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Family Dynamics Across Pregnant Latina Adolescents' Transition to Parenthood

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Abstract

Growth curve models were conducted on assessments of family functioning at four time points from the third-trimester of pregnancy through the first year postpartum for 96 Latino families in which an adolescent daughter was pregnant. Results indicated significant family-level change following an adolescent's childbearing, though there were notable differences between family members in their perceptions of family functioning. Family conflict, as perceived by parenting teens, increased in the latter half of the first year after an initial decline, and family companionship (as rated by mothers and siblings) decreased. Parenting adolescents and siblings perceived significant increases in family cohesion, whereas mothers perceived a significant decline. Unplanned pregnancies, family financial hardship, and expected stress predicted unfavorable family functioning at 1 year. Contrary to expectations, adolescents' greater prenatal efforts to prepare for parenting predicted subsequent family conflict and declines in family cohesion (particularly as rated by mothers). Family members' acculturation level and attitudes of familism, gender roles, and the status attained by parenthood also had predictive effects. Implications of study findings for family adjustment following an adolescent's childbearing are discussed.

Keywords

adolescent childbearing; family conflict; growth curve analyses; prenatal expectations; transition to parenting

Although a sizeable literature exists on the reorganization of the family system after the birth of a baby to adult married couples, little is known about how families change in reaction to an adolescent daughter's childbearing. With approximately 440,000 adolescents giving birth annually (Hamilton, Martin, & Ventura, 2010), and with 80% of adolescent mothers continuing to live with their family of origin until their baby is 1 year (Manlove, Mariner, & Papillo, 2000), such changes clearly have important practical and policy implications. The current study examines how Latino families change after an adolescent daughter's childbearing. (Throughout this article, we use the term 'family' to refer to the pregnant or parenting adolescent's family of origin, and not her family of procreation.) Three indices of family functioning were examined: family conflict, family cohesion (or closeness), and family companionship (or the amount and quality of time spent together). Families were studied while the adolescent was in her third trimester of pregnancy and at three times during the first year postpartum. Latino families were targeted for study because Latinos have nearly twice the national teenage birthrate as women of other race/ethnicities (Hamilton et al., 2010).

Family Changes Following an Adolescent's Childbearing

Drawing from studies of adult married couples, the families of new adolescent mothers likely experience increased conflict and disruption as family members learn to cope with the challenges and demands of a needy infant. Among adult couples, the frequency of spousal conflict escalates as early as three months postpartum and can continue up to two or more years (Doss, Rhoades, Stanley, & Markman, 2009; Kluwer & Johnson, 2007; Nomaguchi & Milkie, 2003). Family conflict has also been observed in the families of childbearing teenagers in regard to who is responsible for and in charge of the baby's care (Obeidallah & Burton, 1999). Certainly, tensions might arise as the adolescent's family reorganizes itself to incorporate the baby into their lives.

Becoming a parent, though, has also been described as highly rewarding, with many married couples reporting greater intimacy and closeness following the birth of their child (Claxton & Perry-Jenkins, 2008; Nomaguchi & Milkie, 2003), though there are exceptions (e.g., Kurdek, 1993; MacDermid, Huston, & McHale, 1990). In the only study of which we are aware that examined family change across an adolescent's transition to parenthood, Cervera (1994) found that in the 16 White families studied, family cohesion increased and general family functioning improved from when the adolescent was 6-months pregnant to 1 month postpartum. Anecdotal reports also indicate that an adolescent's childbearing can unify a family and bring a family closer (Furstenberg, 1980). Thus, although an adolescent's childbearing might trigger family conflict, it could also enhance family closeness.

Another change that married couples experience is a decline in companionate, leisurely time together after a baby's birth (Claxton & Perry-Jenkins, 2008; Kurdek, 1993). Although it is unknown whether or how an adolescent's childbearing alters family leisure time, given the high time demands associated with caring for an infant, family companionship—or leisure time spent together—might likely decline.

Predictors of Postpartum Family Change

Within the adult transition to parenting literature, several prenatal characteristics have been found to moderate couples' adjustment to parenting, such as marital status for women (Mitnick, Hyman, Smith, & Amy, 2009). Identifying pre-existing vulnerabilities to post-birth strain is important for understanding why some couples deteriorate whereas others improve after a child's birth (Doss et al., 2009). To this aim, the current study examines several individual and family characteristics evident before the adolescent's childbearing as predictors of post-birth family functioning.

Whether a pregnancy is *planned or unplanned* is likely consequential for family post-birth adjustment. However, results in the adult literature are mixed. Unplanned pregnancies have been found to be associated with high levels of postpartum marital conflict and dissatisfaction (Cox, Paley, Burchinal, & Payne, 1999; Lawrence, Rothman, Cobb, Rothman, & Bradbury, 2008), but Belsky and Rovine (1990) found the reverse and two studies found no relation between the planfulness of the pregnancy and postpartum adjustment (Doss et al., 2009; Kalmus, Davidson, & Cushman, 1992). Contrary to popular belief, not all adolescent pregnancies are unplanned, with as many as 15% of pregnant 15- to 19-year-olds stating that they intended to become pregnant (Finer & Henshaw, 2006). Adolescents who plan their pregnancies have been found to live within more supportive family environments than adolescents whose pregnancies are unplanned (Sheeder, Tocce, & Stevens-Simon, 2009). To the extent that family support co-occurs with planned pregnancies, such support might also pave the way for a smoother transition period for the families of childbearing adolescents.

Adolescents' *active preparations for parenting*, such as taking parenting or child birth classes, may also be consequential for family postpartum adjustment in that it reflects the adolescent's emotional readiness to engage fully in the parenting role. Results from a recent meta-analysis of the effects of programs for expectant parents found small but significant positive effects for reducing postnatal parental stress and enhancing couple adjustment (Pinquart & Teubert, 2010). It remains to be seen, though, whether the benefits of parenting preparedness by pregnant adolescents translates into positive family-level postpartum functioning.

The *financial strain* involved in providing for a baby is also likely consequential for family postpartum adjustment. Financial strain has not been widely studied as a moderator of couples' adjustment to parenting and two studies failed to find a relation between prenatal financial stress and postnatal couple functioning (Belsky & Rovine, 1990; Doss et al., 2009). Even aside from having to provide for a needy infant, though, economic pressure can have significant adverse effects on family functioning, often leading to parents' psychological distress and taxed marital relations (Parke et al., 2004). Financial hardship at the time of an adolescent's pregnancy might contribute to stressed postpartum family relations because family members might resent having to financially support the adolescent's child.

Expectations of stress that result from an adolescent's childbearing are also likely important for postpartum family functioning. Failure to anticipate the baby's influence, and especially the tendency to overestimate its positive effects, are associated with pre-birth to post-birth increases in depression (Harwood, McLean, & Durkin, 2007) and declines in marital satisfaction (Kalmuss et al., 1992). Thus, anticipating moderate-to-high levels of postnatal family stress might be most adaptive for families with pregnant adolescents because it might more accurately prepare family members for the difficulties that lie ahead.

Because the families involved in the current study were Latino, and largely Mexican American, Mexican cultural values are important for understanding family change. A strong *familistic orientation*, or attitudes emphasizing the importance of family (Steidel & Contreras, 2003), might assuage the stresses associated with an adolescent's parenting and in turn ease families' postpartum adjustment. Indeed, a recent study found that a highly familistic orientation among pregnant Latina women negatively correlated with pregnancy stress and anxiety (Campos et al., 2008). Familistic beliefs, then, may portend high family cohesion and companionship as family members work together and bond emotionally in caring for the adolescent's baby.

Another aspect of *familism* is the belief in the need to perpetuate the family, with an emphasis on large nuclear and extended families (Burgess & Lock, 1945). Embedded within this belief is that high status is attained through childbearing because it enriches and extends the family. Indeed, adolescents have been observed to attain an elevated and more important status within their family as a result of becoming a parent (Furstenberg, 1980). Attitudes consistent with the status benefits of parenthood might facilitate family postpartum adjustment because the family might experience (or perceive to experience) indirect gains in status within their neighborhood and community as a result of the adolescent's childbearing. It is also possible, however, that families that ascribe a high status to parenting might experience greater disequilibrium following an adolescent's childbearing due to the realignment of family roles and relationships as the adolescent adopts a more respected position within the family.

Gender traditionality is also emphasized within Mexican American culture, with daughters often socialized toward mothering, child care and family roles (Gowan & Trevino, 1998). Families that hold highly traditional gender-role expectations might experience less

postpartum conflict than families that hold nontraditional gender attitudes because the parenting adolescent is fulfilling a traditionally-prescribed role, that of mother (MacDermid et al., 1990).

Acculturation is an additional influence on Mexican American families that reflects the degree to which the host culture's values and beliefs are adopted (Marin, 1993). As Latinos acculturate to the Anglo-American culture, they often develop a weakened sense of family duty and begin to adopt attitudes oriented towards individualism and self-sufficiency (Sabogal, Marin, Otero-Sabogal, Marin, & Perez-Stable, 1987). As such, families that are *more* acculturated might experience more conflict and duress following an adolescent's childbearing, while *less* acculturated families might develop a greater sense of post-birth closeness and solidarity. Nadeem and Romo (2008) compared English- and Spanish-speaking Latino adolescent-mother dyads in which the adolescent was pregnant and found that the Spanish-speaking adolescents (a proxy of lesser acculturation) reported more positive feelings about their pregnancy and more support from their mothers than the English-speaking adolescents. The current study examines how family members' level of acculturation predicts family functioning following an adolescent's childbearing.

The Current Study

The current study examines how families change after an adolescent daughter has a baby and how individual and family characteristics evident in the prenatal period predict postpartum family adjustment at 1 year and changes in family functioning across time. Drawing from the literature reviewed, we hypothesize that family conflict will increase and that family closeness will also increase. We further anticipate that family companionship will decline as the time demands of caring for an infant supplant leisurely time spent together. In efforts to better understand how each family member is affected by an adolescent's childbearing, it is useful to compare the viewpoints of various family members. Results from Cervera's (1994) study of family change across adolescents' transition to parenthood showed that adolescents reported poorer post-birth family functioning than their mothers or fathers, which was thought to reflect the adolescent's belief that her parents were unsupportive of her and her baby. The current study compares the reports of family functioning from the parenting adolescent, a younger sibling and their mother.

Method

Participants and Study Design

Families were eligible for the study if there was an adolescent daughter (15–19 years of age) who was pregnant for the first time and no other sibling had previously experienced or caused an adolescent pregnancy. Families were recruited by identifying eligible (first-time pregnant, unmarried, Latina) adolescents from high schools, Women, Infants, and Children (WIC) program centers, and community clinics throughout southern California. Eligible pregnant adolescents, their younger siblings and their mothers were invited to participate in the study, and 97% did so. Younger siblings were eligible if they were between 11 and 18 years of age, biologically related to the pregnant adolescent, and had been living with her at the time of her pregnancy and planned to continue living with her after her baby was born. Ninety six families were enrolled into the study. Five pregnant teens were unable to participate at baseline, but completed the follow-up assessments. Of the 96 enrolled families, 122 younger siblings participated. To eliminate clustering of cases within family, only one younger sibling (the oldest) per family was included in analyses. One younger sibling was determined to be mentally disabled at the initial home visit and her data were not included in the analyses.

Families participated at four time points: when the adolescent was in her 3rd trimester of pregnancy, and when her baby was 2 months, 6 months, and 1 year old. At enrollment, pregnant adolescents were an average age of 17.3 years ($SD = 1.2$) and an average of 7.5 months pregnant (5–10 mos). Most pregnant adolescents were born in the United States (75%); the remainder were born in Mexico. Younger siblings were an average age of 14.2 years at enrollment ($SD = 1.8$) and 55 were female (58%). The majority of siblings were born in the United States (82%); the others were born in Mexico. The pregnant adolescents' mothers were an average age of 40 years at enrollment (30–57 yrs), and most were born in Mexico (78%); the others were born in the U.S (18%), or Central America or Puerto Rico (4%). Most families were economically disadvantaged: the average annual family income was \$18,525 for an average household of six persons, and 66% of families were receiving governmental financial assistance at enrollment.

Procedure

All participants completed a short interview and a self-administered questionnaire in their home at the four study time points. Two female research assistants, who were fluent in Spanish, administered the interview and provided instructions for completing the questionnaire. The home visit lasted about 1 hour. All pregnant adolescents and their younger siblings completed the study interview and questionnaire in English. The mothers responded in either English (30%) or Spanish (70%), whichever was most comfortable for them. All participants were paid \$20 at each time point, and all were assured of the confidentiality of their responses. Confidentiality was facilitated by labeling the study interview and questionnaire with a numeric ID only. This study's procedures were approved by the researchers' university Human Subjects Protections Program.

Measures

The study questionnaire had an approximate third-grade reading level (as ascertained by the Flesch-Kincaid readability method). At the prenatal assessment, all family members completed questions about their expectations of family stress resulting from the adolescent's childbearing and their attitudes of familism, gender roles, and the status attained by childbearing. Also at the prenatal assessment, the pregnant adolescents completed questions about the planfulness of their pregnancy and their preparations for parenthood, and the adolescents' mothers completed questions about family financial strain and their level of acculturation. At all time points, all respondents completed questions about their family's conflict, cohesion and companionship; identical items and response options were used for all respondents across all time points.

Prenatal Predictors

Adolescents' planfulness of pregnancy—Pregnant adolescents indicated how much their pregnancy was planned ($1 = \text{not planned at all}$ to $4 = \text{very much planned}$) and intended ($1 = \text{not intended at all}$ to $4 = \text{very much intended}$), and the two scores were averaged ($\alpha = .83$).

Adolescents' prenatal preparations for parenthood—Pregnant adolescents completed three questions that asked their intentions regarding taking a childbirth class and a parenting class. Response options were $1 = \text{not taken, no plans to take}$; $2 = \text{don't know, still deciding}$; and $3 = \text{yes, have already taken or signed up}$. Adolescents also were asked if they were reading books or magazines to help prepare for their baby ($1 = \text{no}$; $2 = \text{yes, sometimes}$; and $3 = \text{yes, a lot}$). These three items were averaged to form one score of preparation for parenthood ($\alpha = .55$).

Mothers' ratings of family financial hardship—Mothers responded to questions about the difficulty their family had during the last month paying for 14 expenses of daily living, such as food, the house payment or apartment rent, clothes and electricity. Response options ranged from 1 (*not difficult at all*) to 5 (*very difficult*). An additional response option of “*we do not have this expense because we can't afford it*” was coded as a 5, and the response option of “*we did not have this expense last month*” was coded as missing. The available ratings were then averaged across the number of completed items, with an internal consistency of .97.

Expectations of family stress resulting from the adolescent's childbearing—

All study participants completed four questions about the anticipated family stress derived from the adolescent's childbearing. These items were devised specifically for this study and asked: “*Do you think your daughter [your sister, you] having a baby will: put a lot of stress on your family,*” “*be a burden for your family,*” “*cause tensions and arguments within your family,*” and “*be a burden for your relatives?*” Response options ranged from 1 (*no, not at all*) to 5 (*yes, a lot*). The four items had high internal reliability for each respondent (α 's ranged from .82 to .94), thus all items were averaged (within rater) to form one score of anticipated family stress.

Familistic attitudes—Each family members' attitudes about the importance of family were assessed by three items devised specifically for this study to capture the essential elements of Latino attitudinal familism (as discussed by Steidel, & Contreras, 2003): the importance of one's obligations to family (“*I take my family obligations very seriously*”); the subjugation of self to family (“*My family comes first*”); and the importance of family (“*My family is extremely important to me*”). An item from the original Bardis familism scale (1959) assessing subjugation of self to family (“*A person should always consider the needs of his or her family as more important than his or her own needs*”) was also asked. Response options ranged from 1 (*strongly disagree*) to 5 (*strongly agree*). The four items had high internal reliability for each respondent (α 's ranged from .76 to .81), thus, responses were averaged (within rater) to form one score of familistic attitudes.

Status gained from childbearing—Participants responded to six questions devised specifically for this study about their perceptions of the status brought about by childbearing (“*Having a baby makes you an important person in the community and neighborhood*”) using a 5-point Likert scale (5 = *strongly agree*). All items had good internal reliability (α = .93 for pregnant adolescents, mothers, and siblings), thus, responses were averaged (within family member) to reflect respondents' perceptions of the status attained by childbearing.

Gender-role attitudes—This was assessed using the 13-item Attitudes toward Family Roles Scale (Hoffman & Kloska, 1995), in which respondents rated their agreement on a 5-point Likert scale (1 = *strongly disagree* to 5 = *strongly agree*) to statements of traditional gender roles (“*Housework and child care should be more a woman's job than a man's*”). The items had high internal reliability (α 's ranged from .83 to .87), thus, responses were averaged (within rater) to form one score reflecting endorsement of traditional gender roles.

Mothers' acculturation—The 13-item Short Acculturation Scale for Hispanics (Marin, Sabogal, Marin, Otero-Sabogal, & Perez-Stable, 1987) was used to assess mothers' level of acculturation. Items ask about mothers' integration into the dominant U.S. culture in their language use, media use, and in their and their children's social networks. The possible score range was 1 to 5, with high scores reflecting high acculturation (α = .95).

Across-Time Family Outcomes

Family conflict—Five items drawn from the conflict sub-scale of the Family Environment Scale were used to assess family conflict within the last month (Moos & Moos, 1984; “*how often did family members fight or argue with one another?*”). (Items assessing physical aggression were not used.) Response options ranged from 1 (*never*) to 5 (*very often*). Internal consistencies ranged from .83 to .93 for all three family members across the four time points and averaged .88. Thus, the five items were averaged within person at each of the four study time points.

Family cohesion—Three items drawn from Family Adaptability and Cohesion Evaluation Scales were used to assess family cohesion (Olson et al., 1984; “*Family members feel very close to each other*”), with response options ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). (Items that index family support were not used.) The Cronbach alphas ranged from .81 to .93 for all family members across the four time points and averaged .87. These items were averaged within person at each of the four study time points to form a score indicative of family cohesion.

Family companionship—Three items were drawn from the FACES-III ‘time together’ subscale (Olson et al., 1984) to assess family companionship (e.g., “*Family members like to spend their free time with each other*”), with response options ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Four additional items asked how often during the last week they: “*looked forward to spending time with your family,*” “*did something fun with your family at home,*” “*did something fun with your family outside of home,*” and “*ate dinner with your family.*” Response options ranged from 1 (*never*) to 5 (*5 or more times*). These seven items had good internal reliability (alphas ranged from .76 to .89, and averaged .84) and were averaged (within rater and time point) to form one score of family companionship.

Analytic Strategy

We constructed latent growth curves using Mplus 5.1 (Muthén & Muthén, 1998–2007). Using all four time points, growth trajectories were modeled with intercept, slope, and if the trajectory was curvilinear, quadratic terms. We chose the final time point as the intercept (rather than the first time point) because we were interested in outcomes *after* the baby was born. Furthermore, we set one unit of time to equal 10 months, which is equal to the time between the second (2 months postpartum), and fourth (12 months postpartum) study time point. All cases were retained for analysis using the full information maximum likelihood (FIML). Given the relatively small sample size, we used maximum likelihood with robust standard errors (MLR), which approximates the Bentler-Yuan test statistic that performs well for models with small samples (Muthén & Muthén, 1998–2007). We used three model fit indices to examine how well our models fit the data: chi-square values, the comparative fit index, and the root mean square error of approximation. Our first step in data analysis was to estimate the intercept, slope, and quadratic terms of each family outcome as rated by the pregnant adolescents, their mothers and younger siblings. Next, we explored rater differences in intercepts and slopes. We determined that two values were different if the 95% confidence intervals (two standard errors) of the two values did not overlap each other. Finally, we tested whether various prenatal factors predicted the intercept, slope, and quadratic growth terms.

Results

Attrition Analysis

Seventy-three families remained in the study through the final time point, and 23 attrited. To assess whether selective attrition occurred, we compared families who remained in the

sample at 1 year postpartum with those who had dropped out by that time on the prenatal predictors, the family functioning variables as assessed at Time 1, and demographic characteristics (family income, mothers' education, mothers' acculturation, and participants' ages). One significant difference emerged: pregnant adolescents who attrited expected lower family stress compared to pregnant adolescents who remained in the sample. Two marginal differences also emerged, with pregnant adolescents who attrited slightly older and holding slightly more traditional gender-role attitudes than those who remained in the sample.

Trajectories of Family Conflict, Cohesion, and Companionship

The means and standard deviations of all study variables are shown in Table 1. Correlations between the prenatal predictor variables and the family functioning variables as assessed at 1 year postpartum are presented in Table 2. (A full correlation table between all study variables can be obtained from the authors by request.) Growth trajectories were conducted on the three family outcomes one at a time in separate models (results shown in Table 3). Turning first to reports of family conflict, parenting adolescents' ratings of family conflict showed an initial decrease followed by a significant increase after 6 months ($B = .81$ and $.59$, linear and quadratic effects, respectively). Note that the linear component reflects instantaneous change at the intercept, or the final time point. Thus, the positive linear component reflects an increase in family conflict at 1 year. Ratings of family conflict by mothers and younger siblings did not change significantly across time. For family cohesion, parenting adolescents' ratings also showed significant linear ($B = .93$) and quadratic increases ($B = .42$), indicating that parenting adolescents' ratings of family cohesion increased and at an increasingly rapid rate over time. Younger siblings' ratings of family cohesion also increased significantly across time ($B = .22$), whereas mothers' ratings declined ($B = -.18$). The growth model for parenting adolescents' ratings of family companionship revealed poor model fit; therefore no further analyses were conducted using these scores. Mothers' and younger siblings' ratings of family companionship showed significant linear declines across time ($B = -.16$ and $B = -.23$, respectively).

Differences in Family Functioning by Rater

Some growth trajectories differed across family members. For family conflict, the linear increase reported by parenting adolescents ($B = .81$) was significantly greater than that reported by mothers ($B = .08$) and younger siblings ($B = .11$). There were no differences between family members in their ratings of family conflict at 1 year. For family cohesion, the linear increase reported by parenting adolescents ($B = .93$) was significantly greater than that reported by mothers ($B = -.18$) and younger siblings ($B = .22$), but there were no differences in ratings of family cohesion at year 1. For family companionship, the linear declines found for mothers and younger siblings were not significantly different. However, at 1 year, mothers reported significantly higher family companionship ($B = 3.37$) than younger siblings ($B = 2.88$).

Predictors of Trajectories

Model fit was adequate to good for most models (estimates from models with poor fit are not presented). Younger sibling age and gender were included as covariates in all analyses. Sibling age and gender had three significant effects on family functioning: older younger siblings reported lower family companionship at 1 year ($B = -.14$, $p < .05$), and mothers' reports of family conflict were significantly higher at 1 year ($B = .41$, $p < .05$), and increased significantly across time ($B = .36$, $p < .05$) when younger siblings were female (not shown). Age of the pregnant adolescent at enrollment and family income were originally included as covariates, but both variables had almost no significant effects on any growth terms (the exception was that lower income was related to younger sibling reports of higher family

cohesion). Therefore, age of the pregnant adolescent and family income were not retained as covariates.

Pregnancy planned—Having planned and intended the pregnancy was associated with lower family conflict as reported by mothers at 1 year ($B = -.33$) and a decline in mothers' reports of family conflict ($B = -.19$). Having a more planned pregnancy was also associated with higher family cohesion as rated by parenting adolescents at 1 year ($B = .26$) and higher family companionship as rated by mothers at 1 year ($B = .25$).

Preparations for baby—Actively preparing for the baby was associated with parenting adolescents' and their mothers' reports of more family conflict at 1 year ($B = .46$ and $B = .42$, respectively), and significant increases in mothers' reports of family conflict ($B = .25$). Actively preparing for the baby was also associated with lower family cohesion at 1 year as reported by mothers ($B = -.38$) and younger siblings ($B = -.31$), and a sharper decline in mothers' reports of cohesion ($B = -.35$). More preparation for the baby was also related to mothers' lower ratings at 1 year and sharper declines in family companionship ($B = -.40$ and $B = -.21$, respectively).

Family financial hardship—High levels of prenatal financial difficulty were associated with lower family cohesion as reported by parenting adolescents at 1 year ($B = -.19$), and weaker linear ($B = -.59$) and curvilinear ($B = -.32$; $p < .06$) increases in cohesion as reported by adolescents (recall that parenting adolescents' reports of cohesion increased overall). Also, greater financial difficulty was associated with significant increases in family conflict as reported by mothers ($B = .18$). High financial difficulty had one positive association, though, which was a decline in younger sibling ratings of family conflict ($B = -.17$).

Expected family stress—Expectations of high family stress resulting from the teen's childbearing were associated with a weaker linear ($B = -.57$) and curvilinear ($B = -.43$) increase in family cohesion as reported by parenting adolescents (recall that parenting adolescents' reports of cohesion increased overall), and lower family cohesion as reported by mothers at 1 year ($B = -.32$). Expecting high family stress was also associated with lower family companionship as reported by younger siblings at 1 year ($B = -.29$) and marginally associated with higher family conflict at 1 year as reported by both mothers ($B = .27$) and younger siblings ($B = .22$).

Latino attitudinal familism—Strong familistic attitudes were associated with lower levels of family conflict at 1 year as reported by mothers ($B = -.84$) and younger siblings ($B = -.35$). However, recall that the slope and quadratic terms for mothers' and younger siblings' reports of family conflict were nonsignificant—that is, they did not change significantly across time. Therefore, strong familistic attitudes were consistently associated with lower levels of family conflict, from prenatally through 1 year. High familism also had a marginal effect of suppressing the curvilinear increase in family conflict as reported by parenting adolescents (quadratic term: $B = -.81$). High importance of family was also associated with high family cohesion as reported by mothers at 1 year ($B = .86$) and a sharper curvilinear increase in family cohesion as reported by parenting adolescents (quadratic term: $B = .89$). However, high familism had a negative effect on change in younger siblings' reports of family cohesion ($B = -.23$) and was associated with sharper declines in younger sibling-reported family companionship ($B = -.25$).

Status attained by childbearing—Beliefs that childbearing grants one status were associated with weaker linear ($B = -.64$) and curvilinear ($B = -.50$) change in family

conflict across time as rated by parenting adolescents, and higher family cohesion at 1 year as rated by parenting adolescents ($B = .22$). Attributing high status to child-bearing was also associated with higher family companionship at 1 year as rated by siblings ($B = .21$) and mothers ($B = .15$, $p < .06$).

Gender-role attitudes—Having more traditional gender attitudes had a positive effect on change in mother reports of family cohesion at 1 year ($B = .19$) and a positive effect on change in mother reports of family companionship across time ($B = .18$). Younger siblings who held more traditional gender-role attitudes also reported significantly higher levels of family companionship at 1 year ($B = .35$) and marginally higher levels of family cohesion at 1 year ($B = .24$).

Mothers' acculturation—The relationship between mothers' acculturation and family functioning was mixed. When mothers were more acculturated, their ratings of family cohesion were lower at 1 year ($B = -.23$) and sharply declined across time ($B = -.14$). However, when mothers were more acculturated, younger siblings reported a decline in family conflict across time ($B = -.18$).

Discussion

As a whole, results were consistent with expectations and indicated significant family-level change following an adolescent's childbearing, though there were notable differences between family members in their perceptions of family functioning. Family conflict, as perceived by parenting teens, increased in the latter half of the first year after an initial decline, and family companionship (as rated by siblings and mothers) decreased. Parenting adolescents and siblings perceived a significant increase in family cohesion over time, whereas mothers perceived a significant decline. The initial drop in adolescents' reports of family conflict might reflect their preoccupation with infant caretaking which limits their family interactions and, hence, their perceptions of family conflict. The declining trajectories of family companionship as reported by mothers and younger siblings support this interpretation. The sharp increase in adolescents' reports of family conflict at 6 months might reflect the difficulties of parenting an increasingly mobile infant within a confined household. Parenting adolescents also perceived greater changes in family functioning (conflict and cohesion) than either mothers or younger siblings, perhaps because they are most impacted by their childbearing. As numerous studies on adult couples have pointed out, the transition to parenthood is experienced differently by different participants (Kurdek, 1993; Nomaguchi & Milki, 2003).

Regarding the prenatal predictors of postbirth family functioning, as hypothesized, unplanned pregnancies portended stressed family relations. When pregnancies were unplanned, mothers' reports of family conflict increased and, 1 year after the baby was born, parenting adolescents and mothers reported lower family cohesion and companionship, respectively. High financial strain also predicted problematic family functioning. When financial strain was high prenatally, mothers reported increases in family conflict and parenting adolescents reported decreases in family cohesion. However, younger siblings reported decreases in family conflict. Contrary to the literature, prenatal expectations of high family stress resulting from the adolescent's childbearing also forecasted distressed family functioning (i.e., parenting adolescents reported declines in family cohesion, and mothers and younger siblings reported lower levels of cohesion and companionship, respectively, at 1 year). Thus, pessimistic expectations did not help prepare for the stresses that lie ahead but, rather, families that anticipated little stress did best. All of these conditions can potentially be used to identify families at greatest risk of poor postpartum functioning.

Contrary to expectations, adolescents' prenatal efforts to prepare for parenting forecasted problematic family relations, particularly as rated by mothers. This might reflect the tensions that arise when expectant adolescents take steps to fully prepare for their new role as mother. In this case, mothers might feel left out or unneeded and this might lead to conflict (Nadeem & Romo, 2008). Similarly, perhaps the advice the teenager was learning in her preparations for parenting contradicted with her mother's advice and this resulted in conflict. Although parenting preparedness classes generally help adult couples navigate parenthood (Pinquart & Teubert, 2010), they may not address the special challenges faced by adolescents and their mothers struggling to co-parent.

Families that held attitudes consistent with traditional gender-roles and that high status is attained through parenting weathered the transition more favorably: that is, mothers reported increases in family cohesion and companionship, older sisters reported decreases in family conflict; and at 1 year, younger siblings reported greater family companionship and parenting adolescents reported more family closeness. It may be that because the parenting adolescent achieves a valued traditional role and is believed to attain a higher social standing, family functioning benefited. Also, perhaps family relations profited because family members believed that they too had attained an elevated status within their neighborhood via the adolescent's childbearing.

More familistic attitudes and mothers' acculturation level were differentially associated with mothers' and younger siblings' reports of postpartum family functioning. Specifically, high familistic attitudes and mothers' low acculturation (or stronger Mexican orientation) predicted favorable family functioning as rated by mothers (declines in family conflict, increased family cohesion at 1 year) but poorer family adjustment as perceived by younger siblings (increases in conflict, declines in companionship). This suggests that an acculturation gap between mothers and their younger children might explain differences in their perceptions of family, with mothers' strong cultural ties favorably coloring their perceptions of family functioning but negatively affecting children's views (c.f., Smokowski, Rose & Bacallao, 2008). High familism in this case, might portend to ties that bond for mothers, but ties that bind for younger children.

Limitations

A limitation of the current study was the lack of information of family functioning prior to the adolescent's pregnancy, which might have revealed more typical family dynamics and a better reference point with which to compare post-baby family functioning. There is a general consensus in the transition to parenthood literature that the prenatal period is not a representative baseline with which to compare postpartum functioning, primarily because it is a honeymoon period of inflated happiness due to the anticipation of the baby (Mitnick et al., 2009). In this case, declines in family functioning might represent only a return to pre-pregnancy levels. It is also important to recognize that the families of adolescents who become pregnant and give birth differ in important ways from the families of adolescents who delay parenthood until adulthood (Miller, Benson, & Galbraith, 2001). Indeed, the declines in family functioning revealed in the current study might reflect a general escalation of tensions within families that have problematic adolescent children. It is not entirely clear that the adolescents' transition to parenthood itself has a disruptive effect on family functioning.

In addition, study analyses were limited by the sample size of participating families. For example, the three reporters' assessments of family functioning were examined separately rather than combined into latent variables, which would have afforded a more parsimonious test of the hypotheses (although this would have precluded comparisons between raters). Also, multiple group analysis could have more directly tested whether the three reporters

differed in their assessment of family functioning. We suggest that future work incorporate these types of statistical approaches. We also encourage future research to adopt a more multivariate approach to the analysis of predictor variables, because some predictors might interact to affect subsequent family functioning (e.g., financial strain might hinder one's ability to prepare for parenting).

This study was also limited in that some of the study constructs were assessed with items specifically developed for this study and, thus, the validity of these scales is not fully known. Furthermore, the predictor variable of prenatal preparations had a somewhat low internal consistency and, thus, results pertaining to this variable should be considered cautiously. This study also did not have information on the father of the baby and it is widely known that father involvement plays a key role in adolescent mothers' adjustment to parenting (Florsheim et al., 2003). Too, neither older siblings nor the adolescents' fathers provided assessments of family functioning. Results might have been different had such individuals participated.

Finally, for the growth curve analyses we chose to use family functioning at 1 year postpartum as the intercept. This was necessary to address how families adjust to an adolescent's parenting, which we defined as occurring at one year postpartum. This decision, though, precluded an ability to examine how this study's prenatal predictors (e.g., levels of familism and acculturation) relate to prenatal family functioning.

Conclusions

Despite these limitations, this is the first study to our knowledge that has examined change in adolescents' families of origin across the first year of an adolescent's parenting. The present study included the perspectives of multiple family members, and thus better captured the nuances of family change than if only one family member was studied. Furthermore, this study identified several prenatal characteristics that predicted postpartum family adaptation. These findings suggest what factors to target for intervention programs aimed at facilitating families' adjustment to an adolescent daughter's childbearing.

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References

- Bardis P. A familism scale. *Journal of Marriage and the Family*. 1959; 21:340–341.
- Belsky J, Rovine M. Patterns of marital change across the transition to parenthood: Pregnancy to three years postpartum. *Journal of Marriage and the Family*. 1990; 52:5–19.
- Burgess, E.; Locke, H. *The family: From institution to companionship*. New York: American Book Co; 1945.
- Campos B, Dunkel Schetter C, Abdou CM, Hobel CJ, Glynn LM, Sandman CA. Familialism, social support, and stress: Positive implications for pregnant Latinas. *Cultural Diversity and Ethnic Minority Psychology*. 2008; 14:155–162. [PubMed: 18426288]
- Cervera N. Family change during an unwed teenage pregnancy. *Journal of Youth and Adolescence*. 1994; 23:119–140. [PubMed: 12287750]
- Claxton A, Perry-Jenkins M. No fun anymore: Leisure and marital quality across the transition to parenthood. *Journal of Marriage and Family*. 2008; 70:28– 43. [PubMed: 20224746]
- Cox MJ, Paley B, Burchinal M, Payne CC. Marital perceptions across the transition to parenthood. *Journal of Marriage and the Family*. 1999; 61:611– 625.

- Doss BD, Rhoades GK, Stanley SM, Markman HJ. The effect of the transition to parenthood on relationship quality: An 8-year prospective study. *Journal of Personality and Social Psychology*. 2009; 96:601–619. [PubMed: 19254107]
- Finer LB, Henshaw SK. Disparities in the rates of unintended pregnancies in the United States, 1994, 2001. *Perspectives on Sexual and Reproductive Health*. 2006; 38:90–96. [PubMed: 16772190]
- Florsheim P, Sumida S, McCann M, Winstanley M, Fukui R, Seefeldt T, Moore D. The transition to parenthood among young African American and Latino couples: Relational predictors of risk for parental dysfunction. *Journal of Family Psychology*. 2003; 17:65–79. [PubMed: 12666464]
- Furstenberg FF. Burdens and benefits: The impact of early childbearing on the family. *Journal of Social Issues*. 1980; 36:64–87.
- Gowan M, Trevino M. An examination of gender differences in Mexican-American attitudes toward family and career roles. *Sex Roles*. 1998; 38:1079–1093.
- Hamilton BE, Martin JA, Ventura SJ. Births: Preliminary data for 2008. *National Vital Statistics Reports*. 2010; 58:1–17. [PubMed: 21254725]
- Harwood K, McLean N, Durkin K. First-time mothers' expectations of parenthood: What happens when optimistic expectations are not matched by later experiences? *Developmental Psychology*. 2007; 43:1–12. [PubMed: 17201504]
- Hoffman LW, Kloska DD. Parents' gender-based attitudes toward marital roles and child rearing: Development and validation of new measures. *Sex Roles*. 1995; 22:273–293.
- Kalmuss D, Davidson A, Cushman L. Parenting expectations, experiences, and adjustment to parenthood: A test of the violated expectations framework. *Journal of Marriage and the Family*. 1992; 54:516–526.
- Kluwer ES, Johnson MD. Conflict frequency and relationship quality across the transition to parenthood. *Journal of Marriage and Family*. 2007; 69:1089–1106.
- Kurdek LA. Nature and prediction of changes in marital quality for first-time parent and nonparent husbands and wives. *Journal of Family Psychology*. 1993; 6:255–265.
- Lawrence E, Rothman AD, Cobb RJ, Rothman MT, Bradbury TN. Marital satisfaction across the transition to parenthood. *Journal of Family Psychology*. 2008; 22:41–50. [PubMed: 18266531]
- MacDermid SM, Huston TL, McHale SM. Changes in marriage associated with the transition to parenthood: Individual differences as a function of sex-role attitudes and changes in the division of household labor. *Journal of Marriage and the Family*. 1990; 52:475–486.
- Manlove J, Mariner C, Papillo AR. Subsequent fertility among teen mothers: Longitudinal analyses of recent national data. *Journal of Marriage and the Family*. 2000; 62:430–448.
- Marin G. Influence of acculturation on familism and self-identification among Hispanics. In: Bernal, ME.; Knight, GP., editors. *Ethnic identity: Formation and transmission among Hispanics and other minorities*. Albany: State University of New York Press; 1993. p. 181–196.
- Marin G, Sabogal F, Marin BV, Otero-Sabogal R, Perez-Stable EJ. Development of a short acculturation scale for Hispanics. *Hispanic Journal of Behavioral Sciences*. 1987; 9:183–205.
- Miller BC, Benson B, Galbraith KA. Family relationships and adolescent pregnancy risk: A research synthesis. *Developmental Review*. 2001; 21:1–38.
- Mitnick DM, Heyman RE, Smith S, Amy M. Changes in relationship satisfaction across the transition to parenthood: A meta-analysis. *Journal of Family Psychology*. 2009; 23:848–852. [PubMed: 20001143]
- Moos, RH.; Moos, BS. *Family environment scale manual*. Palo Alto, CA: Consulting Psychologists Press, Inc; 1984.
- Muthén, LK.; Muthén, BO. *Mplus user's guide*. 5. Los Angeles, CA: Muthén & Muthén; 1998–2007.
- Nadeem E, Romo LF. Low-income Latina mothers' expectations for their pregnant daughters' autonomy and interdependence. *Journal of Research on Adolescence*. 2008; 18:215–238.
- Nomaguchi KM, Milkie MA. Costs and rewards of children: The effects of becoming a parent on adults' lives. *Journal of Marriage and Family*. 2003; 65:356–374.
- Obeidallah, DA.; Burton, LM. Affective ties between mothers and daughters in adolescent childbearing families. In: Cox, MJ.; Brooks-Gunn, J., editors. *Conflict and cohesion in families: Causes and consequences*. Mahwah, NJ: Erlbaum; 1999. p. 37–49.

- Olson, DH.; McCubbin, HI.; Barnes, H.; Larsen, A.; Muxen, M.; Wilson, M. Family inventories. St. Paul, MN: Family Social Science Center, University of Minnesota; 1984.
- Parke RD, Coltrane S, Duffy S, Buriel R, Dennis J, Powers J, French S, Widaman KF. Economic stress, parenting, and child adjustment in Mexican American and European American families. *Child Development*. 2004; 75:1632–1656. [PubMed: 15566370]
- Pinquart M, Teubert D. Effects of parenting education with expectant and new parents: A meta-analysis. *Journal of Family Psychology*. 2010; 24:316–327. [PubMed: 20545405]
- Sabogal F, Marin G, Otero-Sabogal R, Marin BV, Perez-Stable EJ. Latino familism and acculturation: What changes and what doesn't? *Hispanic Journal of Behavioral Sciences*. 1987; 9:397–412.
- Sheeder J, Tocce K, Stevens-Simon C. Reasons for ineffective contraceptive use antedating adolescent pregnancies: Part 2: A proxy for childbearing intentions. *Maternal and Child Health Journal*. 2009; 13:306–317. [PubMed: 18509750]
- Smokowski PR, Rose R, Bacallao ML. Acculturation and Latino family processes: How cultural involvement, biculturalism, and acculturation gaps influence family dynamics. *Family Relations*. 2008; 57:295–308.
- Steidel AGL, Contreras JM. A new familism scale for use with Latino populations. *Hispanic Journal of Behavioral Sciences*. 2003; 25:312–330.

Table 1

Means and Standard Deviations of Study Variables

Prenatal predictors (score range):	Prenatal		2 months postpartum		6 months postpartum		1 year postpartum	
	M	SD	M	SD	M	SD	M	SD
Pregnancy planned (1–4) (adolescent report)	1.45	0.75						
Preparations for baby (1–3) (adolescent report)	2.04	0.61						
Family financial difficulty (1–5) (mother report)	2.40	1.04						
Expected family stress (1–5)								
Pregnant adolescent report	1.88	0.73						
Mother report	1.60	0.62						
Younger sibling report	1.89	0.81						
Familistic attitudes (1–5)								
Pregnant adolescent report	4.39	0.64						
Mother report	4.89	0.25						
Younger sibling report	4.27	0.66						
Status attained by childbearing (1–5)								
Pregnant adolescent report	2.78	0.92						
Mother report	3.03	1.08						
Younger sibling report	2.83	1.07						
Traditional gender roles (1–5)								
Pregnant adolescent report	2.03	0.70						
Mother report	2.16	0.81						
Younger sibling report	2.55	0.77						
Mothers' acculturation (1–5)	2.15	0.94						
Family conflict (1–5)								
Pregnant/parenting adolescent report	2.18	0.95	1.99	0.88	1.88	0.74	2.18	1.04
Mother report	2.05	0.83	1.94	0.61	2.02	0.79	2.14	0.90
Younger sibling report	2.01	0.99	2.08	0.97	2.05	0.91	2.24	0.98
Family cohesion (1–5)								
Pregnant/parenting adolescent report	3.65	0.96	3.77	0.91	3.72	0.89	4.18	0.80
Mother report	4.18	0.74	4.01	0.80	3.98	0.77	3.97	0.82
Younger sibling report	3.58	0.94	3.65	0.88	3.55	0.88	3.95	0.86

Prenatal predictors (score range):	Prenatal		2 months postpartum		6 months postpartum		1 year postpartum	
	M	SD	M	SD	M	SD	M	SD
Family companionship (1–5)								
Pregnant/parenting adolescent report	3.17	1.01	3.36	1.08	3.07	1.01	3.16	0.97
Mother report	3.59	0.74	3.53	0.73	3.42	0.79	3.39	0.86
Younger sibling report	3.16	0.97	3.19	1.02	2.87	0.95	2.87	0.98

Note. N = 91 pregnant adolescents at the prenatal assessment and 96 parenting adolescents at the postpartum assessments; 96 mothers and 95 younger siblings. Possible score ranges are shown in parentheses. Higher scores reflect higher levels of that variable.

Table 2

Correlations Between Prenatal Predictors and Family Functioning at 1 Year Postpartum

Prenatal predictor (rater):	Family conflict			Family cohesion			Family companionship		
	Parenting adolescent report	Mother report	Younger sibling report	Parenting adolescent report	Mother report	Younger sibling report	Parenting adolescent report	Mother report	Younger sibling report
Younger sibling is girl	-.04	.18	-.08	.07	-.16	-.11	.08	-.03	.04
Younger sibling age	.11	-.04	.11	-.07	.09	.01	-.09	.00	-.21
Pregnancy planned (pregnant adolescent)	-.14	-.22	.09	.23	.27*	.05	.29*	.24	-.05
Preparations for baby (pregnant adolescent)	.27*	.22	.18	-.19	-.27*	-.28*	-.23	-.36**	-.14
Family financial difficulty (mother)	.13	.31*	-.07	-.19	-.10	-.08	-.11	-.13	-.06
Expected family stress (pregnant adolescent)	-.05			-.08			.02		
Expected family stress (mother)		.19			-.24*			-.19	
Expected family stress (younger sibling)			.23			-.12			-.30*
Familistic attitudes (pregnant adolescent)	-.09			-.11			-.01		
Familistic attitudes (mother)		-.32**			.32**			.13	
Familistic attitudes (younger sibling)			-.38**			.17			.32*
Status attained by childbearing (pregnant adolescent)	-.16			.20			.05		
Status attained by childbearing (mother)		-.11			.17			.21	
Status attained by childbearing (younger sibling)			-.18			.12			.26*
Traditional gender roles (pregnant adolescent)	-.08			.14			.16		
Traditional gender roles (mother)		-.21			.19			.20	
Traditional gender roles (younger sibling)			-.04			.13			.28*
Mothers' acculturation (mother)	.10	.07	.15	.05	-.18	-.21	.08	-.10	-.26*

* $p < .05$.

** $p < .01$.

Table 3
Results of Growth Curve Estimates and Predictors of Trajectories of Family Functioning Across Adolescents' Transition to Parenthood

Predictors															
Overall growth curve		Pregnancy planned		Preparations for baby		Family financial difficulty		Expected family stress (by rater)		Status attained by childbearing (by rater)		Traditional gender roles (by rater)		Mothers' acculturation	
Coeff.	SE	Coeff.		Coeff.		Coeff.		Coeff.		Coeff.		Coeff.		Coeff.	
Family conflict (1–5)															
Parenting adolescent report															
Intercept	2.20***	0.12		-.22	.46*	.16		-.12	-.25	-.12		-.24		.11	
Slope	0.81**	0.24		.37	.26	.19		-.15	-.92	-.13		-.64**		-.01	
Quadratic	0.59***	0.17		.42	.09	.05		-.07	-.81 [†]	-.05		-.50**		-.03	
Mother report															
Intercept	2.09***	0.08		-.33***	.42***	.15		.27 [†]	-.84**	-.16		-.11		.16	
Slope	0.08	0.07		-.19*	.25*	.18**		.04	-.25	-.16		-.10		-.01	
Younger sibling report															
Intercept	2.17***	0.10		.02	.19	-.06		.22 [†]	-.35*	-.09		-.14		.02	
Slope	0.11	0.08		.02	-.06	-.17*		-.12	.09	.05		-.08		-.18*	
Family cohesion (1–5)															
Parenting adolescent report															
Intercept	4.20***	0.10		.26**	-.23	-.19*		-.07	-.09	.17		.22*		.08	
Slope	0.93***	0.26		-.01	-.49	-.59*		-.57*	.53	.21		.19		.19	
Quadratic	0.42*	0.19		-.14	-.22	-.32 [†]		-.43*	.89*	.14		.12		.03	
Mother report															
Intercept	3.90***	0.09		_.a	-.38**	-.09		-.32*	.86**	.13		_.a		-.23*	
Slope	-.018*	0.07		_.a	-.35***	-.12		-.09	-.22	.19*		_.a		-.14*	
Younger sibling report															
Intercept	3.83***	0.10		.14	-.31*	-.10		-.19	.14	.24 [†]		.07		-.14	

Predictors																	
Overall growth curve		Pregnancy planned		Preparations for baby		Family financial difficulty		Expected family stress (by rater)		Familiistic attitudes (by rater)		Status attained by childbearing (by rater)		Traditional gender roles (by rater)		Mothers' acculturation	
Coeff.	SE	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.
Slope	0.22 *	0.09	.04	-.08	-.02	.18	-.23 *	.06	-.01	-.02							
Family companionship (1-5)																	
Parenting adolescent report																	
Intercept	_.a																
Slope	_.a																
Mother report																	
Intercept	3.37 ***	0.09	.25 **	-.40 **	-.05	-.13	.45	.15	.15 †	-.09							
Slope	-.016 **	0.06	.09	-.21 *	-.06	-.09	-.21	.18 **	.08	-.01							
Younger sibling report																	
Intercept	2.88 ***	0.11	_.a	_.a	-.06	-.29 *	.26	.35 *	.21 *	-.18							
Slope	-.023 **	0.08	_.a	_.a	.07	.00	-.25 *	.05	.07	.06							

Note. Younger sibling gender and age were included as covariates for all predictors. The intercept was calculated at 1 year postpartum.

^aModel has poor fit; coefficients could not be estimated.

[†] $p < .06$.

* $p < .05$.

** $p < .01$.

*** $p < .001$.