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Emotional Closeness in Mexican-Origin Adolescents' Relationships with Mothers, Fathers, and Same-Sex Friends

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Abstract

Research on the associations between parent-adolescent relationships and friendships among Latinos is limited. Drawing on developmental and ecological perspectives, we examined bidirectional associations between parental warmth and friendship intimacy with same-sex peers from early to late adolescence using a longitudinal cross-lag panel design. Parent-adolescent immigration status and adolescent gender were examined as moderators of these associations. Home interviews were conducted with 246 Mexican American adolescents (51% female) when they were in early (M = 12.55; SD = .60 years), middle (M = 14.64; SD = .59 years), and late adolescence (M = 17.67; SD = .57 years). Modest declines in paternal warmth were evident from early to late adolescence, but maternal warmth was high and stable across this time period. Girls' intimacy with same-sex friends also was high and stable from early to late adolescence, but boys' intimacy with same-sex friends increased over this time period. In general, findings revealed that adolescents' perceptions of parents' warmth in early adolescence were associated positively with friendship intimacy in middle adolescence, and friendship intimacy in middle adolescence was associated positively with parental warmth in late adolescence. Some associations were moderated by adolescent gender and parent-adolescent immigration status. For example, there was an association from maternal warmth in early adolescence to friendship intimacy in late adolescence only for immigrant youth. These findings suggest that among Mexican American adolescents, their relationships with their mothers, fathers, and same-sex friends are intertwined closely and that gender and immigration status shape some of these associations during adolescence.

Keywords

adolescence	e; friendship;	gender; Mexica	n American;	parent-adolescent	relationships
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Introduction

Emotionally close and supportive relationships with parents and friends are associated with healthy psychosocial development and adjustment in adolescence (Steinberg & Silk, 2002; Way, Cowal, Gingold, Pahl, Bissessar, 2001; Way & Greene, 2006). Across a number of ethnic/racial groups, adolescents who report close and supportive relationships with parents also report higher self-esteem (Greene & Way, 2005; Steinberg & Silk, 2002) and fewer adjustment problems (e.g., Perez-Brena, Cookston, Fabricious, & Saenz, 2012; Steinberg & Silk, 2002). Similarly, youth from diverse ethnic/racial backgrounds who have friends who provide emotional support and companionship demonstrate higher self-esteem and more positive social and emotion regulation skills (Greene & Way, 2005; Savin-Williams & Berndt, 1990; Way et al., 2001). This study builds on research on the developmental significance of adolescents' emotional closeness with parents and same-sex best friends by examining associations between these relationships across adolescence.

Biological, social, and cognitive maturation in adolescence contributes to youth's increasingly independent and active role in defining their social networks and sources of emotional support (Steinberg & Silk, 2002). Parents remain central sources of support in adolescents' lives (Laursen & Collins, 2009; Steinberg & Silk, 2002), but youth spend more time with friends and increasingly view friends as significant sources of intimacy (Ladd, 2005; Sullivan, 1953; Way & Greene, 2006). Thus, adolescence is an important period to investigate the bidirectional linkages in parent-adolescent relationships and friendships.

The bioecological model proposes that the ongoing interactions that characterize youth's relationships with significant others in their daily lives are proximal processes (Bronfenbrenner & Morris, 1998); these proximal processes are conceptualized as "the primary mechanisms producing human development" (p. 152), and occur within the microsystems that comprise adolescents' daily lives, such as family, peer, school, and neighborhood (Bronfenbrenner & Morris, 1998). Bronfenbrenner and Morris (1998) further argue that the impact of proximal processes on development vary as a function of the interplay among individual characteristics, the larger environment, and the developmental/ historical period under consideration. Guided by this overarching framework, our study examined the reciprocal associations among adolescents' relationships with mothers and same-sex best friends, and fathers and same-sex best friends, across adolescence using a longitudinal design; further, we tested whether adolescent gender (i.e., an individual characteristic) and parent-adolescent immigration status (i.e., a family characteristic) moderated these associations. We focused on Mexican American youth, an understudied and rapidly growing segment of the U.S. population (U.S. Census Bureau, 2010) for whom we know little about normative developmental processes (McLoyd, 1998; Umaña-Taylor, 2009).

Linkages between Parent-Adolescent Relationships and Adolescents' Same-Sex Friendships

Developmental scholars emphasize the long lasting effects of parent-adolescent relationships on the relationships that youth develop outside of the family, particularly those with friends and peers (Ladd 2005; Parke & Buriel, 2006; Rubin, Bukowski, & Parker, 1998). A number

of theoretical frameworks address the mechanisms underlying the associations between family and peer relationships (Parke & Buriel, 2006; Schneider, Atkinson, & Tardif, 2001). Socialization perspectives highlight how the nature and types of interactions that occur between parents and offspring are linked to youth's social and emotional skills, suggesting that youth learn social skills through their interactions with parents and then apply these skills in other social contexts (Parke & Buriel, 2006). Social learning theorists explain these associations via modeling and observational learning (Bandura, 1977). Research drawing from these perspectives primarily focuses on parent-child relationship qualities as predictors of youth's peer relationships.

Less theoretical and empirical attention has been given to the possibility of bidirectional associations between parent-child relationships and friendships (e.g., Kuczynski, 2003; Parke & Buriel, 2006) and longitudinal data on these associations are relatively rare. In one study of Dutch adolescents, De Goede, Branje, Delsing, and Meeus (2009) examined the linkages over time between their perceptions of support from parents and best friends. From early to middle adolescence, parent-to-friend influences were stronger than friend-to-parent influences, but in middle to late adolescence (using a separate cohort of youth), the associations from parent-to-friend and friend-to-parent were similar in strength suggesting more mutual influence (De Goede et al., 2009). We extended this work to Mexican American youth in this study and investigated bidirectional associations between perceived support from mothers and fathers and intimacy with a same-sex friend across adolescence. We expected that associations from parental warmth to friendship intimacy may be more evident from early to middle adolescence, as this is a time when youth continue to rely on parents for emotional support, but at the same time establish close ties with youth outside the family (Steinberg & Silk, 2002). Thus, close and supportive relationships with parents in early adolescence may provide a foundation of skills that youth emulate in their friendships in middle adolescence. As close friendships become more established in middle adolescence and parent-adolescent relationships become more egalitarian (Steinberg & Silk, 2002), friendship intimacy in middle adolescence may, in turn, predict parental warmth in late adolescence (De Goede et al., 2009). Research and theory supporting this prediction come from studies of European American and European youth (Parke & Buriel, 2006; Steinberg & Silk, 2002), however, and it is less clear if this pattern will emerge among Mexican American adolescents. Because of the Mexican cultural emphasis on respect for elders and the maintenance of age-based hierarchies within families (Knight et al., 2010), a shift towards a more egalitarian parent-adolescent relationship structure, and thus, the possibility of friend-to-parent associations may be less likely to occur among Mexican American adolescents or happen later in their developmental trajectories. Given the lack of existing research, we explored these associations across adolescence, but did not advance a specific hypothesis. Further, as we elaborate below, we expected that adolescent gender and parentadolescent immigration status may moderate some of these associations.

The Role of Adolescents' and Parents' Gender

The gender intensification perspective proposes that early adolescence is a period when pressures for youth to conform to gender-typed role expectations increase, and, thus, youth may increasingly turn to their same-gender parents as role models for gender-appropriate

behavior (Crouter, Manke, & McHale, 1995; Hill & Lynch, 1983). Consistent with this perspective is longitudinal research on European American youth documenting increases in girls' time spent with mothers and boys' time spent with fathers across early adolescence (Crouter et al., 1995). Further, also studying European American families, Updegraff, McHale, Crouter, and Kupanoff (2001) showed that fathers' involvement (but not mothers') was linked to sons' peer relationships, and conversely, that only mothers' involvement was associated with daughters' peer relationships. In a cross-sectional study examining gender socialization in Latino families, Raffaelli and Ontai (2004) found that fathers guided sons' gender socialization, whereas mothers took a strong interest in their daughters' gender socialization. A premise of social learning theory (Bandura, 1977), that youth are more likely to model individuals who are higher in status and share similar characteristics, also suggests that adolescents' warmth with their same-gender parent may be more strongly linked to friendship intimacy than warmth with their opposite-gender parent. From this work comes the prediction that adolescent gender will moderate the associations between parental warmth and friendship intimacy, such that the associations will be stronger for mothers and daughters relative to mothers and sons, and stronger for fathers and sons relative to fathers and daughters. We expected moderation would be most likely to emerge in early to middle adolescence based on the premise of the gender intensification perspective that pressures to conform to gender-typed role expectations, and thus rely on the same-gender parent as a role model, are most pronounced in this developmental period (Hill & Lynch, 1983).

Theory and research on family-peer linkages highlights the potentially unique roles of father-adolescent relationships in adolescents' friendships (Cabrera & Bradley, 2012; Parke & Buriel, 2006). Scholars propose that fathers' relationships with adolescents are more egalitarian and peer-like than are mothers'; the greater similarities in the structure of father-adolescent relationships and friendships, in turn, may promote cross-relationship associations (Parke & Buriel, 2006). Empirical support comes from research on European American families (e.g., Lieberman, Doyle, & Markiewicz, 1999; McDowell & Parke, 2009), however, and such a pattern may be less common in Mexican American families. Research on Latino families suggests that traditional parenting roles, with mothers as primary caregivers and fathers as economic providers and authority figures (Cauce & Domenech-Rodriguez, 2002; Fuligni, 1998), are more common in this cultural context, particularly among immigrant families or those with strong ties to Mexican culture (Leaper & Valin 1996; Parra-Cardona, Córdova, Holtrop, Villarruel, & Wieling, 2008; Raffaelli & Ontai, 2004). As such, we explored adolescents' relationships with mothers and fathers to gain insights about whether similar or different associations with friendships would emerge.

The Role of Family Cultural Context

Scholars who study ethnic minority youth note the variability that exists *within cultural groups* and the need to understand development within the context of these variations (García Coll et al., 1996; McLoyd, 1998; Umaña-Taylor, 2009). One important source of within-group variability results from differences *within* families (e.g., parents versus youth) in place of birth, timing of immigration, and exposure to ethnic and mainstream culture (Lau et al., 2005; Updegraff & Umaña-Taylor, 2010). From a sociological perspective, Glass, Bengston, and Dunham (1986) propose that parents and youth who are raised within *similar*

social environments (e.g., all were born in the U.S.), are socialized within similar social systems (e.g., school, government) that foster greater parent-youth similarity in behaviors and values.

Research focused on the age of immigration provides a more nuanced understanding of the immigrant family experience (Glick & White, 2003; Stevens, 1999), and informed our conceptualization of the family cultural context. Specifically, research suggests that youth who immigrate to the U.S. by or before school age report higher English fluency (Stevens, 1999) and more positive school adjustment (Glick & White, 2003) as their social experiences are most similar to native-born youth who are exposed to the school system at the same age. Thus, youth who immigrate before age 6 may look more similar to U.S.-born youth. Research also has suggested migration by age 12 is associated with different psychosocial adjustment and U.S. attachment than migration after age 12, as individuals who immigrate by age 12 generally enter into the U.S. school system, due to state mandates, where they experience systematic exposure to the English language and U.S. social norms (Rumbaut, 1997; Oropesa & Landale, 1997). Thus, important developmental tasks that occur during adolescence, such as identity (Umaña-Taylor & Fine, 2004) and value (Kohlberg, 1976) development may occur with substantial influence from the U.S. culture. Such research suggests that it is important to account for age of immigration in the study of immigrant families. Thus, when exploring the role of parent-youth immigrant status, a more nuanced estimate of the immigrant experience will be examined, such that critical ages of immigration will be accounted for when exploring parents' (immigration before age 12) and youths' (immigration before age 6) immigration status. In addition, similarities between parents and youth may increase the relevance of parents as role models (Bandura, 1977), suggesting adolescents' modeling of their relationships with parents in their friendships leads to a positive association between parent and friend relationship qualities. Together, this work suggests that, when parents and adolescents share the same immigration status (e.g., parents and adolescents are both Mexico-born), positive associations are expected between parent-adolescent warmth and friendship intimacy. In contrast, associations may be weaker in mixed-status dyads (i.e., immigrant parents with U.S.-born youth). Also consistent with these predictions is research on parent-adolescent acculturation gaps, which suggests that greater discrepancies in acculturation status are linked to more problematic parentadolescent relationships (e.g., less warmth, more conflict) and youth adjustment problems (Author citation; Szapocznik, Kurtines & Fernandez, 1980; Schofield, Parke, Kim, & Coltrane, 2008).

Familism as a Covariate—*Familism*, individuals' endorsement of the belief that family is a source of support and guidance and that the family needs come before ones' individual needs (Knight et al., 2010), is held with high regard in Mexican families (Hurtado, 1995; Knight et al., 2010). In fact, previous research has noted that Mexican Americans endorse familism values at higher rates than European Americans (Sabogal, Marin, Otero-Sabogal, Vanoss, Marin, & Perez- Stable, 1987) and Mexican immigrants endorse this value more than U.S.-born Mexican individuals (Knight et al., 2010). Within families, parents endorse familism more so than their children, who are more acculturated then their parents (Bacallao & Smowkosky, 2007). Such research suggests that parents and adolescents of different

immigrant backgrounds may differ in their endorsement of familism values. In addition, adolescents' familism values are associated with more positive family and peer relationship qualities (*Author citation*; Germán, Gonzales, & Dumka, 2009). For these reasons, we included adolescents' familism support values as a covariate to examine the role of parent-adolescent immigration status as a moderator of parent-friendship associations after taking into account adolescents' values.

The Present Study

In this study, we examined reciprocal associations between Mexican American adolescents' perceptions of parental warmth and friendship intimacy across adolescence. Drawing broadly from developmental theory, we expected associations from parental warmth to friendship intimacy would be more likely to emerge from *early to middle adolescence* and we explored whether friendship intimacy to parental warmth may be more likely to emerge in middle to late adolescence. Further, adolescent gender was expected to moderate, such that stronger parent-friend relationship associations would emerge for same-gender as compared to opposite-gender parent-youth dyads, particularly in early to middle adolescence. Finally, stronger associations between parental warmth and friendship intimacy were expected for parent-adolescent dyads with a shared immigration history (i.e., U.S.-born parents and adolescents; Mexico-born parents and adolescents) as compared to those with different immigration backgrounds (i.e., immigrant parents with U.S.-born youth).

Method

Participants

Data came from a longitudinal study of adolescent development and family dynamics in 246 Mexican American adolescents and their families (Updegraff, McHale, Whiteman, Thayer, & Delgado, 2005). Recruited from schools in and around a southwest metropolitan area, participants met four study criteria: 7th graders and an older sibling were living at home and not learning disabled; biological mothers and biological or long-term adoptive fathers (i.e., 10 or more years) were living at home; mothers were of Mexican origin; and fathers worked at least 20 hours per week. Although not a requirement, 93% of fathers were also of Mexican descent. We focused on two-parent families, who represent the predominant arrangement in Mexican American families in the U.S. (69%; U.S. Census Bureau, 2012) and in the county from which the sample was drawn (U.S. Census Bureau, 2000).

To recruit participants, letters and brochures describing the study goals (in English and Spanish) were sent to families with Latino 7^{th} graders in five public school districts and five parochial schools. Follow-up telephone calls were conducted by trained bilingual staff to determine each family's eligibility and interest in participating in the project. Eligible participants included 421 adolescents and their families (i.e., 32% of those who were contacted and screened). Of those who were eligible, 284 families (67%) agreed to participate, 95 (23%) refused, and 42 families (10%) moved before the recruitment process was completed. Interviews were completed with 246 adolescents and their families. Those who agreed but did not participate in the final sample (n = 38) were families that we were

unable to locate or with whom we were unable to complete a home interview after repeated attempts.

At Time 1 (T1), annual household income ranged from \$5,000 to over \$250,000, with a median of \$41,000 (SD = \$45,222), and 18.3% lived below the federal poverty level, similar to the percentage of families in the county from which the sample was drawn (18.6%; U.S. Census Bureau, 2000). Adolescents' parents averaged approximately 10 years of education (M = 10.34, SD = 3.74 for mothers; M = 9.88, SD = 4.37 for fathers) and were primarily born in Mexico (71% of mothers and 69% of fathers). Foreign-born mothers and fathers resided within the U.S. for an average of 12.37 years (SD = 8.86) and 15.18 years (SD = 8.78), respectively. Most parents were interviewed in Spanish (67%), whereas 84% of the 7th graders were interviewed in English. For adolescents, the sample was 51% female and averaged 12.51 (SD = 0.58) years of age at T1. More than half of 7th graders were born in the U.S. (62%).

Data were available from 246 7^{th} graders at T1. Time 2 (T2) interviews were conducted two years later with 90% of adolescents (n = 222). Those who did not participate could not be located (n = 10) or refused (n = 14). There were no significant differences in the background characteristics of adolescents who participated in T2 versus those who did not. At Time 3 (T3), three years after T2, 75% of the adolescents and their families participated (n = 184). Those who did not participate could not be located (n = 44), had moved to Mexico (n = 2), could not presently participate or were difficult to contact (n = 5), or refused to participate (n = 10). Non-participating families at T3 (n = 61) compared to participating families (n = 184) reported significantly lower income at T1 (M = \$43,419; SD = \$30,119 for non-participating families and M = \$61,068; SD = \$51,840 for participating families) and lower maternal education (M = 9.66; SD = 3.74 for non-participating families and M = 10.79; SD = 3.67 for participating families). Thus, household income and parental education were controlled for in all analyses.

Procedure

Data were collected via in-home interviews at T1 (7th grade) and T3 (12th grade) and over the phone at T2 (9th grade) using the same procedures. Interviews lasted an average of two hours at T1 and T3, and one hour at T2. Interviews were conducted individually using laptop computers and bilingual interviewers read the questions to the participants and entered their answers directly into the computer. For participation at T1 and T3, families received \$100 and \$125, respectively; adolescents received \$40 for participation at T2.

Measures

All measures were forward translated into Spanish and back translated into English by separate individuals for local Mexican dialect (Foster & Martinez, 1995). A third native Spanish speaker reviewed all translations and discrepancies were resolved by the research team.

Family Background Information (T1)—Mothers and fathers reported on their education levels and household income. A log transformation was applied to household

income to correct for skewness, and then a composite score was created for SES by standardizing and averaging mothers' and fathers' educational levels and household income ($\alpha = .76$).

Familism Values—Adolescents completed the 6-item subscale of the Mexican American Cultural Values Scale (Knight et al., 2010) assessing supportive familism values. Adolescents rated items (e.g., "It is always important to be united as a family") using a 5-point scale, ranging from (1) *strongly disagree* to (5) *strongly agree*. Items were averaged to create the familism scores with higher scores indicating higher levels of familism. Cronbach's alpha was .76.

Parent-Adolescent Warmth (T1, T2, T3)—Adolescents reported on the degree of warmth in their relationships with each of their parents (at separate points in the interviews) using the 8-item Children's Report of Parental Behavior Inventory (Schwarz et al., 1985). An example item was: "My mom/dad makes me feel better after talking over my worries with her/him." Each of the items was rated on a 5-point scale ranging from (1) *almost never* to (5) *almost always*. Items were averaged to create a scale score, with higher scores indicating more warmth from mothers and fathers. The reliability and validity of this measure has been established with Mexican American youth in English and Spanish (Knight, Tein, & Shell, 1992). For adolescents' warmth with mothers and fathers, respectively, Cronbach's alphas were .84 and .89 at Time 1, .90 and .91 at Time 2, and .94 and .94 at Time 3.

Friendship Intimacy (T1, T2, T3)—Friendship intimacy was measured using adolescents' reports of intimacy with their closest same-sex friend (Blyth & Clark, 1987). Adolescents completed 8 items (e.g., "How much do you go to your best friend for advice or support?"). Items were rated on a 5-point scale (1 = *not at all*, 5 = *very much*) and averaged to create an overall score. Higher scores indicated higher friendship intimacy. The psychometric properties of this measure have been documented with Mexican American youth (Updegraff, Madden-Derdich, Estrada, Haase, & Leonard, 2002). Cronbach's alphas were .84, 89, and .84 for T1 – T3, respectively.

Parent-Adolescent Immigration Status—Mothers reported if they and their 7th grader were born in the U.S. or Mexico, and fathers reported their own country of birth. Immigrant parents reported their length of U.S. residence at T1, and immigrant youth reported on their length of U.S. residence at T3. The length of U.S. residence was subtracted from each family member's age to calculate each family member's age at immigration to the U.S. Based on prior research (Rumbaut, 1997; Stevens, 1999), age 6 was considered the critical age of immigration for youth as they would have entered the school system at the same time as their U.S.-born peers, and age 12 was considered the critical age for parents as they would have experienced some schooling within the U.S. system. The parent-adolescent immigration status measure was created such that dyads in which both parents and youth were born in the U.S. or immigrated before their corresponding critical period were given a score of 1 = U.S.-raised; dyads in which each person was born in Mexico and immigrated to the U.S. after their critical period (i.e., age 6 for youth and age 12 for parents) were given a

score of 2 = immigrant; and dyads where youth were born in the U.S. or immigrated before the critical period and parents were Mexico-born and immigrated after their critical period were given a score of 3 = mixed-status. See Table 1 for sample breakdown and background characteristics of each group. ANOVAs were conducted to test for parent-adolescent immigration status differences in parents' education levels, household income, years living in the U.S., and youth's familism values (see Table 1). In addition, significant chi-squared analyses revealed differences in T1 home interview language preference for mothers' language, $\chi^2 = 215.04$, p < .001, and adolescents' language, $\chi^2 = 108.31$, p < .001, as a function of mother-adolescent immigration status, and for fathers' language, $\chi^2 = 196.58$, p < .001, and adolescents' language, $\chi^2 = 102.22$, p < .001, by father-adolescent immigrant status. Among U.S.-raised dyads, 94% of parents and 100% of adolescents preferred English; in immigrant dyads, 100% of parents and 35% of adolescents preferred Spanish; and in mixed-status dyads, 98% of mothers, 95% of fathers, and 8% of adolescents preferred Spanish.

Results

Analyses examined bidirectional associations between adolescents' perceived parental warmth and intimacy with their same-sex best friends from early to late adolescence. Adolescent gender and parent-adolescent immigration status were tested as moderators. The means, standard deviations, and correlations for all study variables are in Table 2.

Descriptive Analyses

To provide descriptive information about adolescents' relationships with parents and friends, we conducted a series of 3 (Parent-Adolescent Immigration Status) \times 2 (Adolescent Gender) \times 3 (Time) repeated measures ANCOVAs with SES and adolescents' familism values as covariates. The dependent variables were adolescents' reports of maternal warmth, paternal warmth, and friendship intimacy measured at Time 1 (7th grade), Time 2 (9th grade), and Time 3 (12th grade). ANCOVAs were conducted using Proc MIXED in SAS 9.2 with maximum likelihood estimation to manage missing data in the dependent measures without inflating the models' standard errors (Wolfinger & Chang, 1998). A first model was estimated using time as a fixed effect. If this model showed a significant effect for time, then follow-up analyses were conducted to test mean differences in the outcome variables at each time point.

Beginning with adolescents' reports of *maternal warmth*, there were no significant main effects or interactions. Overall, adolescents reported stable, high levels of maternal warmth (see Table 2). For adolescents' reports of *paternal warmth*, there was a significant main effect for time, F(2, 238) = 21.77, p < .001. Follow-up analyses revealed a significant decrease in warmth from Time 1 to Time 2, t(238) = 5.34, p < .001, and from Time 2 to Time 3, t(238) = 1.97, p < .05. (see Table 2). For adolescents' reports of friendship intimacy, there was a significant Adolescent Gender X Time interaction F(2, 233) = 4.62, p < .01. Follow up analyses revealed significant changes in friendship intimacy for boys, F(2, 113) = 16.86, p < .001, but not for girls (see Table 2). Boys reported increases in friendship intimacy from Time 1 to Time 3, t(113) = -4.11, p < .001, and from Time 2 to Time 3, t(113) = -4.11, t(113) = -4.11

(113) = -5.67, p < .001. No significant main effects or interactions emerged by parent-adolescent immigration status.

Reciprocal Associations between Parental Warmth and Friendship Intimacy

We conducted a series of autoregressive cross-lag panel models (Cole & Maxwell, 2003) in Mplus 6.12 (Múthen & Múthen, 2010) to estimate the reciprocal association between adolescents' reports of parent-adolescent warmth and friendship intimacy from early to late adolescence, after accounting for stability in each construct. We included the following effects in the overall models testing the cross-lag associations between parental warmth and friendship intimacy: SES, adolescents' familism values, adolescent gender (i.e., 0 = girls, 1= boys), and parent-adolescent immigration status (two dummy variables coded as 0 = mixedstatus, 1= U.S.-raised or immigrant dyads); stability in parental warmth and friendship intimacy from Time 1 to 2, Time 2 to 3, and Time 1 to Time 3; cross-lagged effects from parent warmth to friendship intimacy from Time 1 to 2, Time 2 to 3, and Time 1 to 3; and cross-lagged effects from friendship intimacy to parent warmth from Time 1 to 2 and Time 2 to 3. In addition, all models included correlations between the exogenous variables (i.e., SES, adolescents' familism values, adolescent gender, parent-adolescent immigration status, parent warmth at Time 1, friendship intimacy at Time 1), and within-time error correlations for the endogenous variables (i.e., parent warmth, friendship intimacy). Missing data were accounted for using the Full Information Maximum Likelihood (FIML) estimator. Separate models were estimated for adolescents' reports of maternal and paternal warmth.

To test the moderating effect of adolescent gender and parent-adolescent immigration status, a series of multiple group (autoregressive cross-lag panel) models were estimated, first assessing differences as a function of adolescent gender (i.e., 0 = girls, 1 = boys), and next assessing differences as a function of parent-adolescent immigration status (i.e., 1 = U.S.raised, 2 = immigrant, 3 = mixed-status). These models included the following effects: family SES and adolescents' T1 familism values as a covariates; adolescent gender as a covariate in the multiple group models testing moderation by parent-adolescent immigration status, or parent-adolescent immigration status as a covariate in the multiple group models testing moderation by adolescent gender; stability and cross-lag effects (described above). We tested for moderation by the grouping variable of interest when a path coefficient was significant for one group and not for the other group or when path coefficient signs differed across groups. Path coefficients were tested one at a time by comparing the fit of the model in which the path coefficient of interest was unconstrained compared to a model in which all paths were constrained to be equal across groups. Moderation was evidenced when the constrained model resulted in a significant change in χ^2 , p < .05, indicating the unconstrained model fit significantly better than the constrained model (Kline, 1998).

Maternal Warmth and Friendship Intimacy—For the overall model with maternal warmth and friendship intimacy, model fit was good, χ^2 (5) = 10.21, ns, RMSEA = 0.07, CFI = 0.99, and SRMR = 0.02 (see Table 3) and significant variance in maternal warmth and friendship intimacy at T1, T2, and T3 was explained. After accounting for stability in maternal warmth and friendship intimacy, higher levels of maternal warmth at Time 1 were associated with higher levels of friendship intimacy at Time 2 and higher friendship

intimacy at Time 2 was associated with higher maternal warmth at Time 3. Adolescent gender moderated the association from maternal warmth at T1 to friendship intimacy at T2, χ^2 (1) = 7.56, p < .01, such that the association was significant for girls but not for boys (see Figure 1a). Mother-adolescent immigration status moderated the association from maternal warmth at Time 1 to friendship intimacy at Time 3, χ^2 (1) = 5.06, p < .05, such that there was a significant negative association for immigrant dyads, but not for U.S.-raised and mixed-status dyads (see Figure 1b). Specifically, when adolescents in immigrant dyads described closer relationships with mothers in early adolescence, they reported lower levels of friendship intimacy in late adolescence. No other significant moderation effects were found.

Paternal Warmth and Friendship Intimacy—The overall model for paternal warmth and friendship intimacy (see Table 3) was a good fit to the data, χ^2 (5) = 4.47, ns, RMSEA = 0.00, CFI = 1.00, and SRMR = 0.02, and accounted for significant variance in paternal warmth and friendship intimacy at T1, T2, and T3. After accounting for stability in paternal warmth and friendship intimacy, there was a significant positive cross-lag association indicating more father-adolescent warmth at Time 1 was associated with higher friendship intimacy at Time 2. In addition, higher friendship intimacy at Time 2 was associated with higher paternal warmth at Time 3. There was a trend for adolescent gender as a moderator for the association from Time 1 friendship intimacy to Time 2 paternal warmth, χ^2 (1) = 3.67, p < .10 (Figure 2a): higher levels of Time 1 friendship intimacy were associated with lower levels of Time 2 paternal warmth for boys, but not for girls. There also was a trend for the parent-adolescent immigration status as a moderator from Time 1 friendship to Time 2 paternal warmth (See Figure 2b), χ^2 (1) = 2.80, p < .10. This path was negative and non-significant for U.S.-raised and mixed-status dyads, and positive and non-significant for immigrant dyads. No other significant effects emerged.

Discussion

Adolescence is a developmental period characterized by changes in relationships with parents and peers (Rubin et al., 1998; Steinberg & Silk, 2002), but longitudinal research largely focuses on European American and European youth (McGue et al., 2005; Shanahan, McHale, Crouter, & Osgood, 2007). Using a longitudinal design, our findings provided some evidence of *bidirectional* associations among Mexican American adolescents' relationships with parents and friends. Such findings advance research on family-peer linkages by *simultaneously* considering how experiences with parents are linked to future friendship quality and friendships are associated with future parent-adolescent relationship quality (De Goede et al., 2009). In addition, this study's consideration of adolescents' relationships with both mothers and fathers is important, as research on ethnic minority youth has paid limited attention to fathers (Parke & Buriel, 2006).

Mexican American adolescents' ratings of emotional closeness with mothers, fathers, and same-sex friends changed across adolescence. In early adolescence, Mexican American adolescents described moderately high levels of maternal and paternal warmth, suggesting that adolescents relied on both parents for emotional support as they transitioned into adolescence (Steinberg & Silk, 2002). In middle and late adolescence, in contrast,

adolescents continued to describe high levels of maternal warmth, but reported modest declines in their perceived paternal warmth, similar to findings among European American, Asian American, and Dutch adolescents (e.g., De Goede et al., 2009; Greenberger & Chen, 1996; Shanahan et al., 2007). Such findings suggest the possibility that mothers' and fathers' roles as sources of emotional support may become more differentiated across adolescence among youth from diverse ethnic backgrounds. The findings for friendship intimacy revealed gender differences in developmental changes, with girls' relationships with their same-sex best friends characterized by high and stable levels of warmth, and boys' relationships increasing in intimacy over time. Notably, despite increases, boys' levels of friendship intimacy remained lower than girls' across adolescence. These findings are consistent with research on European American youth (Ruble & Martin, 1998) and with gender socialization models that emphasize girls' focus on intimacy with peers (Maccoby, 1998).

Bidirectional Associations between Perceived Closeness with Parents and Friends

Our primary goal was to examine *bidirectional* associations among parent-adolescent warmth and friendship intimacy across the developmental period of adolescence, testing both directions of association (i.e., parent-to-friend and friend-to-parent). Overall, our findings suggested that links from parent-adolescent warmth to friendship intimacy were most pronounced in the transition from early to middle adolescence, such that more perceived warmth with parents in early adolescence predicted higher levels of friendship intimacy in middle adolescence, after accounting for stability in both relationships. Because early adolescence is a period when youth are beginning to expand their social networks beyond the family while still maintaining close relationships with parents (Laursen & Collins, 2009; Steinberg & Silk, 2002), experiences of support in the parent-adolescent relationship may generalize to adolescents' friendships. Such a pattern may be salient for Mexican American youth given the cultural emphasis on family support and interdependence (Cauce & Domenech-Rodríguez, 2002).

Links from friendship intimacy to future parent-adolescent warmth were evident from middle to late adolescence, such that higher levels of friendship intimacy in middle adolescence were linked to warmer relationships with mothers and fathers in late adolescence. During middle adolescence, it is possible that youth further develop their skills as they establish emotionally close relationships with friends, and in turn, apply these skills to promote emotional support from parents in late adolescence (De Goede et al., 2009; Parke & Buriel, 2006). It is notable that these associations were consistent for adolescents' relationships with both mothers and fathers and did not vary as a function of adolescent gender or parent-adolescent immigration status. Together with evidence of friend-to-parent linkages among Dutch adolescents (De Goede et al., 2009), these findings suggest the potentially important role of friendship intimacy in future parent-adolescent quality, particularly in middle to late adolescence. Our findings of friend-to-parent associations in a cultural context that is characterized by the maintenance of age-based hierarchies and an emphasis on values regarding respect for elders (Knight et al., 2010), underscore the need to replicate these findings in other family cultural contexts and to begin to identify the underlying mechanisms. One possible mechanism to consider is the structural changes in the

parent-adolescent relationship during adolescence (Laursen & Bukowski, 1997; Laursen & Collins, 2009; Steingberg & Silk, 2002). To the extent that the parent-adolescent relationship shifts during adolescence from an asymmetrical relationship to one that is more equal between parents and adolescents (Laursen & Bukowski, 1997; Laursen & Collins, 2009; Steingberg & Silk, 2002), these structural changes may promote friend-to-parent associations. It will be important to explore such structural changes in parent-adolescent relationships among Latino families, as existing theory and research relies primarily on data from European American families (Laursen & Bukowski, 1997; Laursen & Collins, 2009; Steingberg & Silk, 2002). The social skills and competencies that adolescents develop within their interpersonal relationships may be another potentially important mechanism that underlies these cross-relationship associations. Future research that identifies the *specific* social skills and competencies that promote parent-to-friend and friend-to-parent associations will be important (e.g., disclosure, perspective-taking, emotion regulation; Masten & Coatsworth, 1998).

The Moderating Role of Adolescent Gender and Parent-Adolescent Immigration Status

Our approach was grounded in a bioecological model of development (Bronfenbrenner & Morris, 1998) and, consistent with this approach, some of the developmental associations among these key relationships in youth's lives varied as a function of adolescent gender and parent-adolescent immigration status. From a gender intensification perspective (Hill & Lynch, 1983), we expected that gender may moderate parent-friendship associations, such that youth would be more likely to look to their same-sex parent as a role model, and thus stronger associations would emerge for mothers with daughters and fathers with sons (Crouter et al., 1995; Updegraff et al., 2001). We found some support for this expectation in that the links from maternal warmth in early adolescence to friendship intimacy in middle adolescence were specific to girls. Altogether, our findings revealed that both maternal and paternal warmth was positively linked to friendship intimacy (two years later) for girls, whereas for boys, only paternal warmth predicted friendship intimacy. As girls are focused more on dyadic relationships with friends (Maccoby, 1998; Ruble & Martin, 1998), they may draw from dyadic interactions with their mothers and fathers. For boys, in contrast, emotional support from their mothers, while important, may be less relevant than support from fathers as they begin to develop close friendships with other boys. That this moderation finding emerged only in early to middle adolescence is consistent with the gender intensification hypothesis (Hill & Lynch, 1983), which suggests that increased gender socialization pressures promote the reliance on same-gender parents as models.

Drawing from a sociological perspective on status inheritance (Glass et al., 1986) and from social learning theory (Bandura, 1977), we expected that parent-friend associations may be stronger when parents and youth share a similar immigrant background that may promote modeling. In contrast to our expectations, among mother-youth immigrant dyads, warmer relationships with mothers in early adolescence predicted lower levels of friendship intimacy in late adolescence. This particular association emerged from *early* to *late* adolescence, a pathway that was not originally hypothesized. At the third assessment in late adolescence, adolescents were transitioning out of high school. Thus, immigrant youth who relied on their mothers for emotional support in early adolescence may have been less inclined to seek out

close friends in late adolescence as their social networks were likely in a period of fluctuation as they transitioned out of secondary education and into emerging adult roles. The characteristics of immigrant families in this sample, including families' limited educational and economic resources, limited English fluency, and relatively short period of time living in the U.S., also may restrict opportunities for youth to develop close friendships outside the family or result in delays in the formation of these close friendships.

In contrast to evidence that mother-adolescent immigration status moderated maternal warmth to friendship intimacy, father-adolescent immigrant status was a marginally significant moderator of one path and none of the path coefficients were significant. Evidence of a moderating effect only for mother-adolescent immigration status in this study stands in contrast to other research, which highlights the role of father-adolescent, but not mother-adolescent, acculturation discrepancies in predicting family relationship and youth adjustment problems (e.g., Schofield et al., 2008; Updegraff, McHale, Whiteman, Thayer, & Crouter, 2006). Together, these findings suggest further research is needed to provide insights about how parent-adolescent cultural congruence or incongruence, as operationalized in different ways and in reference to both mothers and fathers, moderates different aspects of youth development and adjustment. Further, it will be important to understand how parent-adolescent cultural congruence/incongruence interacts with other salient social contexts in adolescents' lives, such as the school, neighborhood or peer microsystems to inform youth development and well being.

Limitations and Future Directions

The limitations of this study provide avenues for future research. First, although adolescents' perceptions of their own relationship experiences are important, future research should examine shared and discrepant perspectives of support in parent-adolescent and adolescent-friend relationships to better understand the interrelations among family and peer contexts across adolescence. Incorporating information from both members of the dyad would also address concerns about potential biases that result from relying on a single reporter of the relationship. Second, the current study focused on parents' and adolescents' shared immigration histories and accounted for adolescents' familism values. It will be important to extend this work to operationalize parent-adolescent congruence/incongruence in other ways that also may be relevant for the associations between parent-adolescent relationships and friendships across adolescence (e.g., similarities in parents' and adolescents' ethnic affiliations). Third, given adolescence is a period of increased interactions with opposite-gender peers, future work should explore linkages between parent-adolescent relationship quality and adolescents' cross-gender peer relationships. Fourth, although the links between parent-adolescent relationship and friendship qualities and adolescents' psychosocial functioning have been tested separately (Greene & Way, 2005; Steinberg & Silk, 2002; Way et al., 2001), it is also important to begin to explore how these cross-relationship associations are linked to youth functioning (see Author citation, for example). Finally, our findings pertain to a specific sample of Mexican American families (i.e., predominantly immigrant, residing in the southwest, two-parent families) and future work should extend this research to youth from different family and sociocultural contexts.

Conclusion

This study is among the first to examine the bidirectional associations between parentadolescent and adolescent-friend relationships across the developmental period of adolescence among Latino youth. Our findings revealed that higher levels of parental warmth in early adolescence were linked to higher friendship intimacy in middle adolescence and closer friendships in middle adolescence predicted warmer relationships with parents in late adolescence (De Goede et al., 2009). Such findings underscore the dynamic interplay among parent-adolescent and adolescent-friend relationships, and suggest the need to understand better the potential mechanisms that explain these cross-relationship associations in future work (Masten & Coatsworth, 1998). Consistent with the bioecological model (Bronfenbrenner & Morris, 1998), some associations were moderated by adolescent gender and mother-adolescent immigration status. Supporting the gender intensification hypothesis (Hill & Lynch, 1983), associations from maternal warmth in early adolescence to friendship intimacy (with a same-sex friend) in middle adolescence were specific to girls. Our focus on relationship intimacy, a salient aspect of females' close relationships (Maccoby, 1998), may explain why this finding emerged only for mother-daughter pairs. Examining cross-relationship associations for dimensions that are more salient for males (e.g., shared activities and interests, dominance) in future research may yield findings specific to father-son dyads. Further, our findings highlighting mother-adolescent immigration status as a moderator of maternal warmth in early adolescence and friendship intimacy in late adolescence contributes to a growing body of research on how the family cultural context, and particularly similarities and differences in parent-youth cultural characteristics, shape family dynamics and youth development and well-being (e.g., Schofield et al., 2009; Author citation). Finally, this study contributes to an emerging foundation of knowledge about the normative development of Latino youth in key social settings, which is crucial given that large cohorts of Latino youth will be transitioning through adolescence and into adulthood in upcoming decades (U.S. Census Bureau, 2010).

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References

- Bacallao ML, Smokowski PR. The costs of getting ahead: Mexican family system changes after immigration. Family Relations. 2007; 56:52–66.
- Bandura, A. Social learning theory. Englewood Cliffs, NJ: Prentice-Hall; 1977.
- Blyth DA, Foster-Clark FS. Gender differences in perceived intimacy with different members of adolescents' social networks. Sex Roles. 1987; 17:689–718.
- Bronfenbrenner, U.; Morris, PA. The ecology of developmental processes. In: Damon, W.; Lerner, RM., editors. Handbook of child psychology Theoretical models of human development. 5th ed. Vol. Vol. 1. New York, NY: John Wiley and Sons; 1998. p. 993-1023.
- Cabrera NJ, Bradley RH. Latino fathers and their children. Child Development Perspectives. 2012; 6:232–238.
- Cauce, AM.; Domenech-Rodriguez, M. Latino families: Myths and realities. In: Contreras, JM.; Kerns, KA.; Neal-Barnett, AM., editors. Latino children and families in the United States. Westport, CT: Praeger; 2002. p. 5-25.
- Cole DA, Maxwell SE. Testing meditational models with longitudinal data: Questions and tips in the use of structural equation modeling. Journal of Abnormal Psychology. 2003; 112:558–577. [PubMed: 14674869]
- Crouter AC, Manke B, McHale SM. The family context of gender intensification. Child Development. 1995; 66:317–329. [PubMed: 7750368]
- De Goede IHA, Branje SJT, Delsing MJMH, Meeus WHJ. Linkages over time between adolescents' relationships with parents and friends. Journal of Youth and Adolescence. 2009; 38:1304–1315. [PubMed: 19779807]
- Foster SL, Martinez CR. Ethnicity: Conceptual and methodological issues in child clinical research. Journal of Clinical Child Psychology. 1995; 24:214–226.
- Fuligni AJ. Authority, autonomy, and parent-adolescent conflict and cohesion: A study of adolescents from Mexican, Chinese, Filipino, and European backgrounds. Developmental Psychology. 1998; 34:782–792. [PubMed: 9681270]
- García Coll C, Crnic K, Lamberty G, Wasik BH, Jenkins R, García HV, McAdoo HP. An integrative model for the study of developmental competencies in minority children. Child Development. 1996; 67:1891–1914. [PubMed: 9022222]

Germán M, Gonzales NA, Dumka L. Familism values as a protective factor for Mexican-origin adolescents exposed to deviant peers. Journal of Early Adolescence. 2009; 29:16–42. [PubMed: 21776180]

- Glass J, Bengston VL, Dunham CC. Attitude similarity in three-generation families: socialization, status inheritance or reciprocal influence. American Sociological Review. 1986; 51:685–698.
- Glick JE, White MJ. The academic trajectories of immigrant youth: Analysis within and across cohorts. Demography. 2003; 40:759–784. [PubMed: 14686141]
- Greenberger E, Chen C. Perceived family relationships and depressed mood in early and late adolescence: a comparison of European and Asian Americans. Developmental Psychology. 1996; 32:707–716.
- Greene ML, Way N. Self-esteem trajectories among ethnic minority adolescents: A growth curve analysis of the patterns and predictors of change. Journal of Research on Adolescence. 2005; 15:151–178.
- Hill, J.; Lynch, ME. The intensification of gender-related role expectations in early adolescence. In: Brooks-Gunn, J.; Petersen, A., editors. Girls at puberty: Biological and psychosocial perspectives. New York, NY: Plenum; 1983. p. 201-228.
- Hurtado, A. Variations combinations, and evolutions: Latino families in the united states. In: Zambrana, RE., editor. Understanding Latino families: Scholarship, policy, and practice. Thousand Oaks, CA, U.S: Sage; 1995. p. 40-61.
- Kline, RB. Principles and Practice of Structural Equation Modeling. NY: Guilford; 1998.
- Knight GP, Gonzales NA, Saenz DS, Bonds DD, Germán M, Deardorff J, Roosa MW, Updegraff KA. The Mexican American cultural values scale for adolescents and adults. Journal of Early Adolescence. 2010; 30:444–481. [PubMed: 20644653]
- Knight GP, Tein JY, Shell R. The Cross-Ethnic Equivalence of Parenting and Family Interaction Measures among Hispanic and Anglo-American Families. Child Development. 1992; 63:1392–1403. [PubMed: 1446558]
- Kohlberg, L. Moral stages and moralization: The cognitive-developmental approach. In: Lickona, T., editor. Moral development and behavior: Theory, research, and social issues. New York, NY: Holt, Rinehart and Winston; 1976. p. 31-53.
- Kuczynski, L., editor. Handbook of dynamics in parent-child relations. Thousand Oaks, CA: Sage; 2003.
- Ladd, GW. Children's peer relationships and social competence: A century of progress. New Haven, CT: Yale University Press; 2005.
- Lau AS, McCabe KM, Yeh M, Garland AF, Wood PA, Hough RL. The acculturation gap-distress hypothesis among high-risk Mexican American families. Journal of Family Psychology. 2005; 19:367–375. [PubMed: 16221017]
- Laursen B, Bukowski WM. A developmental guide to the organisation of close relationships. International Journal of Behavioral Development. 1997; 21:747–770. [PubMed: 20090927]
- Laursen, B.; Collins, WA. Parent– child relationships during adolescence. In: Lerner, RM.; Steinberg,
 L., editors. Handbook of adolescent psychology Contextual influences on adolescent development.
 3rd ed. Vol. Vol. 2. Hoboken, NJ: Wiley; 2009. p. 3-42.
- Leaper C, Valin D. Predictors of Mexican American mothers' and fathers' attitudes toward gender equality. Hispanic Journal of Behavioral Sciences. 1996; 18:343–355.
- Lieberman M, Doyle AB, Markiewicz D. Developmental patterns in security of attachment to mother and father in late childhood and early adolescence: Associations with peer relations. Child Development. 1999; 70:202–213. [PubMed: 10191523]
- Maccoby, EE. The Two Sexes: Growing Up Apart, Coming Together. Harvard University Press; Cambridge, MA: 1998.
- Masten AS, Coatsworth JD. The development of competence in favorable and unfavorable environments: Lessons from research on successful children. American psychologist. 1998; 53:205–220. [PubMed: 9491748]
- McDowell DJ, Parke RD. Parental correlates of children's peer relations: An empirical test of a tripartite model. Developmental Psychology. 2009; 45:224–235. [PubMed: 19210004]

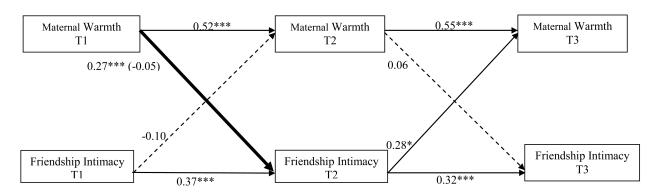
McGue M, Elkins I, Walden B, Iacono WG. Perceptions of the parent-adolescent relationship: A longitudinal investigation. Developmental Psychology. 2005; 41:971–984. [PubMed: 16351340]

- McLoyd, VC. Changing demographics in the American population: Implications for research on minority children and adolescents. In: McLoyd, VC.; Steinberg, L., editors. Studying minority adolescents: Conceptual, methodological, and theoretical issues. Mahway, NJ: Lawrence Erlbaum; 1998. p. 3-28.
- Muthén, LK.; Muthén, BO. Mplus User's Guide: Sixth Edition. Los Angeles, CA: Muthén & Muthén; 2008-2010.
- Oropesa RS, Nancy S Landale. In search of the new second generation: Strategies for identifying second-generation children and understanding their acquisition of English. Sociological Perspectives. 1997; 30:427–454.
- Parke, RD.; Buriel, R. Socialization in the family: Ethnic and ecological perspectives. In: Eisenberg, N.; Damon, W.; Lerner, R., editors. Handbook of child psychology Social, emotional, and personality development. 6th ed. Vol. Vol. 3. New York, NY: Wiley; 2006. p. 429-504.
- Parra-Cardona JR, Córdova D, Holtrop K, Villarruel FA, Wieling E. Shared ancestry, evolving stories: Similar and contrasting life experiences described by foreign born and U.S. born Latino parents. Family Process. 2008; 47:157–172. [PubMed: 18605119]
- Perez-Brena NJ, Cookston JT, Fabricious WV, Saenz D. Patterns of father self-evaluations among Mexican and European American men and links to adolescent adjustment. Fathering. 2012; 10:213–235. [PubMed: 24883049]
- Raffaelli M, Ontai LL. Gender socialization in Latino/a families: Results from two retrospective studies. A Journal of Research. 2004; 50:287–299.
- Rubin, KH.; Bukowski, W.; Parker, JG. Peer interactions, relationships, and groups. In: Damon, W.; Eisenberg, N., editors. Handbook of child psychology Social, emotional, and personality development. Vol. Vol. 3. New York, NY: Wiley; 1998. p. 619-700.
- Ruble, DN.; Marin, CL. Gender development. In: Damon, W.; Eisenberg, N., editors. Handbook of child psychology Social, emotional, and personality development. Vol. Vol. 3. New York, NY: Wiley; 1998. p. 933-1016.
- Rumbaut, RG. Ties that bind: Immigration and immigrant families in the United States. In: Booth, A.; Crouter, AC.; Landale, NS., editors. International Migration and Family Change. New York, NY: Lawrence Earlbaum; 1997. p. 3-46.
- Savin-Williams, RC.; Berndt, TJ. Friendship during adolescence. In: Feldman, SS.; Elliot, GR., editors. At the threshold- The developing adolescent. Cambridge, MA: Harvard University; 1990. p. 277-307.
- Sabogal F, Marín G, Otero-Sabogal R, Vanoss Marín B, Perez-Stable EJ. Hispanic familism and acculturation: What changes and what doesn't? Hispanic Journal of Behavioral Sciences. 1987; 9:397–412.
- Schneider BH, Atkinson L, Tardif C. Child-parent attachment and children's peer relations: A quantitative review. Developmental Psychology. 2001; 37:86–100. [PubMed: 11206436]
- Schofield TJ, Parke RD, Kim Y, Coltrane S. Bridging the acculturation gap: parent-child relationship quality as a moderator in Mexican American families. Developmental Psychology. 2008; 44:1190–1194. [PubMed: 18605845]
- Schwarz JC, Barton-Henry LM, Pruzinsky T. Assessing child-rearing behaviors: A comparison of ratings made by mother, father, child, and sibling on the CRPBI. Child Development. 1985; 56:462–479. [PubMed: 3987419]
- Shanahan L, McHale SM, Crouter AC, Osgood DW. Warmth with mothers and fathers from middle childhood to late adolescence: Within-and between-families comparisons. Developmental Psychology. 2007; 43:551–563. [PubMed: 17484570]
- Steinberg, L.; Silk, JS. Parenting adolescents. In: Bornstein, MH., editor. Handbook of parenting Children and parenting. 2nd ed. Vol. Vol. 1. Mahwah, NJ: Erlbaum; 2002. p. 103-133.
- Stevens G. Age at immigration and second language proficiency among foreign-born adults. Language in Society. 1999; 28:555–578.

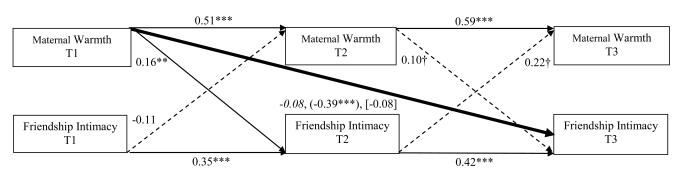
Sullivan, HS. The interpersonal theory of psychiatry. New York: Norton; 1953. Thornton A, Orbuch TL, Axinn WG. Parent-child relationships during the transition to adulthood. Journal of Family Issues. 1995; 16:538–564.

- Szapocznik J, Kurtines WM, Fernandez T. Bicultural involvement and adjustment in Hispanic American youths. International Journal of Intercultural Relations. 1980; 4:353–366.
- Umaña-Taylor AJ. Research with Latino early adolescents: Strengths, challenges, and directions for future research. The Journal of Early Adolescence. 2009; 29:5–15.
- Umaña-Taylor AJ, Fine MA. Examining ethnic identity among Mexican-origin adolescents living in the United States. Hispanic Journal of Behavioral Sciences. 2004; 26:36–59.
- Updegraff KA, Madden-Derdich DA, Estrada A, Sales LJ, Leonard SA. Young adolescents' experiences with parents and friends: Exploring the connections. Family Relations. 2002; 51:72–80
- Updegraff KA, McHale SM, Crouter AC, Kupanoff K. Parents' involvement in adolescents' peer relationships: A comparison of mothers' and fathers' roles. Journal of Marriage and Family. 2001; 63:655–668.
- Updegraff KA, McHale SM, Whiteman SD, Thayer SM, Delgado MY. Adolescent sibling relationships in Mexican American families: Exploring the role of familism. Journal of Family Psychology. 2005; 19:512–522. [PubMed: 16402866]
- Updegraff KA, McHale SM, Whiteman SD, Thayer SM, Crouter AC. The Nature and Correlates of Mexican American Adolescents' Time with Parents and Peers. Child Development. 2006; 77:1470–1486. [PubMed: 16999812]
- Updegraff, KA.; Umaña-Taylor, AJ. Structure and process in Mexican-origin families and their implications for youth development. In: Lansdale, NS.; McHale, SM.; Booth, A., editors. Growing up Hispanic: Health and development of children of immigrants. Washington, DC: Urban Institute; 2010. p. 97-143.
- U.S. Census Bureau. Facts for features: Cinco de Mayo: March 2012. U.S. Census Bureau News. 2012

 Mar. Retrieved from http://www.census.gov/newsroom/releases/archives/
 facts_for_features_special_editions/cb12-ff10.html
- U.S. Census Bureau. 2008 American Community Survey 1-Year Estimates. U.S. Census Bureau News. 2010 Mar. Retrieved May 6, 2010, from http://www.census.gov/Press-Release/www/releases/pdf/cb10ff-08_cincodemayo.pdf
- U.S. Census Bureau. Middle series, 2001 to 2005. Washington, D.C: U.S. Census Bureau, Population Division; 2000. Projections of the total resident population by 5-year age groups, race, and Hispanic origin with special age categories. Available at: http://www.census.gov/population/projections/nation/summary/np-t4-b.pdf
- Way N, Cowal K, Gingold R, Pahl K, Bissessar N. Friendship patterns among African American, Asian American, and Latino adolescents from low-income families. Journal of Social and Personal Relationships. 2001; 18:29–53.
- Way N, Greene ML. Trajectories of perceived friendship quality during adolescence: The patterns and contextual predictors. Journal of Research on Adolescence. 2006; 16:293–320.
- Wolfinger, RD.; Chang, M. Comparing the SAS GLM and MIXED Procedures for Repeated Measures. Cary, NC: SAS Institute Inc; 1998.



(a) Significant (unstandardized) path estimates for the associations between adolescents' reports of maternal warmth and friendship intimacy as moderated by adolescent gender. Analyses controlled for mother-adolescent and father-adolescent immigration status, SES and adolescent's familism values.

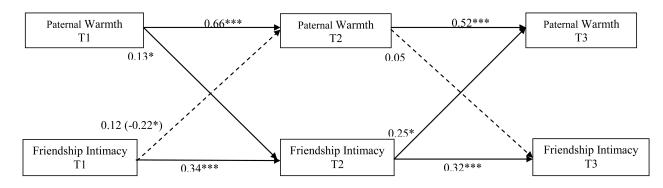


(b) Significant (unstandardized) path estimates for the associations between adolescents' reports of maternal warmth and friends' intimacy as moderated by parent -adolescent immigration status. Analyses controlled for adolescent gender, SES and adolescent's familism values.

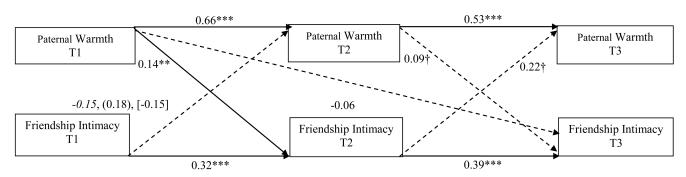
Figure 1.

Unstandardized estimates for maternal warmth cross-lag models testing for (a) adolescent gender and (b) parent-adolescent immigration status (i.e., 1 = U.S.-raised, 2 = immigrant, 3= mixed-status).

Note. Solid line indicates significant paths. Dashed line indicates non-significant paths. A bold line indicates significant moderation. For moderated paths, estimates for girls appear outside of the parentheses and estimates for boys appear inside of the parentheses. Separate models were examined for mother-adolescent and father-adolescent relationships. $\dagger p < .10$, *p < .05, **p < .01, ***p < .001.



(a) Significant (unstandardized) path estimates for the associations between adolescents' reports of paternal warmth and friendship intimacy as moderated by adolescent gender. Analyses controlled for mother-adolescent and father-adolescent immigration status, SES and adolescent's familism values.



(b) Significant (unstandardized) path estimates for the associations between adolescents' reports of paternal warmth and friends' intimacy as moderated by parent -adolescent immigration status. Analyses controlled for adolescent gender, SES and adolescent's familism values.

Figure 2.

Unstandardized estimates for paternal warmth cross-lag models testing for (a) adolescent gender and (b) parent-adolescent immigration status (i.e., 1 = U.S.-raised, 2 = immigrant, 3= mixed-status).

Note. Solid line indicates significant paths. Dashed line indicates non-significant paths. A bold line indicates significant moderation. For moderated paths, estimates for the U.S.-raised dyads appear outside of the parentheses in italics; estimates for the immigrant dyads appear inside of the parentheses; and estimates for the mixed-status dyads appear in brackets. Separate models were examined for mother-adolescent and father-adolescent relationships. † p < .10, *p < .05, **p < .01, ***p < .001.

Table 1

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Sample Breakdown and Background Characteristics for Parent-Youth Immigration Status (N = 243)

Mother-Youth	US-r: $(n = n)$	US-raised $(n = 85)$	Immigrant $(n = 45)$	grant 45)	Mixed-status $(n = 115)$	status 115)	F Values
	M	(QS)	M (SD) M (SD)	(SD)	(QS) W	(SD)	
Household Income (T1)	\$78,267a	(43,768)	\$26,817 ^b	(12,279)	\$46,657°	(46,210)	$\$78,267^a$ (43,768) $\$26,817^b$ (12,279) $\$46,657^c$ (46,210) F (2, 239) = 25.89, $p < .001$
Mothers' Years Living in U.S. (T1)	33.14^{a}	(7.51)	3.23 ^b	(1.82)	13.43°	(4.93)	F(2, 171) = 232.49, p < .001
Mothers' Education Level I (T1)	12.65^{a}	(2.61)	7.92 ^b	(3.70)	9.54°	(3.56)	F(2, 242) = 36.51, p < .001
Youths' Familism (T1)	4.45	(0.60)	4.29	(0.68)	4.38	(0.51)	F(2, 242) = 1.07, ns.

Father-Youth	US-raised $(n = 78)$	ised 78)	Immigrant $(n = 45)$	grant 45)	Mixed-status $(n = 121)$	status 121)	
	M	(SD)		M (SD)	M	(SD)	
Household Income (T1)	\$79,098a	(42,936)	\$27,296 ^b	(12,932)	\$47,697°	(46,748)	$\$79,098^a (42,936) \$27,296^b (12,932) \$47,697^c (46,748) F(2,239) = 24.90, p < .001 (46,748) F(2,239) = 24.90, p < .001 (46,748) (46$
Fathers' Years living in U.S. (T1) 32.63 ^a	32.63^{a}	(6.50)	7.01 ^b	(86.98)	17.07^{c}	(6.46) F	F(2, 171) = 67.34, p < .001
Fathers' Education Level I (T1)	12.82^{a}	(2.73)	8.10^{b}	(4.68)	8.70b	(4.18)	F(2, 241) = 32.67, p < .001
Youths' Familism (T1)	4.42	4.42 (0.65)	4.32		(0.68) 4.41 (0.47)	(0.47)	F(2, 241) = 0.48, ns.

Note. One mother-youth dyad and one father-youth dyad were excluded from all immigration status analyses as the youth reported being born in Mexico and both parents reported being U.S.-born. Father nativity also was missing for one family. TI = Time 1. Scores with different superscripts within the same row are significantly different from one another at p < .05.

 $I_{Note.}$ 12 = high school graduate, 14 = 2 years of college, vocational or technical school, 16 = college graduate, 18 = Master's Degree.

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Table 2

Correlation, Means, and Standard Deviations for Study Variables for Girls (Above the Diagonal) and Boys (Below the Diagonal)

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	1	2	3	4	5	9	7	æ	6	10	111
1. SES (T1)	1	0.19*	0.19*	-0.05	0.14	0.18*	0.13	0.12	0.23**	0.14	0.11
2. Familism Support (T1)	0.15		0.38***	0.10	0.08	0.29***	0.31***	0.17	0.28***	0.20^{*}	0.41
3. Maternal warmth (T1)	-0.06	0.05	•	0.43	0.38	0.47***	0.32***	0.27**	0.16^{\dagger}	0.42***	0.22*
4. Maternal warmth (T2)	-0.16^{\dagger}	0.09	0.46***	•	0.51***	0.15	0.34	0.19^{\ddagger}	-0.09	0.16^{\dagger}	0.27*
5. Maternal warmth (T3)	90.0	0.05	0.34***	0.41	1	0.14	0.07	0.43	-0.05	0.25*	0.14
6. Paternal warmth (T1)	-0.01	0.18^{*}	0.39***	0.30**	0.01	1	0.56***	0.38***	0.23**	0.28**	0.22*
7. Paternal warmth (T2)	-0.17^{\dagger}	0.04	0.19^{*}	0.45	-0.03	0.54***	1	0.50***	0.22^{*}	0.19^{\dagger}	0.31**
8. Paternal warmth (T3)	-0.04	0.03	0.07	0.14	0.25*	0.34***	0.47***	1	0.15	0.29*	0.38***
9. Friendship intimacy (T1)	0.19^{-7}	0.03	0.07	0.00	0.10	0.06	-0.12	0.03		0.35	0.23*
10. Friendship intimacy (T2)	0.11	0.04	-0.02	0.13	0.29*	0.02	-0.04	0.13	0.72***	1	0.40
11. Friendship intimacy (T3)	0.15	0.00	-0.06	0.04	0.31*	-0.02	0.00	0.09	0.57	0.73***	1
Girls											
Mean	0.00	4.43	3.97	3.90	3.92	3.80	3.55	3.42	4.15	4.15	4.24
SD	0.87	0.57	0.80	0.83	0.98	0.80	0.93	1.10	0.52	0.59	0.49
Boys											
Mean	-0.08	4.35	3.90	3.92	3.89	3.87	3.57	3.35	3.35	3.27	3.66
SD	0.79	0.58	0.59	0.73	0.81	0.75	0.88	0.91	0.64	0.66	0.59
Overall Sample											
Mean	-0.01	4.39	3.94	3.91	3.91	3.84	3.55	3.39	3.76	3.73	3.96
SD	0.83	0.58	0.71	0.78	0.91	0.78	0.91	1.01	0.71	0.76	0.61

Note: Correlations are above the diagonal for girls and below the diagonal for boys. Estimates are based on the FIML sample size of n = 125 for girls and n = 121 for boys.

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t p < .10,

p < .05,

p < .01,*** p < .001.

Table 3

Overall Three-Wave Autoregressive Cross-Lag Panel Model of the Associations between Adolescents' Reports on Parents' Warmth and Friendship Intimacy

	Mother I	Model	Father Model	
	b	(SE)	b	(SE)
Cross Lag effects				
Parent $1 \rightarrow \text{Peer } 2$	0.16**	(0.06)	0.13*	(0.05)
Parent $2 \rightarrow \text{Peer } 3$	0.05	(0.05)	0.05	(0.04)
Peer $1 \rightarrow Parent 2$	-0.11	(0.08)	-0.09	(0.09)
$Peer \ 2 \rightarrow Parent \ 3$	0.28*	(0.12)	0.26*	(0.13)
Stability effects				
$Peer\ 1{\rightarrow}\ Peer\ 2$	0.36***	(0.07)	0.35***	(0.07)
Peer $2 \rightarrow$ Peer 3	0.35***	(0.07)	0.35***	(0.07)
Parent $1 \rightarrow$ Parent 2	0.51***	(0.07)	0.66***	(0.07)
Parent $2 \rightarrow$ Parent 3	0.56***	(0.09)	0.53***	(0.09)
Covariate Estimates				
$Gender \to Parent \ 1$	-0.05	(0.09)	0.12	(0.10)
$Gender \to Parent\ 2$	-0.03	(0.11)	-0.12	(0.12)
$Gender \to Parent \ 3$	0.24	(0.17)	0.11	(0.19)
$Gender \to Peer \ 1$	-0.78***	(0.07)	-0.78***	(0.07)
$Gender \to Peer\ 2$	-0.57***	(0.09)	-0.61***	(0.09)
$Gender \rightarrow Peer \ 3$	-0.28**	(0.10)	-0.26**	(0.10)
$US \to Parent \ 1$	0.02	(0.10)	0.06	(0.11)
$US \to Parent\ 2$	0.02	(0.12)	0.18	(0.13)
$US \to Parent\ 3$	0.14	(0.16)	0.06	(0.18)
$US \to Peer \ 1$	0.19*	(0.08)	0.12	(0.08)
$US \to Peer\ 2$	0.06	(0.10)	0.04	(0.10)
$US \to Peer\ 3$	-0.06	(0.09)	-0.04	(0.09)
$Immigrant \rightarrow Parent \ 1$	-0.09	(0.12)	0.07	(0.13)
$Immigrant \rightarrow Parent\ 2$	0.10	(0.13)	-0.09	(0.14)
$Immigrant \rightarrow Parent \ 3$	0.02	(0.20)	-0.09	(0.22)
$Immigrant \rightarrow Peer \ 1$	-0.02	(0.10)	-0.01	(0.10)
$Immigrant \rightarrow Peer\ 2$	-0.24*	(0.11)	-0.20^{\dagger}	(0.11)
$Immigrant \rightarrow Peer\ 3$	-0.13	(0.12)	-0.17	(0.12)
$Familism \rightarrow Parent \ 1$	0.29***	(0.08)	0.30***	(0.08)
$Familism \rightarrow Parent\ 2$	0.03	(0.09)	0.13	(0.09)
$Familism \rightarrow Parent \ 3$	-0.07	(0.13)	0.01	(0.15)
$Familism \rightarrow Peer \ 1$	0.13*	(0.06)	0.15*	(0.06)
$Familism \rightarrow Peer\ 2$	0.03	(0.07)	0.04	(0.07)
$Familism \rightarrow Peer\ 3$	0.21**	(0.08)	0.19*	(0.08)

	Mother I	Model	Father N	<u>Iodel</u>
	b	(SE)	b	(SE)
$SES \rightarrow Parent \ 2$	-0.12^{\dagger}	(0.07)	-0.13^{\dagger}	(0.07)
$SES \rightarrow Parent \ 3$	0.14	(0.10)	0.04	(0.11)
$SES \rightarrow Peer\ 2$	-0.05	(0.06)	-0.03	(0.06)
$SES \rightarrow Peer \ 3$	0.03	(0.06)	0.02	(0.06)
R ² Values				
Parent warmth 1	0.06*	(0.03)	0.06*	(0.03)
Parent warmth 2	0.22***	(0.05)	0.32***	(0.05)
Parent warmth 3	0.31***	(0.07)	0.28***	(0.06)
Peer intimacy 1	0.35***	(0.05)	0.34***	(0.05)
Peer intimacy 2	0.46***	(0.05)	0.45***	(0.05)
Peer intimacy 3	0.45***	(0.06)	0.43***	(0.06)

 $^{^{\}dagger}p$ < .10,

^{*} p < .05,

^{**} *p* < .01,

^{***} p < .001