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Contextual and Developmental Predictors of Sexual Initiation Timing among Mexican-origin Girls

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Abstract

Using data from a longitudinal study of Mexican-origin girls (ages 11–17 at Time 1), we examined sociocultural (i.e., family structure, nativity, and acculturation), interpersonal (i.e., supportive parenting and conflict), and developmental (i.e., menarche timing and autonomy expectations) predictors of sexual initiation. Using Cox proportional hazards models, we explored whether Time 1 variables predicted the occurrence and timing of first sexual intercourse reported 2.5 to 3.5 years later. Results indicated that the likelihood of early sexual intercourse was higher among first-generation than second-generation immigrants. In addition, living with a step-parent (compared to two biological parents) was associated with a higher likelihood of early intercourse. Furthermore, early autonomy expectations emerged as a salient predictor of intercourse, such that girls with earlier autonomy expectations were more likely to have earlier intercourse than girls with later autonomy expectations. Taken together, results highlight the importance of considering developmental and contextual factors when studying Mexican-origin girls' sexual initiation.

Keywords

Autonomy; interpersonal; Latina youth; sexual initiation; sociocultural

Latinos are the largest and fastest growing minority group in the United States. Recent data suggest that Latinas are more likely than White (non-Latina) females to be sexually active and engage in sexual behaviors before the age of 13 (Centers for Disease Control and Prevention, 2012). Early sexual initiation has been linked to a number of adverse outcomes including sexually transmitted diseases and unintended pregnancy (Kaestle, Halpern, Miller, & Ford, 2005; O'Donnell, O'Donnell, & Stueve, 2001). For example, almost one third of Latinas aged 15–19 experience a pregnancy (Driscoll, Brindis, Biggs, & Valderama, 2004),

with Mexican-origin girls having the highest birth rates (Frost & Driscoll, 2006). These figures call for studies exploring predictors of early sexual initiation among Mexican-origin girls.

Most research on the sexual behaviors of Latino youth has been descriptive in nature (Trejos-Castillo & Vazsonyi, 2009) or examined only cultural factors (Afable-Munsuz & Brindis, 2006). Less attention has been given to the multiple developmental and contextual factors that may account for pathways of sexual behavior (Zimmer-Gembeck & Helfand, 2008) for Latinos, especially those of Mexican descent who are at risk for teen births. To fill this gap, we examined sociocultural (i.e., family structure, nativity, and acculturation), interpersonal (i.e., supportive parenting and parent-adolescent conflict) and developmental (i.e., menarche timing and autonomy expectations) factors assessed at early or middle adolescence (when girls were 11 to 17 years of age) as predictors of the timing of Mexican-origin girls' sexual initiation reported in middle to late adolescence (when girls were 14 to 20 years of age).

A Developmental-Contextual Perspective on Timing of Sexual Initiation

The integrative ecological model of adolescent sexuality adapted by Raffaelli, Kang, and Guarini (2012) is a useful framework for understanding the many factors influencing Latina girls' sexuality development. According to this framework, a number of nested factors at different ecological levels from the outermost layer of the ecology (i.e., sociocultural characteristics such as acculturation) to the innermost layer (i.e., individual characteristics such as developmental processes) impact adolescent sexuality. Studies with Latinos, however, have focused primarily on the outermost layer, particularly demographic or cultural predictors (Trejos-Castillo & Vazsonyi, 2009). Using the integrative ecological model as a framework, we examined sociocultural, interpersonal, and developmental predictors of Mexican-origin girls' sexual initiation. We draw on additional theories, such as symbolic interactionism and problem behavior theory, for further support.

Sociocultural Factors

Sociocultural factors, including family structure, nativity status, and acculturation, are represented in the outermost layer of the integrative ecological model (Raffaelli et al., 2012). Previous research suggests that family structure predicts Latino adolescents' sexual behaviors (Upchurch, Aneshensel, Mudgal, & McNeely, 2000; Vélez-Pastrana, González-Rodríguez, & Borges-Hernández, 2005). Specifically, Latino youth living with both biological parents have a lower risk of early sexual initiation than youth living in other family arrangements (Upchurch et al., 2001). Thus, we expected that girls living with two biological parents would report later sexual initiation than girls living in other family structures.

Other salient sociocultural factors related to Latino adolescents' sexual behaviors are nativity status (U.S.-born vs. foreign-born) and acculturation, although findings are not always consistent. Some studies suggest that Latino immigrant youth have lower odds of early sexual initiation than U.S.-born Latino youth (McDonald, Manlove, & Ikramullah, 2009), in line with the notion of an immigrant advantage (i.e., foreign-born youth generally

report better outcomes than U.S.-born youth). Other researchers, however, have reported that the immigrant advantage depends on age of immigration to the United States (Raffaelli et al., 2012). Specifically, individuals who immigrate during adolescence initiate sex later than those who immigrate during childhood. Finally, studies examining the broader construct of *acculturation* (e.g., English language preference) generally point to the benefits of less acculturation, with less acculturated youth experiencing first sex later than more acculturated youth, although findings in this area are inconsistent as well (Afable-Munsuz & Brindis, 2006). Given the general pattern of an immigrant advantage, we expected that immigrant and less acculturated Mexican-origin girls would report later sexual initiation than U.S.-born and more acculturated girls.

Interpersonal factors

Immediately following the sociocultural layer, and closer in influence on adolescent development, are interpersonal domains such as characteristics of the parent-child relationship. Using a symbolic-interaction perspective, scholars have posited that adolescents with supportive and accepting parents are more likely to internalize appropriate behaviors such as delaying sexual engagement (Killoren, Updegraff, Christopher, & Umaña-Taylor, 2011). In line with this premise, girls with more negative maternal relationships (e.g., low warmth, low levels of communication) have earlier sexual debuts than girls with more positive relationships (e.g., high warmth, high levels of communication; Davis & Friel, 2001). Moreover, sexually active Latino adolescents report lower levels of support from family than sexually inexperienced teenagers (Vélez-Pastrana et al., 2005). In line with symbolic interaction principles and previous findings, we expected that girls who reported supportive relationships with their mothers would initiate sex later, whereas, girls who reported greater conflict intensity would initiate sex earlier.

Developmental factors

Biological and psychological factors comprise the innermost level of the model (Raffaelli et al., 2012). There is a dearth of research on individual-level predictors of Latino sexual initiation, but the mainstream literature points to pubertal timing and autonomy as important contributors. A number of explanations have been used to delineate the processes by which pubertal timing may lead to adverse outcomes such as early sexual initiation (Mendle, Turkheimer & Emery, 2007). From a biological perspective, early puberty brings about accelerated physical, hormonal, and neurological changes that may result in arousal, sensation seeking, and ultimately negative outcomes. From a psychobiological model (i.e., the interplay of biology and environment), increases in hormones result in girls' vulnerability to environmental conditions such as attention from older, opposite-sex friends (Simmons, Blyth, & McKinney, 1983) and an increasing likelihood that girls will engage in early sex (Marín, Coyle, Gomez, Carvajal, & Kirby, 2000). One of the most commonly used indicators of pubertal timing is menarche (Posner, 2006) and existing work reveals that earlier onset of menarche is associated with earlier timing of sexual intercourse (e.g., Meschke, Zweig, Barber, & Eccles, 2000). For example, a study with an ethnically diverse sample found that early menarche was positively associated with age at first intercourse (Deardorff, Gonzales, Christopher, Roosa, & Millsap, 2005). Thus, we examined timing of

menarche and anticipated that earlier menarche would be associated with early sexual initiation.

Another developmentally-related area that has been examined rarely is *autonomy* (Zimmer-Gembeck & Helfand, 2008). Autonomy is a multifaceted construct, with behavioral autonomy, our focus in this study, referring to the ability to make independent decisions (Daddis & Smetana, 2005). Problem-Behavior theory (Jessor, Donovan, & Costa, 1991) notes that rejection of conventional adult norms can lead to a greater likelihood of engaging in problem behaviors such as early sexual initiation. Adolescents' expectations regarding the age at which to engage in various autonomous behaviors can indicate a deviation from adult conventional norms given that parents usually have later age expectations for autonomy than children (Daddis & Smetana, 2005). Thus, Mexican-origin girls who have early autonomy expectations maybe rejecting conventional norms resulting in a higher likelihood of engaging in early sexual behaviors compared to those with late autonomy expectations. Supporting this idea, Raffaelli and Crockett (2003) found that high autonomous decision-making at ages 12–13 was associated with a greater likelihood of having sexual intercourse by age 15 among an ethnically-diverse national sample. In line with the limited work available, we hypothesized that earlier autonomy expectations would be associated with early sexual initiation; whereas later autonomy expectations would be associated with later sexual initiation.

In sum, guided by the integrative ecological model of adolescent sexuality, we examined predictors of sexual initiation among a sample of Mexican-origin girls. Specifically, we investigated sociocultural (i.e., family structure, nativity status, and acculturation), interpersonal (i.e., maternal support and conflict intensity with mothers), and individual-developmental (i.e., menarche timing and autonomy expectations) predictors of first sexual intercourse. Our concurrent attention to developmental and contextual predictors of Mexican-origin girls' sexual initiation uniquely contributes to the literature on sexuality development among this understudied population.

Method

Participants

Data came from a study of Mexican-origin girls and their mothers living in a metropolitan area in the Southwestern United States. Adolescents ($N = 338$ at Time 1; T1) were recruited from predominantly Latino schools and were eligible to participate if both parents reported Mexican descent and their mothers agreed to participate. Adolescents (aged 11–17 at first assessment) were initially surveyed in 2006 and invited to participate 2.5 and 3.5 years later for two additional assessments. Follow-up surveys were completed in 2009 (T2) and 2010 (T3) by 175 females. Reasons for not participating at T2 and T3 included change in residence (i.e., mail was “unable to forward”), disconnected or incorrect phone numbers or unanswered phone calls.

The current sample was limited to girls who had not experienced sexual intercourse by T1 ($N = 320$). In line with recommended practice (i.e., left-censoring) (Singer & Willett, 2003), girls who had sex prior to T1 ($N = 18$) were excluded to ensure appropriate temporal

ordering (i.e., the dependent variable occurring after independent variables were assessed). Analyses demonstrated that excluded girls initiated sex earlier ($M = 14.90$ versus 16.59 , $p < .001$) and had higher rates of early menarche (44.4% versus 17.5% , $p < .001$) than females retained in the sample. The two groups did not differ significantly on autonomy expectations or any socio-demographic factors. Descriptive statistics for all study variables are reported in Table 1.

Measures

Predictor variables were assessed at T1 and the dependent variable was assessed at both follow-up interviews.

Age of first sexual intercourse—At T2 and T3, respondents were asked whether they had ever experienced vaginal intercourse, and if so, the month and year of the first experience. Using this information and their birth dates, we calculated their age at first sex. Girls who were missing information on the exact day that they were born were assigned the midpoint of the year that they were born. We then created a variable that was coded 0 for all months before first sex and 1 for subsequent months after the girls had experienced sex.

Family Structure—Adolescents living in single-parent families (1 = single-parent, 0 otherwise) and those living in step-parent families (1 = step-parent, 0 otherwise) were compared to adolescents living with both biological parents.

Nativity Status—We captured nativity status with two dichotomous variables. Girls who were born in Mexico to Mexico-born mothers were first-generation immigrants. Those who were born in the United States to Mexico-born mothers were second-generation immigrants. These two groups were compared to girls who were born in the United States to U.S.-born mothers (i.e., third or higher generation immigrants).

Acculturation—We assessed language acculturation using the mean of a 12-item subscale of the Bidimensional Acculturation Scale (Marin & Gamba, 1996). Items assessed English media use, language use, and proficiency (e.g., “How often do you speak in English with your friends?” $\alpha = .92$). Responses ranged from 1 (*almost never*) to 4 (*almost always*).

Supportive parenting—Adolescents completed a 9-item version of the Inventory of Parent and Peer Attachment (Armsden & Greenberg, 1987) assessing perceptions of maternal support (e.g., “I can count on my mother when I need to talk”). Participants responded using a 4-point scale (1 = *almost never or never*, 4 = *almost always or always*). Item responses were averaged ($\alpha = .93$).

Conflict intensity—A 15-item measure assessed the intensity of mother-daughter conflict in 15 domains (e.g., chores, schoolwork). Participants responded using a scale from (1) *very mild* to (5) *very angry*. The original 12-item scale (Updegraff, Delgado, & Wheeler, 2009) was revised by deleting one item (related to rules) and adding four specific items (e.g., disobedience and substance use) ($\alpha = .88$).

Early Menarche—Following prior research with Mexican-origin females (Jean et al., 2011), menarche was considered early if it occurred before age 11 (1 =early menarche, 0 otherwise). The girls coded “0” included those who reached menarche after their 11th birthday and those who had not yet reached menarche but were at least 11 years old.

Autonomy expectations—A 20-item version of the Teen Timetable Questionnaire (Feldman & Quatman, 1988) assessed adolescents’ expectations for autonomy. Adolescents were asked the age at which they thought they should be allowed to engage in everyday management domains (e.g., “at what age do you think you should go out on dates?”). Respondents chose from 5 answer options: 1 (*before age 12*), 2 (*between 12 and 14*), 3 (*between 15 and 17*), 4 (*18+ years*), and 5 (*never*) with greater scores indicating later autonomy expectations ($\alpha = .89$).

Results

Analytical Approach

In order to jointly examine multiple predictors of sexual initiation, we used Cox proportional hazards models (Cox, 1972). Cox models are appropriate because they explore the timing of an event and they account for censoring. The outcome in a Cox model is the hazard rate, which is the likelihood of experiencing an event in a given time period, conditional on surviving to that time period. In the present study, we were interested in the timing of first sex; Thus the hazard indicates the likelihood of experiencing first sex in a particular month, conditional on not having had sex before that month. These models assume that the hazards are proportional, an assumption that was not violated (i.e., chi-square tests of the Schoenfeld residuals were non-significant). Also, cox models account for censoring which occurs when an individual does not experience the event of interest during the study’s observation period. In our case, right-censoring occurred because some girls did not initiate sex before the study ended and thus had missing information about their timing of first sex. In our sample, 49% of the participants experienced sexual intercourse and 51% were right-censored.

Survival models require reorganizing the data into a person-period format in which individuals contribute multiple observations. Females are “at risk” for sex until they experience it or are censored and no longer followed. In the current study, risk was specified as beginning at birth. Therefore, girls were at risk until the month that they had sexual intercourse. In the current study, the average age of first sexual intercourse was 16.6 years.

Multiple imputation was used to handle missing data for all analytical variables that were missing at random (MAR). Overall 6.8% of data were missing, with missingness highest on the dependent variable as a result of attrition. To retain data from as many participants as possible, and to reduce bias, data were imputed in Stata using the Bayesian Markov Chain Monte Carlo technique (Schlomer, Bauman, & Card, 2010). Following standard procedure (Rubin, 2009), results combined information from 20 imputed datasets. Importantly, sensitivity analyses that were limited to respondents with complete information on all variables (i.e., list wise deletion), produced results that were both substantively and statistically consistent with those reported here.

Bivariate Correlations

We computed bivariate correlations using the `mibeta` command, which provides standardized regression coefficients for multiply-imputed data. As can be seen in Table 2, we included a dichotomous variable indicating whether the respondent had sex (yes or no). This variable, however, differs from the dependent variable used in the hazard models (the hazard rate), which incorporates information on both the *occurrence* and *timing* of first sex. Results demonstrated that living in a step-parent family and experiencing early puberty were associated positively, whereas autonomy expectations were associated negatively, with experiencing sexual intercourse.

Sociocultural, Interpersonal, and Developmental Predictors of Sexual Intercourse

Table 3 presents three models exploring how sociocultural, interpersonal, and developmental factors were related to the hazard of sexual intercourse. Because hazard ratios are presented, values greater than 1 indicate positive associations, whereas values less than 1 indicate negative associations.

Model 1 shows that family structure was linked to the likelihood of first sexual intercourse. The hazard of sexual intercourse was nearly doubled for girls living with a step-parent than for girls living with both biological parents. Girls living in single-parent and two-parent families did not differ significantly in their likelihood of first sexual intercourse. Nativity status was also a significant predictor. The hazard of sexual intercourse was 35% lower (1–0.65) for second-generation immigrants than for first-generation immigrants. The hazard was not significantly different for third- and first-generation girls. Acculturation did not predict timing of first sexual intercourse.

In Model 2, parent-adolescent relationship characteristics were added to the sociocultural factors to predict timing of first sexual intercourse. Contrary to expectations, conflict intensity and supportive parenting were not significant predictors of sexual intercourse.

Developmental characteristics were added in Model 3 in order to jointly examine sociocultural, interpersonal, and developmental predictors of teenage first sexual intercourse. Although early menarche was not associated significantly with timing of first sexual intercourse, autonomy expectations were associated strongly with the likelihood of first sex. Participants with later expectations for autonomy had a lower likelihood of experiencing the transition to first sexual intercourse than those who had earlier autonomy expectations. The autonomy expectations scale ranged from 1 to 5 (with higher scores signaling later autonomy expectations) and the hazard ratio of 0.63 indicated that a 1-point increase on the autonomy expectations scale was associated with a 37% lower hazard of first sexual intercourse. The hazard ratios for the sociocultural variables remained similar when developmental predictors were introduced into the model.

Discussion

Previous work points to a number of factors, ranging from biological to social, implicated in early sexual initiation (Zimmer-Gembeck & Helfand, 2008). Most of this knowledge base does not include Latinos, a group with unique family characteristics, experiences, and

values. Given this gap in the literature, we examined sociocultural, interpersonal, and developmental predictors of the timing of Mexican-origin girls' sexual initiation. Overall, family structure, nativity status, and autonomy expectations emerged as important predictors of early sexual initiation.

In line with previous work (Pearson, Muller, & Frisco, 2006; Upchurch et al., 2001), Mexican-origin girls living in step-families had a higher risk for early sexual initiation than girls living with both biological parents. Interestingly, girls living in single-parent households did not differ from girls in two biological-parent households. The higher risk for girls living in step-families may result from stress caused by numerous family transitions (Wu & Thomson, 2001). Although our study did not assess family transitions directly, fewer transitions may lead to better adjustment among Latinas. Prior work including Latinas has often failed to distinguish between step-parent and single-parent families. Yet as family structure becomes increasingly complex for Mexican-origin families in the United States (Phillips & Sweeney, 2005), examining the implications of different family structures and transitions on adolescent adjustment is important.

Our findings also suggest that foreign-born adolescents' likelihood of early sexual initiation was greater than second generation, but not greater than third generation youth. This finding is inconsistent with previous work documenting an immigrant advantage in terms of lower risk of problem behaviors for foreign-born individuals (Raffaelli et al., 2012). It is possible that the absence of an immigrant advantage among our sample of foreign-born girls results from their young age of arrival to the United States ($M_{\text{age}} = 6.2$ years). Recent findings have demonstrated that foreign-born Latinas who arrived to the United States during childhood were at greater risk for earlier sexual initiation than those who arrived during adolescence. This research, however, does not explain why foreign-born girls were at greater risk for early sexual initiation than second generation girls. One possibility is that dating partner characteristics may be responsible for this association. Previous research suggests that foreign-born girls are more likely to have a first sexual partner that is older in age (Raffaelli et al.) and risky sexual behavior is greater among girls with older partners (Marín et al., 2000). Therefore, we conducted follow-up analyses to examine whether nativity status predicted the number of older dating partners among our participants. A trend-level association indicated that second generation girls had fewer older sexual partners than first generation girls, a finding that persisted after controlling for total number of partners in the past 12 months ($\beta = -.981, p = .06$). Although preliminary, this association suggests that future work examining the link between partner characteristics and sexual behaviors among immigrant girls is needed.

Arguably the most notable contribution of the current study was the inclusion of autonomy issues, which have been examined rarely in the adolescent sexual behavior literature (Zimmer-Gembeck & Helfand, 2008). Behavioral autonomy expectations emerged as a strong predictor of early sexual initiation among our participants. Mexican-origin girls who had later autonomy expectations had lower risk for early sexual initiation than those who had earlier autonomy expectations. Namely, girls with later age expectations to engage in behaviors such as dating, going out without telling their parents, or going to boy/girl parties were less likely to report early sexual initiation. This finding is in line with previous work

that revealed autonomous decision-making at early ages increased adolescents' risk for engaging in sexual activity by age 15 (Raffaelli & Crockett, 2003). Further, this finding highlights the need for future studies to examine autonomy issues as a possible proximal correlate of adolescent sexual behavior (Zimmer-Gembeck & Helfand, 2008). The salience of early autonomy expectations as a significant risk factor for early sexual initiation among our sample highlights the need to move beyond solely cultural-based explanations to understand behavioral patterns. Taking a developmental and contextual approach can reveal developmental processes that also may explain patterns of problem behaviors among ethnically diverse samples.

Our results did not support previous findings that point to a link between early pubertal maturation and sexual behaviors (Zimmer-Gembeck & Helfand, 2008). This null finding may result from left censoring (i.e., excluding females who had sex prior to T1) as omitted females experienced earlier age at menarche and age at first sex than retained females. Another possibility is that autonomy expectations and early menarche interact to shape sexual behaviors. Because of our small sample size, we could not successfully test this interaction, however, future research should explore whether menarche timing and autonomy expectations interact to influence the timing of sexual initiation.

Importantly, we did not find an association between parent-child interpersonal factors and sexual initiation. Although previous work (Davis & Friel, 2001) points to the salience of the parent-adolescent relationship in predicting adolescent sexual behavior, some studies focusing on Latino samples do not find significant associations (Upchurch et al., 2001). It is possible that our null findings regarding conflict resulted from the use of a comprehensive measure of everyday conflict that tapped into different conflict domains (e.g., chores, lying). A more specific measure of mother-daughter conflict (about dating, sex) might be related to sexual intercourse. Further, it may be that maternal conflict is more salient in predicting adolescents' sexual involvement under conditions of low maternal support than high maternal support (Germán, Gonzales, Bonds McLain, Dumka, & Millsap, 2013). Future studies should examine potential interactive effects of mother-adolescent relationship qualities. Additionally, other parenting dimensions, such as monitoring, should be included as predictors of Mexican-origin girls' sexual initiation. Nevertheless, the lack of significant interpersonal predictors in the current study further supports the notion that these variables must be examined in combination with factors that tap into developmental processes during adolescence.

Lastly, it is important to note that our study had a number of limitations. This is a convenience sample of Mexican-origin girls with unique contextual realities that likely preclude the generalizability of the findings. In addition, the small sample size resulted in large confidence intervals and thus null findings should be interpreted cautiously. Despite these limitations, this study makes a significant contribution by taking into account sociocultural, interpersonal, and developmental variables as predictors of sexual initiation among Mexican-origin girls. Given that Latino youth are at risk for negative sexual outcomes, including sexually transmitted infections and unintended pregnancy, this study provides important information about contextual and developmental factors linked to sexual initiation among this population.

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Table 1

Descriptive Statistics (Means/Percentages) for the Sample

	Mean/%	sd	Item-Missing (%)
<i>Dependent Variable</i>			
Age of First Sexual Intercourse (year)	16.59	0.14	49.4% 0.00
<i>Sociocultural Factors</i>			
Family Structure			
Single-Parent Families	17.5%		5.9%
Step-Parent Families	22.5%		5.9%
Two Biological Parents	60.3%		5.9%
Nativity Status			
First Generation	34.7%		4.4%
Second Generation	51.9%		4.4%
Third or Higher Generation	13.4%		4.4%
Acculturation	3.50	0.03	0.0%
<i>Interpersonal Factors</i>			
Supportive Parenting	3.27	0.04	0.0%
Conflict Intensity	2.22	0.04	0.0%
<i>Developmental factors</i>			
Early Menarche	19.4%	0.03	0.04
Autonomy Expectations	3.32	0.03	0.00

Table 2

Correlation between Study Variables (N = 320)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(1) Single-Parent Families	1									
(2) Step-Parent Families	-0.251 ***	1								
(3) Second Generation	-0.153 *	-0.006	1							
(4) Third or Higher Generation	0.054	0.113 *	-0.279 ***	1						
(5) Acculturation	0.026	0.049	0.161 **	0.395 ***	1					
(6) Supportive Parenting	-0.102	-0.077	0.015	0.146	0.083	1				
(7) Conflict Intensity	0.148	0.194 †	-0.082	0.056	0.023	-0.261 ***	1			
(8) Early Menarche	0.068	0.001	-0.065	0.045	0.006	0.001	0.005	1.000		
(9) Autonomy Expectations	-0.094	-0.079	-0.009	-0.053	-0.280 ***	0.239 ***	-0.149 ***	-0.011	1	
(10) Had sex	-0.029	0.243 ***	-0.088	0.114	0.014	-0.046	0.046	0.172 *	-0.126 **	1

Notes.

† $p < .1$,* $p < .05$,** $p < .01$,*** $p < .001$.

Table 3

Predictors of First Sexual Intercourse among a Sample of Mexican-American Girls (in Hazard Ratios)

	Model 1		Model 2		Model 3	
	HR	SE	HR	SE	HR	SE
<i>Sociocultural Predictors</i>						
Family Structure						
Single-Parent Families	1.15	0.26	1.13	0.25	1.18	0.26
Step-Parent Families	1.99	0.36 ***	1.96	0.36 ***	1.92	0.35 ***
Nativity Status						
Second Generation	0.65	0.12 *	0.65	0.12 *	0.63	0.12 *
Third or Higher Generation	0.82	0.22	0.84	0.23	0.90	0.24
Acculturation						
	1.30	0.23	1.31	0.23	1.09	0.19
<i>Interpersonal Factors</i>						
Supportive Parenting			0.91	0.10	1.02	0.11
Conflict Intensity			0.94	0.09	0.89	0.09
<i>Development factors</i>						
Early Menarche					1.19	0.22
Autonomy Expectations					0.63	0.11 **

Notes: Hazard ratios > 1 indicate a positive association whereas those < 1 indicate a negative association. SE indicates standard error.

* $p < .05$,** $p < .01$,*** $p < .001$.