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Discrimination, Parent-Adolescent Conflict, and Peer Intimacy: Examining Risk and Resilience in Mexican-Origin Youths' Adjustment Trajectories

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Abstract

Peer discrimination and parent-adolescent conflict in early adolescence were examined as predictors of depressive symptoms and risky behaviors from early to late adolescence using four waves of data over an eight-year period from a sample of 246 Mexican-origin adolescents ($M_{\text{Time 1 age}} = 12.8$, $SD = 0.58$; 51% female). The buffering effect of friendship intimacy and moderating role of adolescent gender were tested. Higher levels of discrimination and conflict in early adolescence were associated with higher initial levels of depressive symptoms and risky behaviors in early adolescence and stability through late adolescence. For females who reported higher than average discrimination, friendship intimacy had a protective effect on their depressive symptoms.

Keywords

discrimination; Mexican-origin youth; parent-adolescent conflict; peer intimacy; risk and resilience

Latino youth in the U.S. are at elevated risk for experiencing poor mental health (Kann et al., 2014), including depressive symptoms (Mikolajczyk, Bredehorst, Khelaifat, Maier, & Maxwell, 2007), and engaging in risky behaviors (Wilkinson, Shete, Spitz, & Swann, 2011). Two potential risk factors that are associated with youths' adjustment problems are experiences with discrimination (Berkel et al., 2010) and parent-adolescent conflict (Pasch et al., 2006). Yet, how these experiences in *early* adolescence, a point of heightened vulnerability (Steinberg, 2010), shape longitudinal trajectories of adjustment is not well

understood. Further, during this vulnerable time, the key role of friends in early adolescence as providers of intimacy and emotional support for adolescent girls and boys (Way, 2011), might be especially important for youth experiencing ethnic discrimination from their peers and heightened conflict with parents. Grounded in the integrative model and a risk and resilience framework, the goals of our study were as follows: (a) to examine whether perceived ethnic discrimination from peers and mother-and father-adolescent conflict in early adolescence predicted longitudinal changes in depressive symptoms and risky behaviors over an eight-year period; and (b) to investigate the buffering effects of friendship support in early adolescence on the relations between discrimination, parent-adolescent conflict, and adjustment problems, and how these moderating effects might vary by adolescent gender.

Guiding Theoretical Perspectives

This study is guided by two corresponding theoretical frameworks, the integrative model for the study of developmental competencies in minority children (hereafter ‘the integrative model’; García Coll et al., 1996) and a risk and resilience framework (Masten & Powell, 2003). The integrative model is an ecologically grounded model that focuses on how social stratification influences normative processes in ethnic minority youth, and on the variability of these processes within this group of youths. The integrative model emphasizes two complementary constructs necessary for inclusion in studies of ethnic minority youth that help define their developmental pathways: Constructs that assess experiences unique to ethnic minority youth (e.g., peer ethnic discrimination) and constructs that assess experiences relevant to youth of any ethnic background (e.g., parent-adolescent conflict), but that might be experienced differently by ethnic minority youth.

Further, the model suggests that these types of constructs create environments that may be inhibitive or promotive, in other words, limit or facilitate healthy development, respectively (García Coll et al., 1996). Inhibitory or promotive processes may operate as direct shapers of youth and family outcomes, or importantly, could function as processes that alter the nature of relations between risk factors and outcomes. Specifically, the integrative model defines peer discrimination, a risk factor unique to ethnic minority youth, as one such inhibitory construct that is likely to directly impact youths’ healthy adjustment. Drawing upon this same framework, we also conceptualized parent-adolescent conflict as a construct normatively experienced by youth of any ethnic background (Fuligni, 2012), but that that may be especially inhibitive for Mexican-origin youth, considering their highly family-oriented context (Hardway & Fuligni, 2006). In particular, parent-adolescent conflict might be a potent stressor as Mexican-origin parents expect, and are expected by their immediate social context, to socialize their youth to minimize interpersonal conflict (Peterson & Bush, 2013). Moreover, there is evidence to suggest that Mexican-origin parents value social competence as characterized by respect, harmony, and sensitivity to others, especially with parents (Peterson & Bush, 2013). Thus, these constructs in the peer and family contexts may be sources that inhibit the healthy development of Mexican-origin early adolescents.

However, the same contexts that limit healthy adjustment might also contain processes that facilitate or promote healthy adjustment (García Coll et al., 1996). Whereas peers may be a

source of discrimination, they might also be a source of friendship and support, especially in early adolescence when intimacy among friends is known to increase substantially (Berndt, 2004). Further, the friendship context might be particularly salient among Latino adolescents. In a qualitative study on urban ethnic-minority adolescents, Latino and African American (but not Asian American) adolescents were found to integrate nonfamilial friends into their families, considering them fictive kin (e.g., Way, Gingold, Rotenberg, & Kuriakose, 2005); for example, they referred to their best friends as brothers, sisters, or cousins. Therefore, when Mexican-origin adolescents experience conflict in their home or discrimination outside their home, having friends to whom to turn for support might be a key protective factor.

Complementing the integrative model, a risk and resilience framework (Masten & Powell, 2003) seeks to identify specific constructs, termed risk factors, that increase the likelihood of maladjustment (i.e., main effects), but also notes that relations between risk and maladjustment can be altered (e.g., weakened) by the presence of protective factors, or buffers of risk (i.e., moderators). Accordingly, we were interested in testing how ethnic discrimination from peers and conflict between parents and adolescents, conceptualized as risk factors (or inhibitory processes) in early adolescence, related to longitudinal trajectories of Mexican-origin adolescents' depressive symptoms and risky behaviors from early to late adolescence. Additionally, following research that has shown that friendship quality can buffer against the negative impact of risk (e.g., peer victimization; Cuadros & Berger, 2016), we also theorized that friendship intimacy (i.e., emotional support in the context of a close friendship) would interact with risk factors to differentially predict adjustment trajectories from early to late adolescence.

We focused on risk (peer discrimination and parent-adolescent conflict) and protective (friendship intimacy) factors during an important developmental period: *early adolescence*. Research with ethnic minority youth suggests that ethnic discrimination (Greene, Way, & Pahl, 2006), parent-adolescent conflict (e.g., Jensen et al., 2014), and friendship intimacy (Way, Becker, & Greene, 2006) are salient in early adolescence. Furthermore, some suggest that early adolescence is a particularly vulnerable period, a time when heightened reward-seeking, impulsivity, and sensation seeking occurs (Steinberg, 2010), as compared to late adolescence and early adulthood. As such, it may be that the experience of risk factors at this particular time might result in changes in outcomes in ways that differ from experiencing those same risk factors at a later time point, when the cognitive control system has matured and permits increased self-regulation and control (Steinberg, 2008). The effects of risk and protection in early adolescence, then, would have a significant impact on adjustment trajectories into adulthood because a key task for early adolescents is managing the major shifts in cognitive capacities together with its subsequent effects on various aspects of adolescents' daily lives (Zarrett & Eccles, 2006), such as awareness of peer discrimination, parent-adolescent conflict, and having a close friend.

Risk Factors and Psychosocial Adjustment in Adolescence

Different types of risk factors experienced in adolescence are likely to co-occur in the daily lives of Mexican-origin youth (e.g., discrimination and economic hardship, Umaña-Taylor,

Updegraff, & Gonzales-Backen, 2011; discrimination and language hassles, Nair, White, Roosa, & Zeiders, 2013) and are related to multiple indicators of maladjustment. For example, cultural (i.e., discrimination and acculturative stress) and economic (i.e., economic hardship) stressors were found to be related to internalizing and externalizing problems, with cultural factors (i.e., ethnic identity and familism) buffering some of the links in a cross-sectional study of Mexican-origin teen mothers in middle to late adolescence (Umaña-Taylor et al., 2011). In a prospective study, discrimination in 5th grade was positively related to changes in internalizing symptoms from 5th to 7th grades, whereas language hassles were positively related to changes in internalizing and externalizing behavior problems across the same 2-year period, and some of these relations were buffered by family and neighborhood factors (i.e., cohesion; Nair et al., 2013). Moreover, two co-occurring types of conflict, mother-daughter and co-parenting conflict, were related to higher rates of depressive symptoms and risky behaviors, respectively (Derlan, Umaña-Taylor, Toomey, Updegraff, & Jahromi, 2015); more specifically, this study demonstrated that mismatch (e.g., adolescent mothers' high mainstream cultural involvement and high levels of family ethnic socialization) was associated with greater frequency of everyday mother-daughter conflict and co-parenting conflict. In turn, mother-daughter and co-parenting conflict were related to the adolescent mothers' adjustment.

Overall, this literature indicates that peer discrimination and parent-adolescent conflict are indeed salient risk factors that relate to poor mental and behavioral health for Mexican-origin youth, both concurrently and prospectively (across a two-year period), and that the contexts in which these youths reside may offer important sources of protection. Yet, we found no study that has evaluated how early experiences with these risk factors shape longitudinal trajectories of adjustment for Mexican-origin youth. Adolescence is an important period in which to examine *trajectories* of adjustment given substantial change across this developmental period in depressive symptoms and risk behavior engagement, broadly characterized by increases followed by decreases (e.g., Gutman & Eccles, 2007). In addition, by testing different risk factors simultaneously, we can learn how peer discrimination and parent-adolescent conflict are each linked to trajectories of adjustment problems, while accounting for the other risk factor.

Peer Ethnic Discrimination

The prevalence of discrimination tends to increase as Latino youth enter adolescence and has potential consequences for their adjustment (for a review see Umaña-Taylor, 2016). Available research on the prevalence rates of discrimination among Latinos show that, in a sample of Latino middle and high school students, 80% reported at least one discriminatory incident at school (Gonzalez, Stein, Kiang, & Cupito, 2014) and, in a sample of Latino early adolescents (93% of Mexican heritage), 59% perceived some discrimination (Kulis, Marsiglia, & Nieri, 2009). Occurrences of ethnic discrimination might be particularly impactful in early adolescence, as this is a time when youths' positive regard for one's ethnic group begins to increase (French, Seidman, Allen, & Aber, 2006), and when youth begin to negotiate their identities in various contexts (Chatman, Eccles, & Malanchuk, 2005), particularly with peers (Way, 2011). As such, ethnic discrimination can be

detrimental to an integral part of the developing self, and in turn, have an impact on psychological health and functioning (Thoits, 2013).

Recent prospective work indicates that ethnic discrimination puts Mexican-origin early adolescents at significant risk for maladjustment (e.g., Nair et al., 2013). However, the links between ethnic discrimination in *early* adolescence and *longitudinal* trajectories of psychosocial adjustment *from early to late adolescence* is unknown. In this study, we examined how peer ethnic discrimination in early adolescence related to changes in depressive symptoms and risky behaviors from early to late adolescence, expecting higher levels of ethnic discrimination in early adolescence would be related to increases in adjustment problems (i.e., depressive symptoms, risky behaviors).

Parent-Adolescent Conflict

Different from ethnic discrimination, parent-adolescent everyday conflict, such as conflicts that arise from autonomy issues related to schoolwork, chores, dress, and appearance (Chung, Flook, & Fuligni, 2009), are viewed as a normative part of a renegotiation process between adolescents and their parents for youth of any ethnic background (Fuligni, 2012). Yet, much of the theoretical and empirical work on parent-adolescent conflict among Latino youth has focused on parent-adolescent conflict as it relates to discrepancies in parent-youth acculturation (e.g. Pasch et al., 2006). A small number of these studies include specific links between parent-adolescent conflict and adjustment outcomes, and find that parent-adolescent conflict is related to depressive symptoms and problem behavior among Mexican-origin families (e.g., conduct problems, substance use; Pasch et al., 2006). Recent work also finds a positive relation between mother-daughter conflict and depressive symptoms and risky behaviors (one year later) among Mexican-origin adolescent mothers (Derlan et al., 2015). The current study builds on this literature by focusing on *normative* parent-child conflict in early adolescence as a predictor of trajectories of adjustment that stem from early to late adolescence.

In our study, we examined the associations between both mother-adolescent and father-adolescent conflict in early adolescence. An important strength of our study is the inclusion of adolescents' evaluations of their relationships with *both* mothers *and* fathers, as the majority (66.8%) of Mexican-origin families in the U.S. include two parents (U.S. Census Bureau, 2016). A small but growing body of work suggests that Latino (e.g., Mexican-origin) fathers' relationships with their children, although distinct from mothers (e.g. traditional parenting roles, Cauce & Domenech-Rodriguez, 2002), have a significant impact on youth adjustment (Cabrera, Aldoney, & Tamis-LeMonda, 2013).

The Buffering Role of Friendship Intimacy and Adolescent Gender

In examining risk factors relevant to the lives of Mexican-origin adolescents, that is, with their peers and family, we hypothesized that their negative effects might be ameliorated when they turn to their friends. The integrative model identifies *promoting environments* (García Coll et al., 1996), and the risk and resilience framework addresses protective factors that can lead to resilience in the face of risk (Masten & Powell, 2003). In the current study, we examined friendship intimacy that, although pertinent to the lives of early adolescents

(Eccles & Roeser, 2009; Rose & Rudolph, 2006), is less often studied among Latino youth relative to European and African American youth (Way et al., 2006).

Studying whether friends matter is important given their role during early adolescence as providers of intimacy and emotional support (Way, 2011). Adolescents who describe closer and more supportive friendships also indicate lower levels of depressive symptoms (Pelkonen, Marttunen, & Aro, 2003) and decreased risk of future depressive episodes (Van Voorhees et al., 2008). Friends might be particularly salient in the lives of Mexican-origin youth, as Latino adolescents value their interdependence with close peers who are viewed as part of the family (Way et al., 2005).

Further, when relationships with friends are supportive, risk factors stemming from both the school and home contexts may be attenuated, given the salience of peer support, as measured by time spent with friends or friendship attachment during this period (e.g., Masten, Telzer, Fuligni, Lieberman, & Eisenberger, 2012). Thus, an adverse experience, such as discrimination from peers, may not result in an internalization or externalization of the event when there is a close friend who provides support when the negative experience occurs. A close friend might provide the necessary support that outweighs the effects of discrimination. Similarly, the negative effects of experiencing conflict with a parent might be mitigated when adolescents are able to rely on a close friend for support. Yet, cross-sectional work using a multiethnic sample of Mexican American, African American, and Anglo adolescents indicated that friendship quality, measured as peer attachment, did not buffer the negative effects of family conflict on internalizing and externalizing behaviors (Formoso, Gonzales, & Aiken, 2000). It is possible that peer support buffers peer-related risk, but may not buffer risk in other contexts. As such, we explored whether friendship intimacy would buffer the hypothesized negative effects of peer (i.e., discrimination) and family (i.e., mother-and father-adolescent conflict) risk factors on youth outcomes from early to late adolescence.

The buffering role of friend intimacy in the links between risk factors and adjustment might be further qualified by adolescent gender. There is work that suggests that friendships among adolescent girls have higher levels of intimacy than friendships among adolescent boys (Maccoby, 1998; Rose & Rudolph, 2006). And, high friendship quality has been found to buffer the negative effects of early adolescent girls' low maternal support on their internalizing difficulties (Rubin et al., 2004). However, qualitative work with adolescent boys suggests that intimacy is especially highly regarded among boys during early and middle adolescence (Way, 2011). Further, the latter work suggests that young adolescent males look for protection from friends, physically and emotionally. Recent work found that friendship quality (e.g., support) protected both early adolescent girls and boys in Chile from the negative effects of peer victimization on wellbeing (Cuadros & Berger, 2016). Therefore, we explored whether the moderating effects of friendship intimacy in the links between risk factors and adjustment further varied by adolescent gender.

The Current Study

Drawing from the integrative model (García Coll et al., 1996) and the risk and resilience framework (Masten & Powell, 2003), we expected that higher levels of peer ethnic discrimination and conflict with mothers and fathers in early adolescence would be related to increases in Mexican-origin youths' adjustment problems from early to late adolescence. Additionally, we explored the moderating role of friendship intimacy in the association between risk factors and adjustment. Further, because females place greater emphasis on interpersonal relationships (Maccoby, 1998) and engage in more interactions that include social conversation, self-disclosure, and support seeking than males (Rose & Rudolph, 2006), it is possible friendship intimacy may be more protective for early adolescent females than for males. In all analyses, we controlled for youth nativity, given that risk factors varied by nativity in prior work (e.g. Pérez, Fortuna, & Alegria, 2008).

Method

Data came from a study of family relationships and adolescent development in Mexican-origin families (Updegraff, Umaña-Taylor, McHale, Wheeler, & Perez-Brena, 2012), including 246 families recruited in 2002–2003 from a metropolitan area in the southwestern U.S. Criteria for participation were as follows: (a) a 7th grader and at least one older adolescent sibling were living at home, (b) biological mothers and biological or long-term adoptive fathers were living at home (for a minimum of 10 years), (c) mothers were of Mexican origin, and (d) fathers worked at least 20 hours per week. Although not an eligibility criterion, 93% of fathers also were of Mexican descent. Additional information about sampling criteria and sample representativeness has been published elsewhere (Updegraff, McHale, & Crouter, 2006).

Families of 7th graders were recruited from public junior high schools in five school districts and from five parochial schools. Schools were selected to represent a range of socioeconomic situations as indicated by the proportion of students eligible for free or reduced-price lunch (range: 8%– 82% across the schools). To recruit families, letters and brochures describing the study (in both English and Spanish) were sent to families, and follow-up telephone calls were made by bilingual staff to determine eligibility and interest in participation. Eligible families included 421 families (32% of those we were able to contact and screen for eligibility), of which 284 (67%) agreed to participate, 95 (23%) declined, and 42 (10%) were unreachable. Interviews were completed by 246 families. This study focused on 7th graders, the target adolescents, as they participated in four waves of data ranging from 7th grade to two years post-high school.

At Time 1 (T1), families represented a range of socioeconomic levels, with annual household incomes ranging from \$5,000 to over \$250,000 per year, a median income of \$41,000, and 18.3% of the sample meeting federal poverty guidelines. Parents' education level ranged from less than sixth grade to advanced graduate degrees (e.g., J.D., M.D., Ph.D.), with an average of 10 years of education ($M = 10.34$, $SD = 3.74$ for mothers, and $M = 9.88$, $SD = 4.37$ for fathers). Parents born outside the U.S. (70% of mothers and fathers) had resided in the U.S. an average of 12.38 ($SD = 8.86$) and 15.18 ($SD = 8.78$) years for

mothers and fathers, respectively. Adolescents (51% female) were U.S.-born (62%) or Mexico-born (38%) and averaged 12.8 years of age ($SD = 0.58$). Two thirds of parents and 17% of adolescents completed the survey in Spanish at T1.

At Time 2 (T2; two years after T1), 91% of the adolescents participated and adolescents averaged 14.64 years of age ($SD = 0.59$). There were no significant differences in the background characteristics of adolescents who participated at T2 versus those who did not. Time 3 (T3) interviews were conducted 3 years after T2 when target adolescents averaged 17.72 years of age ($SD = 0.57$); over 75% of the families participated ($n = 185$). Of those who did not participate, some could not be located ($n = 43$), some had moved to Mexico ($n = 2$), some could not participate at that time or were difficult to contact ($n = 8$), and some refused to participate ($n = 8$). Time 4 (T4) interviews were conducted two years after T3 when target adolescents averaged 19.60 years of age ($SD = 0.66$); 70% of families participated ($n = 173$). Of those who did not participate at T4, some could not be located ($n = 45$), some had moved to Mexico ($n = 4$), some could not presently participate or were difficult to contact ($n = 4$), and some refused to participate ($n = 8$). Because participating families reported higher maternal education and family income at T1 as compared to non-participating families at T3 (maternal education $M = 10.62$; $SD = 3.80$ versus $M = 9.48$, $SD = 3.45$, $F(1, 245) = 4.37$, $p < .05$; family income $M = \$59,517$; $SD = \$48,395$ versus $M = \$37,632$; $SD = \$28,606$, $F(1, 245) = 11.05$, $p < .001$, respectively) and participating families reported higher maternal education, paternal education, and family income at T1 as compared to non-participating families at T4 (maternal education, $M = 10.75$; $SD = 3.75$ versus $M = 9.35$; $SD = 3.53$, $F(1, 245) = 7.42$, $p < .01$; paternal education, $M = 10.46$, $SD = 4.37$ versus $M = 8.49$, $SD = 4.08$, $F(1, 244) = 10.66$, $p < .001$; family income $M = \$59,136$; $SD = \$46,674$ versus $M = \$41,635$; $SD = \$39,095$, $F(1, 245) = 8.41$, $p < .01$, respectively), we controlled for family socioeconomic status (SES), a composite of parent education and family income, in all analyses.

Procedures

Data were collected during in-home interviews at T1, T3, and T4 that lasted approximately 3 hours with each parent and 2 hours with adolescents. Individual interviews were conducted using laptop computers by bilingual interviewers (who were primarily Latino) with questions read aloud because of potential variability in family members' reading levels. At T2, only target adolescents were invited to participate in a 1-hour interview over the telephone using the same procedures as in the home interviews at T1, T3, and T4. Informed consent and assent was obtained prior to the interview. Families received \$100 and \$125, respectively at T1 and T3; adolescents received \$40 at T2, and each family member received \$75 at T4. The university institutional review board approved all procedures.

Measures

All measures were forward-translated to Spanish and back-translated to English by two separate individuals (Knight, Roosa, & Umaña-Taylor, 2009). All discrepancies were resolved by the research team. Across all measures, higher scores indicate higher levels of the construct.

Peer ethnic discrimination (T1)—Adolescents reported on their perceptions of ethnic-based discrimination from peers in the past year, including acts directed at the larger ethnic group or at themselves, using a 4-item (e.g., “How often have kids at school called you names because you are [Mexican OR Mexican American]?” and “How often have kids at school excluded you from their activities like not inviting you to go out with them, not inviting you to their houses or not letting you join their games, because you are [Mexican or Mexican American]?”) scale (Johnston & Delgado, 2004). Adolescents reported on a scale of 1 (*never*) to 4 (*often*). A mean score was computed and the Cronbach’s alpha was .70. This measure demonstrated adequately reliability and support for validity in a different sample of Mexican-origin youth (Nair et al, 2013).

Parent-Adolescent Conflict (T1)—Adolescents reported on the frequency of conflict with each of their parents using a 12-item measure (e.g., “How often do you have disagreements or differences of opinion with your [mom or dad] about keeping the house clean?” and “How often do you have disagreements or differences of opinion with your [mom or dad] about clothing, hair style?”), adapted from Smetana (1988) and Harris (1992). Items were rated on a scale from 1 (*not at all*) to 6 (*several times a day*). An average score was computed for conflict frequency with mothers ($\alpha = .80$) and with fathers ($\alpha = .86$). This measure has demonstrated adequate reliability and support for validity with Mexican-origin participants (e.g., Derlan et al., 2015).

Friendship Intimacy (T1)—Adolescents described the degree of *intimacy* they experienced with their closest same-sex friend (e.g., “How much do you go to [friend name] for advice or support?” and “How much do you share your feelings or secrets with [friend name]?”) using an eight-item scale developed by Blyth and Foster-Clark (1987). Response choices ranged from 1 (*not at all*) to 5 (*very much*). Blyth and Foster-Clark’s work (1987) suggests that this measure validly discriminates between relationships that should differ in their levels of intimacy. This measure has also been used in Mexican American samples and has been shown to be reliable in assessing intimacy with family members and friends (Updegraff, Madden-Derdich, Estrada, Sales, & Leonard, 2002). Cronbach’s alpha was .83.

CESD (T1-T4)—To measure adolescents’ depressive symptoms, we used the Center for Epidemiological Studies Depression Scale (CES-D; Radloff, 1977). The 20 items assess cognitive, affective, and behavioral depressive features; respondents rate the frequency with which symptoms (e.g. “During the past month, I did not feel like eating; my appetite was poor” and “During the past month, I felt depressed”) occurred on a scale ranging from 1 (*rarely or none of the time*) to 4 (*most of the time*). Items were recoded to reflect a range of 0 to 3. Cronbach’s alphas were .85, .88, .90, and .89 for T1 through T4, respectively. Although this measure is a screening rather than a diagnostic tool, means scores of 24 or higher are considered to be a conservative cutoff and 16 or higher are used as a more liberal cutoff for clinically significant levels of depressive symptoms in community-based samples (Le, Muñoz, Soto, Delucci, & Ippen, 2004). In addition, this measure has been shown to be reliable in assessing depressive symptoms among Mexican-origin adolescents (Bámaca-Colbert, Umaña-Taylor, & Gayles, 2012).

Risky Behaviors (T1-T4)—To measure adolescents’ risky behaviors, we used Eccles and Barber’s (1990) scale. Adolescents were asked to indicate how many times they engaged in different types of risky behaviors (i.e. “During the last 12 months, how many times have you been drunk on alcohol?” and “During the last 12 month, how many times have you stayed out all night without a parent’s permission?”) using a 23-item scale; response choices ranged from 1 (*never*) to 4 (*more than 10 times*). Cronbach’s alphas were .85, .87, .89, and .88 for T1 through T4, respectively. This measure has demonstrated adequate reliability and its validity has been supported in prior work with Mexican-origin adolescents (Toomey, Umaña-Taylor, Updegraff, & Jahromi, 2015).

Background Characteristics (T1)—Adolescent nativity (0 = *Mexico-born*, 1 = *US-born*) and family SES were included as control variables. Parents reported on their education levels and on their annual household income. A family SES score was created by standardizing and averaging mothers’ and fathers’ education levels and annual household income, after correcting for positive skew in income with a log transformation ($\alpha = .76$).

Analysis Plan

Study hypotheses were tested with a series of growth curve models in a multi-level modeling (MLM) framework using PROC MIXED in SAS9.2 (Raudenbush & Bryk, 2002). This approach accounts for the nested nature (time) of the data and utilizes maximum likelihood estimation to handle the patterns of missing data inherent in longitudinal designs (Enders, 2010). Although this is a software limitation, a strength of the growth modeling approach, more broadly, is that it includes each individual in an analysis as long as they have at least one time point of data. Because there were no missing data at T1, no participants were excluded from analyses. In line with recommendations (Molenberghs & Kenward, 2007), all analyses used an unstructured covariance matrix.

First, an unconditional linear growth model was estimated to ensure there was significant individual variability in the intercept (i.e., the average level of the outcome at T1) and the slope (i.e., the rate of growth over time). To address our first goal, we conducted 2-level MLM growth models with occasions nested within individuals. At Level 1, we included age as our metric of time, which was centered at T1 so that the intercept reflected adolescents’ depressive symptoms and risky behaviors at the start of the study. Next, we added the individual predictors of discrimination and conflict into the model to test whether each of these explained variability in the intercept and slope. We conducted separate analyses for mother- and father-adolescent conflict due to high correlations between these variables. To address our second goal, we tested for effects of our moderators, friendship intimacy and gender; we ran models to evaluate the interactive effects of ethnic discrimination and parent-adolescent conflict (i.e., the risk factors) and friendship intimacy (i.e., the moderator), that is, moderator X risk factor X gender X time. All the two-way and three-way interactions were included. We grand-mean centered all risk factors and moderators (Enders & Tofighi, 2007). Pseudo R^2 statistics, representing the proportion of variance accounted for by a model, were calculated for all models for the Level 1 residual variance and Level 2 slope variance (Singer & Willet, 2003). Given R^2 statistics cannot be estimated in multi-level

models, the pseudo R^2 can be used as an estimate of effect size (Fairchild, MacKinnon, Taborga, & Taylor, 2009).

Results

As a preliminary step, two (Adolescent Gender) ANOVAs were conducted to test for gender differences in all study variables (see Table 1 for descriptive statistics and correlations among all study variables). Significant gender differences were found for father-adolescent conflict, $F(1, 244) = 6.07, p < .05$, friendship intimacy $F(1, 244) = 116.20, p < .01$, depressive symptoms at T2, $F(1, 220) = 19.16, p < .01$, T3 $F(1, 172) = 5.08, p < .05$, and T4, $F(1, 159) = 6.77, p < .01$, and risky behaviors at T1, $F(1, 244) = 5.44, p < .05$, T2, $F(1, 220) = 6.10, p < .05$, T3, $F(1, 155) = 16.91, p < .01$, and T4, $F(1, 140) = 8.15, p < .01$ (see Table 1 for means and standard deviations). Skewness and kurtosis of all variables fell within the acceptable range (skewness cut-off of 2.0 and kurtosis cut-off of 7.0; Curran, West, & Finch, 1996).

Direct Effects of Risk Factors on Outcomes

Depressive Symptoms—Results from the initial unconditional growth model (Table 2, Model 1) indicated a significant linear decline in depressive symptoms from T1 to T4 suggesting that for every one-unit increase in age, adolescents reported an average of a 0.49 unit decrease in depressive symptoms. To test whether growth in depressive symptoms over time may be nonlinear, a quadratic growth term was entered into the model. The term was not significant, and its inclusion did not result in a better fitting model; thus, we proceeded with the linear model. The results for the effects of risk factors on growth in depressive symptoms revealed that both risk factors (i.e., peer discrimination, parent-adolescent conflict) had significant interactions with linear growth in depressive symptoms (Table 2, Models 2 and 3). Probing of the discrimination X time interaction indicated that when discrimination was *high* at T1 adolescents reported higher average initial levels of depressive symptoms at T1 and experienced a significant decline in symptoms across the four time points, ($\beta = -0.89, p < .01$). However, when discrimination was *low* at T1, adolescents reported lower levels of depressive symptoms at T1 and this level remained stable over time. It is noteworthy that, although depressive symptoms declined for adolescents experiencing higher levels of discrimination, significant differences in the two groups' depressive symptoms remained at T4 (8 years later in early adulthood), with youth with higher levels of discrimination at T1 reporting higher depressive symptoms at T4 compared to youth with lower levels of discrimination at T1 ($t(241) = 6.26, p < .01$). Early adolescents who experienced discrimination remained higher and above clinical cut-off levels as compared to their counterparts who had low levels of discrimination.

Probing of the mother-adolescent conflict X time and father-adolescent conflict X time interactions indicated a similar effect, such that when mother-adolescent or father-adolescent conflict was high in early adolescence, adolescents reported higher average levels of initial depressive symptoms and experienced a significant decline ($\beta = -0.89, p < .01$, and $\beta = -0.90, p < .01$, for mother- and father-adolescent conflict, respectively) in symptoms across the four time points. However, when mother-adolescent conflict or father-adolescent conflict

was *low*, adolescents reported lower average levels of depressive symptoms at T1 and this level remained stable over time. Similar to findings for discrimination, despite declines in depressive symptoms, we also found that average levels of depression at T4 (i.e., at 20 years of age) were significantly higher in the high as compared to the low parent-adolescent conflict groups at T4, $t_{\text{mother conflict}(225)} = 5.40, p < .01$; $t_{\text{father conflict}(231)} = 5.23, p < .01$.

Risky Behaviors—The initial growth model for risky behaviors indicated a significant linear increase in risky behaviors from T1 to T4, suggesting that for every one-unit increase in time, adolescents on average, experienced a 0.02 unit increase in risky behaviors (Table 2, Model 1). To test for non-linear growth, a quadratic growth term was entered into the model. The quadratic term was significant (Table 3, Model 1b) and nested model testing revealed that the linear model resulted in a poorer fitting model; thus, we retained the quadratic term in subsequent models. The tests of the direct effects of risk factors on growth in risky behaviors revealed that only mother-adolescent conflict was a significant predictor of linear growth in risky behaviors (Table 2, Model 2). Probing of the mother-adolescent conflict X time interaction indicated that when mother-adolescent conflict was high in early adolescence, adolescents reported higher average levels of initial risky behaviors and that level remained stable over time. In contrast, when mother-adolescent conflict was *low*, adolescents reported lower average (intercept) levels of initial risky behaviors and experienced a significant linear increase ($\beta_{\text{mother conflict}} = 0.03, p < .01$) in risky behaviors across the four time points. Similar to findings for depressive symptoms, we also found that average levels of risky behaviors at T4 were significantly different between the two groups, with adolescents reporting higher risky behaviors in the high versus low mother-adolescent conflict groups at T4 ($t(223) = 1.52, p < .01$). Both *discrimination* and *father-adolescent* conflict were unrelated to growth in risky behaviors over time.

Buffering Effect of Friendship Intimacy and Gender on the Relation between Risk Factors and Growth in Adjustment

Depressive Symptoms—In testing the buffering effects of friendship intimacy and gender on the relation between the risk factors and changes in depressive symptoms (Table 2, Models 4 and 5), there was a significant four-way interaction: discrimination X friendship intimacy X gender X time. To probe this interaction, we ran separate models for males and females at one standard deviation above the mean for discrimination and one standard deviation below the mean for discrimination (Aiken & West, 1991). The probing revealed that *for females who reported higher than average discrimination*, friendship intimacy had a protective effect, such that when intimacy was *high*, these females experienced a significant decline in depressive symptoms over time ($\beta = -0.85, p < .01$), but when intimacy was *low*, declines in depressive symptoms were less pronounced ($\beta = -0.82, p < .05$), although still significant (Figure 1). *For females, who experienced lower than average discrimination*, there was no significant moderating effect of friendship intimacy. *For males*, there were no significant effects of friendship intimacy on the relation between discrimination and changes in depressive symptoms.

Risky Behaviors—Tests of the buffering effects of friendship intimacy and gender on the relation between the risk factors and changes in risky behaviors indicated that there were no

significant moderating effects of friendship intimacy for the whole sample, males, or females.

Discussion

Guided by the integrative model (García Coll et al., 1996) and a risk and resilience framework (Masten & Powell, 2003), we examined (a) how discrimination from peers and parent-adolescent conflict in early adolescence was linked to trajectories of depressive symptoms and risky behaviors from early to late adolescence and (b) the moderating roles of friendship intimacy and gender on the relations between risk factors and adjustment trajectories. In addressing these goals, we contribute to the field by examining how risk factors in early adolescence inform trajectories of adjustment. In particular, our findings indicate that when youth experience discrimination or parent-adolescent conflict in early adolescence their trajectories of adjustment problems are distinct from youth whose experiences of discrimination and parent-adolescent conflict are low in early adolescence. That is, we see distinct trajectories as a function of early adolescent risk and trajectories that differ from the typical normative pattern of increases followed by decreases in depressive symptoms and risky behavior across adolescence (e.g., Gutman & Eccles, 2007).

These findings contribute to the body of literature born out of the integrative model focusing on delineating the unique ways in which risk factors relate to adjustment for minority youth. Moreover, drawing on the risk and resilience framework, our study revealed that emotional support from a close friend was protective for adolescent females experiencing higher than average levels of peer discrimination. This is important for at least two reasons. First, it highlights a malleable mechanism to target for intervention; for instance, prevention efforts focused on improving early adolescent girls' social skills and fostering intimacy in their peer relationships may be prudent. Second, this finding highlights how individual characteristics (i.e., gender) and context (i.e., friend intimacy) at particular time points in development (i.e., early adolescence) may be sensitive to experiences of discrimination. That is, female adolescents with lower levels of friendship intimacy, and males, regardless of their friendship intimacy, may be especially vulnerable to experiences with discrimination in early adolescence.

Direct Effects of Risk Factors on Growth in Depressive Symptoms and Risky Behaviors

Findings from our first goal aligned well with the integrative model by underscoring that constructs unique to racial and ethnic minority youth (e.g., perceived discrimination) and constructs salient to adolescents generally (e.g., parent-adolescent conflict) *both* contribute to variation in developmental processes (García Coll et al., 1996). Furthermore, our findings suggest that elevated levels of these stressors during early adolescence not only result in immediate higher levels of maladjustment in terms of depressive symptoms (intercept effects) but also alter longitudinal growth patterns of depressive symptoms across an eight-year period (slope effects). For example, although youth with high levels of discrimination in early adolescence reported declines in their depressive symptomology over time, their overall decline was limited. These youths' depressive symptoms remained higher and above clinical cut-off levels as compared to youth who had low levels of discrimination in early

adolescence. Youth who had low levels of discrimination in early adolescence evidenced lower initial levels of depressive symptoms, which remained low and stable over the course of adolescence. Therefore, it is important to note that declines in depressive symptoms only occurred in the context of having high risk in early adolescence.

Our findings corroborate the positive association between peer ethnic discrimination and depressive symptoms in prior longitudinal work from late childhood to early adolescence among African American youth (Brody et al, 2006) and cross-sectional work among 6th to 12th grade Latino adolescents (Umaña-Taylor, Tynes, Toomey, Williams, & Mitchell, 2015). It is possible that experiences of peer ethnic discrimination become internalized and, therefore, are linked to depressive symptoms. This is consistent with Thoits' (2013) assertion that experiences that compromise one's sense of self can be detrimental to psychological well-being. In fact, the internalizing of discrimination may be the reason why discrimination was not linked to risky behavior, an index of externalizing rather than internalizing symptomatology. However, this finding somewhat contrasts the work with Latino adolescents that finds discrimination (i.e., online racial discrimination) as positively associated with externalizing problems for younger adolescents but not for older adolescents (Umaña-Taylor et al., 2015). This study focused on Latino youth, more broadly, and a link did not emerge between peer discrimination, the focus of the current study, and externalizing symptoms. All in all, further work that helps to understand the discrimination-risky behavior link across adolescence is necessary.

Consistent with Peterson and Bush's (2013) work on Latino parent-adolescent everyday conflict and prior cross-sectional work with Mexican-origin adolescent females (Bámaca-Colbert et al., 2012), our findings showed that mother- and father-adolescent conflict in early adolescence was a significant predictor of trajectories of depressive symptoms for males and females. Indeed, our findings contribute to the body of literature that suggests that everyday conflict experiences with mothers is inhibitive. Importantly, our work further documents similar effects for fathers.

In predicting risky behaviors, gender differences emerged. Mother-adolescent conflict, but not father-adolescent conflict, predicted risky behaviors. This latter pattern may reflect the more traditional parenting roles that characterize Mexican American families, on average (Cauce & Domenech-Rodriguez, 2002); that is, mothers typically assume the primary role of caretaking in this cultural context. As such, mothers' more primary role may mean that when conflicts arise with mothers, who are expected to be the parent to whom youth turn to in time of need (Nomaguchi, 2008), youth may respond by engaging in risky behaviors. Similar to the findings linking parent-adolescent conflict and trajectories of depressive symptoms across adolescence, risky behaviors are significantly higher at age 20 for those adolescents who experienced higher (versus lower) levels of conflict with mothers in early adolescence. These findings support early adolescence as a point of heightened vulnerability (e.g., Steinberg, 2010), in which risk factors may have a long-lasting impact even when a fairly low level of a risk factor is experienced. Our findings also point to the importance of including fathers and future work should explore how fathers and mothers may have a unique impact on their adolescents' adjustment.

Overall, these findings call for more work to examine risk factors over time to be able to understand whether certain risk factors are more salient at particular developmental time points. Risk factors experienced in early adolescence, indeed, set youth on distinct outcome trajectories. However, it will also be important to measure these risk factors at multiple time points across the developmental period of adolescence because it is also possible that the risk factors remained high across the time span for youth who experienced high levels of discrimination and conflict in early adolescence. Additionally, repeated assessments over time of both risk factors and adjustment indices will enable the examination of bidirectional associations and provide insight on the direction of these effects. Further, our work addressed the importance of co-occurring risk factors to examine the potential differential impact of different types of risk factors on adjustment. Another important future direction is examining how risk factors work in combination, such as the interaction among different risk factors, in relation to adolescent adjustment.

Buffering Effects of Friendship Intimacy and Gender on the Relations between Risk Factors and Growth in Depressive Symptoms and Risky Behaviors

In testing the buffering effects of friendship intimacy (i.e., our second goal), our findings revealed that the protective effects of friendship intimacy were specific to females' depressive symptoms. That is, when female adolescents experienced high levels of peer ethnic discrimination, there were greater declines in depressive symptoms across adolescence among females who also experienced *high* levels of friendship intimacy in early adolescence, relative to those reporting low levels of friendship intimacy. Supportive functions of the peer context may be more salient for females than for males, as females engage in more interactions that include social conversation, self-disclosure, and support-seeking than males (Rose & Rudolph, 2006). Thus, it is possible that females who are experiencing high levels of discrimination but have supportive friendships may be disclosing more of their personal peer problems to their close friends and, in turn, receiving emotional support that buffers against depressive symptoms (Rose & Rudolph, 2006). Interventions targeted at increasing levels of peer support may help reduce the impact of peer ethnic discrimination on adjustment for female youth.

It is important to note, however, that friendship intimacy did not buffer the negative effects of risk within the family context, similar to previous findings using a multiethnic sample (Formoso et al., 2000). Consistent with family-oriented values, Mexican-origin youth may be less likely to turn to their friends for support when dealing with risk resulting from parent-adolescent conflict in an effort to protect their family unit; that is, by not publically discussing family strife youth are able to respect and honor the sanctity of the family (Cauce & Domenech-Rodríguez, 2002). Future work should examine protective factors within the family context. Another potential explanation for the differential effect of friendship intimacy could involve the setting in which the risk factor occurs (García Coll et. al, 1996). Discrimination originates and is experienced in large diverse social contexts (e.g., schools, neighborhoods; Simpkins, Delgado, Price, Quach, & Starbuck, 2013), whereas parent-adolescent conflict may often take place within the more private family setting. As such, discrimination is a risk factor that adolescents are often experiencing in the context of peers, rendering it more salient to intimate discussions among peers; whereas parent-adolescent

conflict is a risk factor that adolescents experience primarily in the home or with family members, and therefore, may be less likely to be disclosed to friends. It is important to note that these explanations are speculative and future work should focus on understanding how different types of risk factors may impact peer relationships.

Limitations and Future Directions

The present study offers valuable insight into the links between risk factors in *early adolescence* and changes in adjustment problems among Mexican-origin youth, but there are important limitations to acknowledge that provide directions for future research. First, we tested how risk factors in early adolescence predicted adjustment across adolescence. However, it will be important to examine longitudinal bidirectional links between risk factors and adjustment in future work. Second, future work should test growth in risk factors and its relation to growth in outcomes. Third, we were unable to test whether trajectories of friendship intimacy alter the links between risk and adjustment or examine whether adolescent girls with high intimacy continue to have close friends across time because we did not have data across adolescence on friendship intimacy; thus, examining the longitudinal impact of friendship intimacy is an important future direction. Fourth, this study utilized a single reporter (youth) for all study constructs, which raises the possibility that findings could be due to shared method variance. Future studies should seek to include multiple reporters. Finally, the results of our study are based on a specific group of Mexican-origin adolescents (i.e., adolescents from two-parent predominantly immigrant families living in the southwestern U.S.); future work should examine these processes in Mexican-origin samples from different geographic locations, with different immigration histories, and of varying family structures (e.g., single- and step-parent families) to determine the generalizability of these findings.

In closing, this study drew from the integrative model (García Coll et al., 1996) and a risk and resilience framework (Masten & Powell, 2003), and focused on early adolescence as an important developmental period to contribute to the literature on risk factors in early adolescence that may be linked to psychosocial adjustment across the adolescent years and to the identification of key supportive contexts that could buffer the potential negative effects of risk factors. Indeed, our work illustrates the potential impact of peer ethnic discrimination and parent-adolescent conflict in early adolescence on depressive symptoms and risky behaviors from which early adolescents are not likely to recover by late adolescence. Although it is possible these youths will recover in adulthood, our findings suggest that early adolescents who experience risk factors, such as peer ethnic discrimination and parent-adolescent conflict, experience higher levels of adjustment problems across adolescence, relative to those reporting low risk in early adolescence.

Our study focused on Mexican-origin adolescents, a young, large, and rapidly growing segment of the U.S. population (i.e., Latinos) who are, on average, at increased risk for maladjustment (Kann et al., 2014). Thus, identifying targets for prevention with this population has significant public health implications. Our findings suggest that early adolescent females' peer context can be a setting for prevention and intervention programs

dealing with peer ethnic discrimination. Given that the task of altering risk factors for a generation is daunting, it becomes important to identify other targets for intervention.

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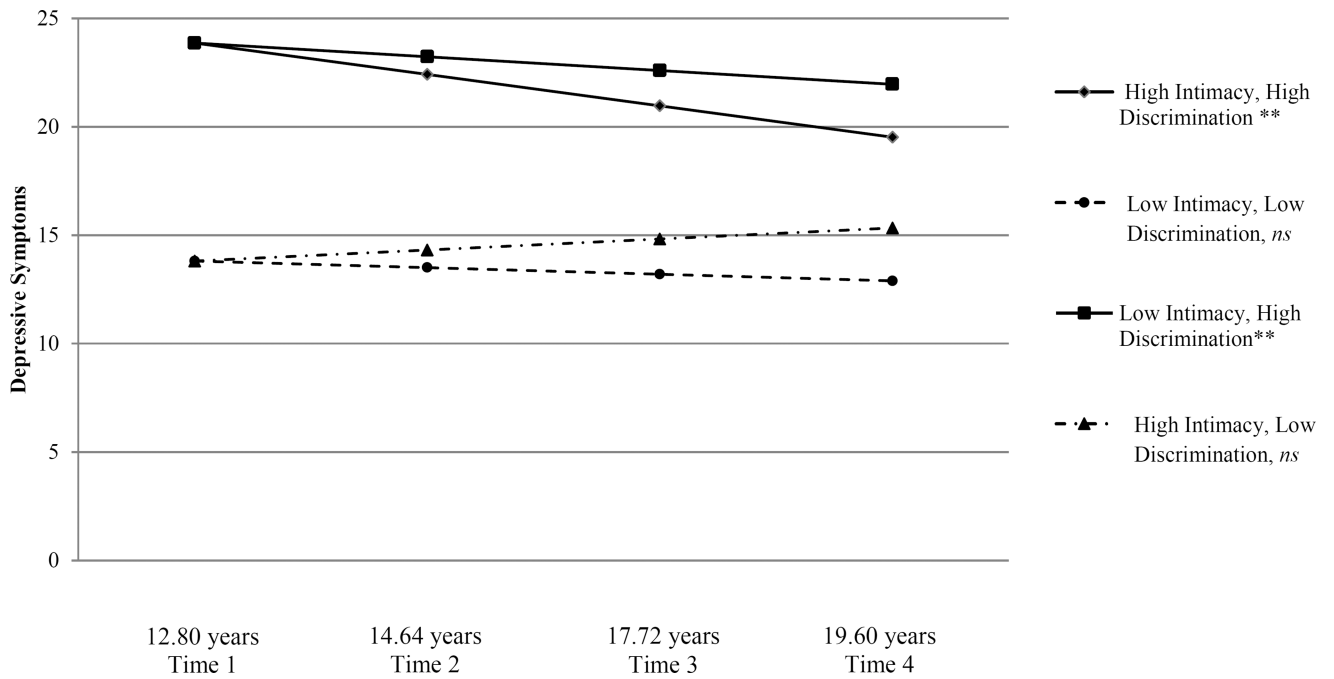


Figure 1. Change in depressive symptoms over time for females' varying levels of discrimination dependent on level of friendship intimacy (Time 1). ** $p < .01$

Correlations and Descriptive Statistics for Study Variables (females above diagonal/males below diagonal).

Table 1

Variables	1	2	3	4	5	6	7	8	9	10	11	12
1) Discrimination (T1)	1	0.40**	0.43**	-0.02**	0.43**	0.14**	0.24**	0.06**	0.19***	0.10**	0.34*****	0.18**
2) M-A Conflict (T1)	0.07**	1	0.79**	0.06**	0.53**	0.25**	0.18**	0.26**	0.52***	0.38***	0.23**	0.27**
3) F-A Conflict (T1)	0.22**	0.70**	1	-0.02**	0.49**	0.26**	0.16**	0.21**	0.41***	0.52*****	0.33*****	0.36*****
4) Friend Intimacy (T1)	-0.01	0.02	-0.06	1	-0.10**	-0.03**	0.03**	0.21**	0.00**	0.11**	-0.05**	0.03**
5) Dep Symptoms (T1)	0.44**	0.25**	0.35**	0.05	1	0.37**	0.34**	0.11**	0.58*****	0.24*****	0.22***	0.12**
6) Dep Symptoms (T2)	0.28**	0.22**	0.15*	0.10**	0.34**	1	0.30**	0.35**	0.28**	0.34**	0.21	0.03
7) Dep Symptoms (T3)	0.22	0.15*	0.20*	0.10	0.18**	0.33**	1	0.42**	0.18**	0.22***	0.22***	0.04**
8) Dep Symptoms (T4)	0.08	-0.10	-0.02	-0.14	0.16*	0.29**	0.40**	1	0.09**	0.31***	0.14**	0.12**
9) Risky Beh (T1)	0.35**	0.29**	0.28**	0.17	0.48**	0.13*	0.02	-0.01	1	0.54**	0.24*	0.22
10) Risky Beh (T2)	0.22*	0.21**	0.14*	0.28***	0.07**	0.24**	0.00*	-0.14*	0.59*****	1**	0.42*****	0.41***
11) Risky Beh (T3)	0.01	0.15*	0.21*	0.10	0.02	0.04	0.26*	0.27*	0.24*	0.50**	1	0.70**
12) Risky Beh (T4)	0.21	0.21	0.17	0.19	-0.11	0.31*	0.17	0.06	0.26*	0.59**	0.71**	1
<i>Mean</i> _{females}	1.41 _a	2.64 _a	2.54 _a	4.15 _a	17.26 _a	19.18 _a	14.73 _a	15.06 _a	1.31 _a	1.36 _a	1.42 _a	1.38 _a
<i>SD</i> _{females}	0.48 _a	0.89 _a	1.02 _a	0.52 _a	11.23 _a	10.92 _a	10.65 _a	9.83 _a	0.36	0.34	0.33	0.33
<i>Mean</i> _{males}	1.50 _a	2.78 _a	2.85 _b	3.35 _b	15.56 _a	13.65 _b	11.50 _b	11.50 _b	1.42 _b	1.49 _b	1.67 _b	1.57 _b
<i>SD</i> _{males}	0.55 _a	0.86 _a	0.95 _a	0.64 _a	8.27 _a	7.40 _a	7.56 _a	7.23 _a	0.41	0.38	0.43	0.44

Note: M-A = Mother-adolescent; F-A = Father-adolescent; Dep= Depressive; Beh = Behaviors; T1 = Time 1; T2 = Time 2; T3 = Time 3; T4 = Time 4;

* $p < .05$;

** $p < .01$; Means with different subscripts within a column are significantly different at $p < .05$.

Table 2

MLM Growth Models for Depressive Symptoms showing Unconditional Growth (Model 1) and Main Effects Models (Models 2 and 3) Discrimination, Mother Conflict (Model 4), Father Conflict (Model 5) with Intimacy and Gender as Moderators.

Predictors	Model 1		Model 2		Model 3		Model 4		Model 5	
	β	SE	β	SE	β	SE	β	SE	β	SE
<i>Fixed Effects</i>										
Intercept	16.80**	0.58	15.01**	0.82	14.84**	0.83	15.38**	0.88	15.27**	0.89
Time	-0.49**	0.11	-0.51**	0.11	-0.51**	0.11	-0.61**	0.12	-0.60**	0.12
Gender	--	--	4.05**	0.80	4.26**	0.81	4.04**	0.96	4.05**	0.98
Nativity	--	--	-0.36	0.84	-0.27	0.85	-0.53	0.83	-0.38**	0.84
Discrim	--	--	5.90**	1.01	5.46**	1.05	6.13**	1.08	5.69**	1.12
M -A Confl	--	--	3.36**	0.58	--	--	3.58**	0.62	--	--
F-A Confl	--	--	--	--	2.81**	0.53	--	--	2.96**	0.54
Discrim X Time	--	--	-0.56*	0.23	-0.51*	0.23	-0.54	0.29	-0.46**	0.30
M-A Confl X Time	--	--	-0.39**	0.13	--	--	-0.47**	0.17	--	--
F-A Confl X Time	--	--	--	--	-0.34**	0.12	--	--	-0.40**	0.17
Friend Intimacy	--	--	--	--	--	--	-0.35	0.84	0.06	0.85
Friend Intimacy X Time	--	--	--	--	--	--	-0.15	0.20	-0.19	0.20
Discrim. X Time X FI	--	--	--	--	--	--	0.10	0.33	0.13	0.35
M-A Confl. X Time X FI	--	--	--	--	--	--	0.28	0.17	--	--
D-A Confl. X Time X FI	--	--	--	--	--	--	--	--	0.05	0.16
Discrim X Time X G	--	--	--	--	--	--	0.51	0.42	0.47	0.43
M-A Confl X Time X G	--	--	--	--	--	--	0.15	0.23	--	--
F-A Confl X Time X G	--	--	--	--	--	--	--	--	0.18	0.23
Intimacy X Time X G	--	--	--	--	--	--	0.52	0.28	0.52	0.29
Discrim. X Time X Intimacy X G	--	--	--	--	--	--	-1.42**	0.55	-1.28*	0.56
<i>Random Effects</i>										
L1 residual	53.66**	4.00	53.21**	3.94	53.11**	3.95	53.39**	3.96	53.26**	3.96
L2 Intercept Variance	46.38*	9.17	21.42**	6.90	22.81**	7.03	20.94**	6.89	22.44**	7.02

	Model 1	Model 2	Model 3	Model 4	Model 5
Predictors	β	β	β	β	β
	SE	SE	SE	SE	SE
L2 Slope Variance	0.68**	0.48*	0.51*	0.38	0.39
Pseudo R ²				0.27	0.27
L1 Residual Variance		0.01	0.01	-0.00	-0.00
L1 Slope Variance		0.29	0.26	0.21	0.22

Note: Discrim. = Discrimination; M –A Confl. = Mother-Adolescent Conflict; F-A Confl. = Father-Adolescent Conflict; FI = Friend Intimacy; G = Gender;

* $p < .05$;

** $p < .01$; Gender coded 0 = male, 1 = female; Nativity coded 0 = US-born, 1 = Mexico-born. -- = Construct not included in model. Pseudo R² for Models 2 and 3 were estimated by comparing the residual variance in Model 2 (or 3) to the unconditional Model [Unconditional Model – Model 2 (or 3) / Unconditional Model]. Pseudo R² for Models 4 and 5 were estimated by computing the following formula [Model 2 (or 3) – Model 4 (or 5) / Model 2 (or 3)].

MLM Growth Models for Risky Behavior showing Unconditional Growth (Model 1) and Main Effects Models (Models 2 and 3).

Table 3

Predictors	Model 1		Model 1b		Model 2		Model 3	
	β	SE	β	SE	β	SE	β	SE
<i>Fixed Effects</i>								
Intercept	1.37**	0.02	1.31**	.03	1.32**	0.03	1.31**	0.04
Time	0.02**	0.00	0.08**	0.01	0.07**	0.01	0.07**	0.01
Time ²	--	--	-0.01**	0.00	-0.01**	0.00	-0.01**	0.00
Gender	--	--	--	--	-0.12**	0.03	-0.11**	0.04
Nativity	--	--	--	--	0.09*	0.03	0.10*	0.04
Discrim	--	--	--	--	0.13**	0.04	0.12*	0.05
M -A Confl	--	--	--	--	0.15**	0.03	--	--
F-A Confl	--	--	--	--	--	--	0.11**	0.01
Discrim X Time	--	--	--	--	-0.01	0.01	-0.01	0.01
M-A Confl X Time	--	--	--	--	-0.01*	0.01	--	--
F-A Confl X Time	--	--	--	--	--	--	-0.01	0.01
<i>Random Effects</i>								
L1 Residual Variance	0.05**	0.00	0.05**	0.00	0.05**	0.00	0.05**	0.00
L2 Intercept Variance	0.10**	0.02	0.10**	0.02	0.07**	0.01	0.08**	0.01
L2 Slope Variance	0.00**	0.00	0.00**	0.00	0.00	0.00	0.00**	0.00
Pseudo R ²								
L1 Residual Variance			0.03		0.00		0.00	
L1 Slope Variance			0.07		0.04		0.01	

Note: Discrim. = Discrimination; M -A Confl. = Mother-Adolescent Conflict; F-A Confl. = Father-Adolescent Conflict;

* $p < .05$;

**

$p < .01$; Gender coded 0 = male, 1 = female; Nativity coded 0 = US-born, 1 = Mexico-born. Model 4 and Model 5 (Discrimination, Mother conflict, Father Conflict models with Gender and Intimacy Interactions) are not shown due to non-significant interactions. Pseudo R² for Models 1b - 3 were estimated by comparing the residual variance in Model 2 to the unconditional Model (Unconditional Model - Model X / Unconditional Model).