paths were freely estimated, then the more parsimonious constrained B paths (i.e., paths equivalent from fifth to seventh grade and from seventh to ninth grade) were kept in the model.

In the final model, the observed direction and significance of the path coefficients between the variables were used to support or reject the hypothesized relationships among school belonging, ethnic pride, and self-esteem. Positive and statistically significant coefficients (p < .05) for Paths A, B, and C will be interpreted as consistent with study hypotheses. In addition, positive and statistically significant coefficients for Paths B and D will be interpreted as consistent with the transactional model's prediction of a reciprocal relationship between ethnic pride and school belonging. Positive and statistically significant coefficients for Paths C and E will be interpreted as consistent with a bidirectional prediction for self-esteem and school belonging. Covariates (i.e., family income, child nativity) were modeled to predict ethnic pride, self-esteem, and school belonging in seventh and ninth grades, and to be correlated with ethnic pride, self-esteem, and school belonging in fifth grade.2

#### Results

# **Descriptive Statistics and Intercorrelations Among Study Variables**

Table 1 provides the descriptive statistics and correlations among latent variables used in the SEM. Means and SDs were computed from the raw scale scores. Latent means were estimated based on the measurement model. School belonging was lower for boys than girls, but declined for both boys and girls. Girls' self-esteem increased from fifth to seventh grade and decreased from seventh to ninth grade. Boys' self-esteem remained stable. Also,

girls' ethnic pride increased from fifth to seventh grade and in ninth grade decreased to the same level as fifth grade. Boys' ethnic pride declined from fifth to seventh grade and remained stable thereafter. In general, ethnic pride was positively correlated with self-esteem (rs = .11-.43 [girls]; rs = .12-.38 [boys]) and with school belonging (rs = .11-.31 [girls]; rs = .10-.38 [boys]). Self-esteem was positively correlated with school belonging (rs = .10-.58 [girls]; rs = .14-.62 [boys]).

#### Tests of Overall Model and Specific Hypotheses

Figure 2 provides the results for the overall SEM. Significant path differences by gender were found based on a multiple-group analysis. After allowing for these gender differences following procedures outlined in the analysis plan, this model demonstrated adequate fit with the data: CFI = .96, TLI = .95, RMSEA = 0.03. In Figure 2, path estimates for girls are shown left of the slash and for boys are shown right of the slash. In addition, significant differences by gender are displayed in boxes and bold font. As shown in Figure 2, ethnic pride, self-esteem, and school belonging all demonstrated significant stability over time. For example, ethnic pride in fifth grade predicted ethnic pride in seventh grade  $(\beta = .43 \text{ for girls}, \beta = .31 \text{ for boys}).$ 

Our first hypothesis was that self-esteem would predict later school belonging (Path C). We also considered the possibility that school belonging would predict later self-esteem (Path E). As predicted, self-esteem predicted relative increases in school belonging for boys from fifth to seventh grade and from seventh to ninth grade ( $\beta s = .15-.19$ , p < .01, respectively). However, these effects were not significant for girls. Moreover, school belonging did not predict subsequent self-esteem. Thus, boys who had higher self-esteem showed relatively improved school belonging over time, whereas high levels of school belonging did not predict improved self-esteem over time for girls or boys.

Our second hypothesis was that ethnic pride would predict later school belonging (Path B). We also considered the possibility that school belonging would predict later ethnic pride (Path D). Ethnic pride had significant cross-lagged effects on school belonging for boys and girls ( $\beta s = .06-.08$ , p < .05, one-tailed test; Figure 2); that is, ethnic pride was associated with relative increases in school belonging from fifth to seventh grade and from seventh to ninth

<sup>&</sup>lt;sup>2</sup> Prior studies have shown that ethnic pride varies by generational status, with first-generation immigrants typically higher in ethnic pride than later generation immigrants (Rumbaut, 2005). Although the findings are less consistent, there is some evidence that school adjustment variables also vary by generational status, with first-generation youth having stronger school attachments, higher academic motivation, and better school performance than their U.S.-born youth (Fuligni, 1997; García Coll & Marks, 2011; Pong & Zeiser, 2011). In supplemental analyses, we included generational status as a covariate and found the same pattern of findings as when nativity status was included as a covariate.

 $<sup>^3</sup>$  The self-esteem stability paths were equivalent between boys and girls, and across time, except from fifth to seventh grade,  $\Delta$   $\chi^2(1)=18.75,\,p<.001;$  i.e., worse model fit when the self-esteem stability path from fifth to seventh grade was constrained equal (vs. freely estimated) for boys and girls; self-esteem was more stable for girls across time. Also, the ethnic pride stability paths were equivalent between boys and girls, and across time, except from seventh to ninth grade,  $\Delta$   $\chi^2(1)=19.51,\,p<.001;$  i.e., worse model fit when the ethnic pride stability path from seventh to ninth grade was constrained equal (vs. freely estimated) for boys and girls; ethnic pride was more stable for boys across time.

Table 1 Intercorrelations Among the Latent Variables (N = 674)

Variable	1	2	3	4	5	6	7	8	9	10
1. School belonging (fifth)	_	.42***	.31***	.46***	.23**	.21**	.31***	.14+	.10	.08
2. School belonging (seventh)	.46***		.47***	.27***	.58***	.40***	.22**	.26***	.21**	.09
3. School belonging (ninth)	.29***	.42***	_	.10	.24***	.49***	.17*	.16*	.25***	03
4. Self-esteem (fifth)	.27***	.26***	.27***	_	.58***	.44***	.43***	.36***	.11	.11+
5. Self-esteem (seventh)	.14+	.42***	.41***	.25**	_	.68***	.18*	.30***	.16*	.17**
6. Self-esteem (ninth)	.14+	.24**	.62***	.21**	.49***	_	.19*	.22**	.31***	.16*
7. Ethnic pride (fifth)	.10	.21**	.20**	.38***	.24**	.22**	_	.33***	.34***	01
8. Ethnic pride (seventh)	.17*	.19**	.18**	.14+	.36***	.12+	.33***	_	.60***	.11+
9. Ethnic pride (ninth)	.27***	.33***	.38***	.22**	.33***	.34***	.32***	.52***	_	01
10. Family income (fifth)	.13+	.02	.17**	.04	.13+	.13*	14*	.04	.12+	_
Girls										
Latent M	.00	33***	72***	$.00^{a}$	.12*	$17^{**}$	.00 <sup>b</sup>	.29***	.00 <sup>b</sup>	_
(SE)	(.00.)	(.10)	(.13)	(.00)	(.06)	(.06)	(.00.)	(.06)	(.00.)	_
Scale M	3.68	3.64	3.51	2.80	2.84	2.70	3.60	3.72	3.64	7.14
(SD)	(.35)	(.36)	(.44)	(.51)	(.48)	(.46)	(.42)	(.37)	(.44)	(4.38)
Boys										
Latent M	25*	54***	-1.02***	$.00^{a}$	$.00^{a}$	$.00^{a}$	.00 <sup>b</sup>	$19^{**c}$	$19^{**c}$	_
(SE)	(.11)	(.12)	(.14)	(.00.)	(.00)	(.00)	(.00)	(.07)	(.07)	_
Scale M	3.61	3.57	3.42	2.79	2.79	2.75	3.56	3.55	3.52	7.43
(SD)	(.41)	(.41)	(.48)	(.47)	(.44)	(.45)	(.45)	(.52)	(.53)	(4.14)

Note. Correlations for girls appear above the diagonal and those for boys appear below the diagonal. Family income was reported on a 20-point scale, with \$5,000 increments (M = \$30,000 - \$35,000, SD = \$15,000 - \$20,000). Latent means are standardized. Latent variable means for girls at fifth grade were set to zero and used as a reference to compare the remaining latent estimates. Means constrained to equality across gender and/or waves have superscripts a, b, or c.

 $p^{+} = p^{-} < .10$ . \*  $p^{-} < .05$ . \*\*  $p^{-} < .01$ . \*\*\*  $p^{-} < .001$ , two-tailed test.

grade for boys and girls. School belonging predicted subsequent ethnic pride for boys ( $\beta s = .20-.22$ , p < .01) but not girls. Specifically, boys high in school belonging tended to increase in ethnic pride from fifth to seventh grade and from seventh to ninth grade.

Our third hypothesis was that ethnic pride would predict later self-esteem (Path A). Ethnic pride in fifth grade predicted a relative increase in self-esteem from fifth to seventh grade ( $\beta=.20$ , p<.05) among boys. Contrary to our prediction, ethnic pride in seventh grade did not predict self-esteem for boys in the ninth grade. Moreover, although ethnic pride correlated with self-esteem among girls, ethnic pride did not predict later self-esteem for girls. Self-esteem did not predict later ethnic pride for either boys or girls.

Our fourth hypothesis was that boys, compared with girls, would show stronger associations among study variables. For boys, but not girls, results showed significant predictions from ethnic pride to self-esteem, self-esteem to school belonging, and school belonging to ethnic pride. The prediction from ethnic pride to school belonging, however, held similarly for boys and girls.

#### Discussion

Guided by earlier research and theory (Brown & Chu, 2012; Gonzalez, 2009; Juvonen, 2006; Rivas-Drake, Syed, et al., 2014; Sameroff, 2009; Spencer, 2006), the present study extended previous investigations by examining the longitudinal effects of ethnic pride and self-esteem on students' feelings of belonging in school. We considered possible transactional effects among these constructs, and between ethnic pride and self-esteem (Sameroff, 2009). Consistent with prior findings from a couple of studies (e.g., Cooper & Sánchez, 2016; Mandara et al., 2009), we found

gender differences in some of the predicted effects among Mexican-origin adolescents. In the following sections, we discuss the stability of the constructs of interest, attend to the school transitions in the processes examined, and describe how the findings relate to theory (Gonzalez, 2009; Juvonen, 2006; Sameroff, 2009; Spencer, 2006).

# Associations Among Self-Esteem, Ethnic Pride, and School Belonging

Aligned with theory proposing that self-worth is a precursor to making school connections (Juvonen, 2006), we found that selfesteem is associated with later levels of school belonging among boys, but not girls, stably across both school transitions. Based on these results and promising evidence from self-esteem (Robins et al., 2012) and self-affirmation interventions (Sherman et al., 2013), programs that target the promotion of self-esteem may consider tailoring interventions for Mexican American boys across school transitions. Our findings on self-esteem are contrary to research suggesting that school belonging is a precursor to well-being (Roeser & Eccles, 1998), and theory proposing that social experiences and the development of the self are reciprocal (Sameroff, 2009); school belonging did not predict subsequent self-esteem among Mexican-origin youth. Perhaps youth find ways to adapt and respond to school experiences in other ways that maintain their self-esteem, a possibility that also aligns with the PVEST (Spencer, 2006; Swanson et al., 2003). For instance, social interactions that relate more proximally to youths' ethnic identities (Spencer, 2006; Swanson et al., 2003), such as the school's ethnic-racial climate rather than broader school belonging, may be more directly associated with self-esteem development in adolescence. It is also possible that school belonging is associated with self-esteem ear-

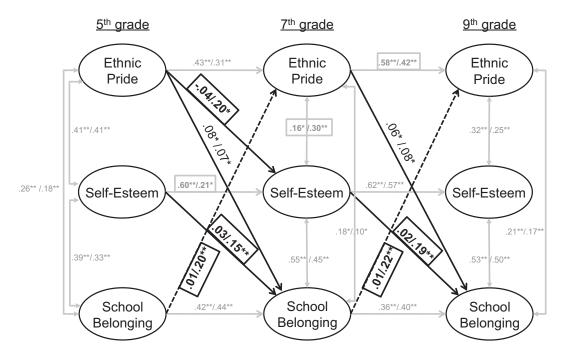


Figure 2. Path analyses from a multiple group analysis evaluating the associations between ethnic pride, self-esteem, and school belonging for girls and boys (N=674). Nonsignificant paths are estimated but not displayed in the figure. Standardized estimates for girls are left of the slash and for boys are to the right (girls/boys). Significant differences between girls and boys are displayed in boxes and bold font. Family income and child nativity were included as controls but are not displayed in the figure. Ethnic pride in ninth grade was lower for girls ( $\beta=-.10$ , p=.08) and boys ( $\beta=-.16$ , p<.01) born in the United States, compared with girls and boys born in Mexico, respectively. School belonging in seventh grade was higher for girls born in the United States ( $\beta=.13$ , p=.07) compared with girls born in Mexico. For boys, family income predicted higher school belonging ( $\beta=.14$ ,  $\beta=.02$ ) and ethnic pride ( $\beta=.13$ ,  $\beta=.02$ ) in ninth grade.  $\chi^2(744)=1026.78$ ,  $\beta<.001$ , comparative fit index (CFI) = .96, Tucker-Lewis Index (TLI) = .95, root mean square error of approximation (RMSEA) = .03. \*  $\beta<.05$ . \*\*  $\beta<.01$ , one-tailed test.

lier in elementary school, when peer norms are rooted in more positive school behaviors rather than more deviant behaviors at later grades (Galván et al., 2011). Research examining processes that link boys' self-esteem to school belonging, as well as Mexican American boys' daily school experiences at different developmental stages, would help elucidate the present study's findings and inform potential transactional associations in the development of the self among Mexican-origin youth (Sameroff, 2009).

We found that ethnic pride had significant, albeit small, effects on relative increases in school belonging for boys and girls, consistent with previous cross-sectional research (Brown & Chu, 2012; Oyserman, 2008) and theory (Juvonen, 2006). In addition, school belonging had significant effects on subsequent ethnic pride for boys, supporting previous qualitative research (e.g., Gonzalez, 2009) and theoretical work (PVEST; Spencer, 2006; Swanson et al., 2003). These findings suggest that, for boys, ethnic pride and school belonging demonstrate a transactional process across school transitions consistent with theoretical expectations (Sameroff, 2009; Spencer, 2006; Swanson et al., 2003). Specifically, positive school experiences promoted affirmative ethnic selfperceptions, and vice versa (Spencer, 2006; Swanson et al., 2003). One key view of the PVEST is that challenging experiences are triggers to adaptive or maladaptive coping strategies. Although Mexican-origin boys and girls both had declines in school belonging (which is a potentially challenging experience), boys generally had lower school belonging and ethnic pride levels than girls. This difference may be why the association between school belonging and ethnic pride was reciprocal for boys, because they may have had more challenging experiences across the school transitions, such as discrimination. Because Mexican-origin adolescents, especially Mexican-origin adolescent boys, have relatively high rates of school challenges (Lee & Ransom, 2011; Sáenz & Ponjuan, 2011) and often face discrimination (Ortiz & Telles, 2012), individual differences in ethnic pride and self-esteem may partly help explain the extent to which Mexican-origin adolescent boys feel they belong in school.

The current study adds to a body of literature on ethnic identity and affirmation by highlighting how school experiences may contribute to the development of positive ethnic regard among Mexican American boys (Dotterer et al., 2009; Rivas-Drake, Seaton, et al., 2014). Schools that embrace and celebrate the ethnic identities of students are better positioned to help Mexican-origin students feel welcomed in school. Although school belonging did not predict ethnic pride among girls, ethnic pride positively predicted later levels of school belonging among girls and boys, supporting previous research on academic well-being (Rivas-Drake, Seaton, et al., 2014) and theory suggesting that positive social contexts would be positively associated with adaptive self-identities such as

ethnic group pride (Spencer, 2006; Swanson et al., 2003). In addition, based on post hoc tests of equality of variances, boys' ethnic pride was significantly more variable than girls' in seventh and ninth grades. Thus, it would have been difficult to obtain significant predictions of ethnic pride given girls' lower variability. Ethnic pride may have been more variable for Mexican-origin males than females because young men of color likely experience harsher social conditions intertwined with their identities and perceived school roles (Cooper & Sánchez, 2016; Sáenz & Ponjuan, 2011). Especially important, however, the findings suggest that ethnic pride may promote a sense of belonging in school for both Mexican-origin boys and girls. The results suggest that ethnic pride should be fostered as a developmental resource for Mexican-origin youth, especially those at risk for academic declines.

Although previous research has documented an association between ethnic pride and self-esteem (Umaña-Taylor et al., 2014), replicating this association in a longitudinal framework is necessary to examine the extent to which this association consistently emerges across studies. Our results showed that the association between ethnic pride and later self-esteem was moderated by gender and time. In fact, this was the only association moderated by a school transition (i.e., across grades). Based on the multiplegroup analysis conducted, ethnic pride predicted later self-esteem for boys, but not for girls, in the transition from fifth to seventh grade. Perhaps especially when Mexican-origin boys encounter and become more aware of experiences of discrimination in high school and other settings (Neblett, Rivas-Drake, & Umaña-Taylor, 2012), the promoting effect of ethnic pride on self-esteem may be suppressed. Interdependent processes over time may help shape the experiences of Mexican-origin boys, because they interact with school and community members. We note, however, that we examined ethnic pride and not ethnic exploration or ethnic achievement/ resolution. Thus, our results only address the perceived belonging and affirmation that individuals have toward their ethnic group.

# Gender Difference Findings and Implications for Mexican-Origin Adolescents' Adjustment

Our findings on broad gender differences are consistent with previous studies showing that boys', but not girls', experiences related to their ethnic backgrounds are associated with well-being (Alfaro et al., 2009; Mandara et al., 2009) and school attitudes (Cooper & Sánchez, 2016). Mexican-origin adolescent boys experience more school-related difficulties than do girls, including lower educational attainment and more school discipline referrals (Lee & Ransom, 2011; Sáenz & Ponjuan, 2011). The present findings suggest that this gender difference might be attributable, in part, to the tendency for boys to have lower levels of school belonging than girls. Thus, ethnic pride may play an especially protective role for Mexican-origin boys in school and perhaps help explain differences in student success. For instance, having coethnic, but not cross-ethnic, friendships were associated with higher academic achievement among Latino high school boys (this study was based on the Add Health dataset and it was not stated how many Latino adolescents were of Mexican origin; Riegle-Crumb & Callahan, 2009). The present findings also suggest that Mexican-origin boys may benefit most from positive individual self-affirming factors such as ethnic pride and self-esteem in promoting school belonging during school transitions. Future work should attempt to identify gendered expectations in school policies, teacher interactions, and peer norms that may be prompting harmful gender differences affecting the development of Mexicanorigin boys.

We primarily did not find effects for girls, perhaps because other factors not tested in the model are more salient to Mexican-origin girls' experiences in the transition to adolescence. For example, previous research suggests that Latina adolescent girls' self-concept and well-being is more strongly linked to out-of-school experiences in the family, such as parenting (Camaca-Colbert, Gayles, & Lara, 2011; this study was based on Mexican-origin adolescent girls) and familism values (attitudes about the importance of family; Cupito, Stein, & Gonzalez, 2015; 78% of the Latino adolescents were of Mexican origin); these findings align with prior research suggesting that girls' mental health likely has a stronger base in their family relationships compared with boys' well-being (e.g., Rubin et al., 1992). Future research examining gender roles and various domains of self-affirmation would help clarify these processes among girls.

Also, the stability of self-esteem from fifth to seventh grade was weak for boys, suggesting that boys experience greater shifts in self-esteem during the transition into middle schools, maybe as a result of the changing school environments from elementary to middle school. Interestingly in seventh grade, the association between ethnic pride and self-esteem was stronger for boys than for girls, suggesting that girls' self-esteem may be more strongly linked to other sources of self-worth, such as body image, during pubertal development (Deardorff et al., 2013). However, previous research has typically not shown gender differences in the stability of self-esteem in ethnically heterogeneous samples (Trzesniewski, Donnellan, & Robins, 2003). These associations could be further explored in future research.

#### **Future Research Directions**

Strengths of this study include the longitudinal design using measurement invariance techniques, which provides a relatively strict test of the associations among the variables. The present study was conducted in California, a state with a strong presence of Mexican-origin youth (Pew Research Center, 2011), and the findings should be considered in that context. The Mexican-origin adolescents in the study were primarily recent immigrants; 91% of youth in the study either were born in Mexico or had at least one Mexican-born parent. In contrast, in the United States, approximately 33% of Mexican origin 16- to 25-year-olds are born in Mexico (i.e., first generation), 36% are born in the United States with at least one parent born in Mexico (i.e., second generation), and 31% are born in the United States as well as their parents (i.e., third generation or higher; Pew Research Center, 2009). Thus, future research should examine whether the findings from this study replicate in different Mexican-origin communities (e.g., samples with more third-generation participants or with participants living in less established Latino immigrant destinations such as communities in the United States Midwest or Southeast).

Possible study limitations include the exclusive use of selfreport data and how some of the study measures were assessed. Although the measures we studied are inherently phenomenological (Spencer, 2006), peer reports of school belonging may be appropriate for future research examining peer-related school dy-

namics. Furthermore, our measure of school belonging tapped into questions about positive feelings about school and beliefs about school being important (Gonzales et al., 2008). Thus, the items only implied, but did not explicitly reference, an emotional connection to school. We also note that although we were interested in examining general self-esteem, future research is needed to clarify how school belonging relates to other aspects of self-worth, including peer self-concept (Castro-Schilo, Ferrer, Hernández, & Conger, 2016; Morrison et al., 2003). Future research examining additional aspects of school belonging and self-esteem will help clarify the associations among the study variables.

We were limited in explaining the mechanisms for why most of the results were evident only for boys and not girls. As mentioned earlier, future research should examine gender-based processes in schools that may help explain why there may be stark differences in the findings between boys and girls of Mexican origin, especially given corroborating evidence that some academic related processes are predicted for Latino boys but not girls (Cooper & Sánchez, 2016; in this study, 94% of Latinos were of Mexican origin). Furthermore, we examined the associations among variables based on a transactional framework (Sameroff, 2009). However, researchers interested in examining the trends in the variables over time could use longitudinal growth models. Despite the need for further development, this study demonstrates longitudinal associations between school belonging and two key components of self-affirmation (i.e., ethnic pride, self-esteem) among Mexicanorigin youth. Our findings add to a growing research literature linking aspects of the self with school adjustment, with attention to differences between boys and girls of Mexican-origin.

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