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The First Teenage Pregnancy in the Family: Does It Affect Mothers' Parenting, Attitudes, or Mother-Adolescent Communication?

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Abstract

To understand the consequences of adolescent pregnancy and childbearing for the family, 189 mothers from three types of families were studied: families in which all teenage daughters had never been pregnant, families in which only one teenager was currently pregnant, and families in which only one teenager had delivered a baby within the previous 6 months. In the latter two family types, the current pregnancy or childbearing was the first to occur in the family. Mothers were assessed twice, 13 months apart. Results indicated that, compared with the mothers of never-pregnant teens, the mothers of parenting teens monitored their children less, expected less of their older daughters, and were more accepting of teenage childbearing. Across-time analyses showed that, in families in which the teenager was initially pregnant, mothers monitored and communicated less with their other children and were more accepting of teenage sex after the older daughter gave birth. In families in which the teenager was initially parenting, mothers perceived more difficulty for their teenage daughters and reported being less strict with their other children across time.

Keywords

adolescent childbearing; adolescent pregnancy; Hispanics; parent-adolescent communication; parenting; younger siblings' pregnancy risk

When an adolescent becomes pregnant and bears a child, it is reasonable to expect that this affects the adolescent's family, if only because the new baby often becomes part of the family household and requires a great deal of care and attention. But how adolescent childbearing impacts the adolescent's family of origin, particularly her parents' parenting and her siblings' development, has been a completely neglected area of study. With close to 80% of teens continuing to reside within their family of origin 1 year after they give birth (Hogan, Hao, & Parish, 1990; Trent & Harlan, 1994) and with the younger siblings of teenage mothers themselves having an elevated rate of early parenthood (Cox, Emans, & Bithoney, 1993; East & Felice, 1992; Friede et al., 1986), such effects on the family surely have important practical and policy implications.

The research that has examined the impact of adolescent childbearing on the family has generally taken three forms: the effects of teenage childbearing on a family's intergenerational structure, whereby a history of early parenting creates an age-condensed multigenerational family structure (e.g., Burton, 1995, 1996a, 1996b; Ladner, 1988); its effects on family residential patterns and household composition (e.g., Hogan et al., 1990; Trent & Harlan, 1994); and its effect of eliciting family support, particularly child-care assistance from the teen's mother (Brooks-Gunn & Chase-Lansdale, 1991; Furstenberg & Crawford, 1978). This last area of research has examined the quality of grandmothers'

parenting (Chase-Lansdale, Brooks-Gunn, & Zamsky, 1994) and its relation to outcomes of the teen's child (Spieker & Bensley, 1994) and to qualities of the adolescent's parenting (East & Felice, 1996). What these studies lack, however, is an analysis of how families change or adapt specifically in response to a teenager's pregnancy and birth.

In an attempt to understand the consequences of adolescent pregnancy and childbearing for the teen's family, this study examined mothers in three family types: those in which all the teenage daughters in the family had never been pregnant, those in which only one teenager in the family was currently pregnant, and those in which only one teenager in the family had delivered a baby not longer than 6 months previously. In the latter two family types, the current adolescent pregnancy or childbearing was the first to occur in the family. Mothers in these three family types were studied twice 13 months apart to assess how their parenting, their attitudes, and their communication with their children changed across time. A daughter's adolescent pregnancy and birth might alter her mother's parenting, for example, by diminishing the mother's ability to monitor her own children, by increasing a mother's acceptance of early non-marital childbearing, by reducing a mother's achievement expectations for her other children, and by compelling a mother to speak more often and more frankly with her other children about sex and contraception. I discuss the logic and theory for each of these effects.

The Effects of a Daughter's Pregnancy

Mothers' Monitoring

Families in which teenagers bear children have historically been characterized by grandparental childrearing systems, wherein the adolescent's mother typically provides the primary hands-on care for the teen's child (Burton, 1995, 1996a, 1996b). Because these grandparenting duties can be extensive and time consuming, they likely interfere with or distract the mother from monitoring or supervising her own children. Role strain theory postulates that the psychological stress associated with undertaking multiple roles impedes a person from performing well in any role (Goode, 1960). Thus, it may be that the time and role demands of caring for her daughter's child compromises a mother's ability to monitor her own children's behavior and activities.

It is also conceivable, however, that because of the older daughter's early pregnancy or birth, mothers might be even more rigorous in monitoring their other children. Although this possibility will be examined in the study presented here, the more practical responsibilities of caring for her daughter's child probably would diminish a mother's ability to oversee her own children's activities, especially given that most of these mothers are parenting (and grandparenting) alone without a coresident adult (Burton, 1995) and that the mother's other children are likely to be adolescents and monitoring their behavior is particularly difficult (Dornbusch et al., 1985).

Mothers' Acceptance of Teenage Parenting

An older daughter's early childbearing also might act to increase her mother's acceptance and tolerance of teenage sex and early nonmarital childbearing. Teenage parenting may be viewed with less stigma and less disgrace by the teenager's parents. Moreover, the daughter's early childbearing may signify to mothers the lack of real-life options available to their daughter. As a result, mothers may rationalize their daughter's teenage parenting as a reasonable and acceptable response to their disadvantaged socioeconomic circumstances. This kind of attitude change is akin to that described in Festinger's (1957) theory of cognitive dissonance, whereby the tension created by opposing attitudes and behaviors motivates a change in either the behavior or the attitude. Mothers of teenage daughters who become pregnant may come to believe that early childbearing is not that bad after all.

Mothers' Achievement Expectations

A teenager's pregnancy also might reduce her mother's achievement expectations for her other children. For example, the older daughter's early childbearing may demonstrate to her parents their inability to control their children's lives and life outcomes. Expectations for their other children may yield accordingly if parents believe that they have little control over their children's futures.

It is also plausible, however, that an opposite reaction might occur among parents. Because the older daughter has had a child while she was a teenager, parents might place even higher and more demanding expectations on their other children. Parents often are initially disappointed when a teenage daughter gives birth (Furstenberg, 1980), but they may perceive younger siblings as having potential for success. Realizing that the older daughter's school and job options are likely to be limited, parents might have even more demanding expectations of their other children. Because this is a new area of study and this issue has not been investigated, both expectations appear plausible.

Mothers' Communication with Their Children

Finally, an adolescent's early pregnancy might increase her mother's communication about sex and contraception with her other children. For example, mothers might be motivated to prevent a second pregnancy in the family and might view the older daughter's pregnancy as an opportunity to discuss contraception and ways of preventing pregnancy with their other children. Moreover, mothers may feel partly to blame for the older daughter's pregnancy and may see their lack of open communication about sex and birth control with the older daughter as one of the factors that possibly contributed to her becoming pregnant. These feelings may compel the mother to discuss sexuality and contraception more openly with her other children.

The Study

The study presented here sought to identify the effects of adolescent pregnancy and childbearing on the teen's family of origin by examining changes across time in mothers' parenting within families in which there was either a pregnant teenager or a parenting teenager. It was expected that, from Time 1 to Time 2, the mothers of pregnant and parenting teens would monitor their children less, be more accepting of early nonmarital parenting, have lower expectations for their other children, and communicate more about sex and contraception with their other children. This study also assessed other aspects of mothers' attitudes, such as their perceived importance of childbearing, the problems associated with early parenting, and the best ages to reach certain life course transitions. Differences in these mother characteristics across time in families in which the daughter was originally pregnant would reveal how mothers changed as a result of their daughter's giving birth. Differences in these mother characteristics across time in families in which the daughter was originally parenting would reveal how mothers changed across their daughter's first year postpartum.

This study also contrasted the mothers of never-pregnant teens with the mothers of pregnant teens and the mothers of parenting teens at Time 1 and Time 2. Mothers' monitoring of their children, their attitudes about sex and childbearing, and their communication with their children were compared. Differences in these characteristics among mothers could reveal the within-family risk factors that preceded the older daughter's pregnancy. That is, low parental monitoring, low expectations, permissive attitudes about sex, and poor mother-adolescent communication all have been shown to relate to teenage sexual activity and teenage pregnancy (Jaccard, Dittus, & Gordon, 1996; Miller, 1998; Miller, McCoy, Olson, & Wallace, 1986; Moore, Peterson & Furstenberg, 1986; Newcomer & Udry, 1984, 1985).

Thus, in the study presented here, the mothers of pregnant and parenting teens are expected to do less monitoring and to have lower expectations, more permissive sexual attitudes, and poorer communication with their children than the mothers of never-pregnant teens.

This study also sought to determine how mothers' time spent caring for their new grandchildren impacts their ability to supervise their own children. It was expected that as the number of hours that mothers spent caring for their grandchildren increased, mothers' monitoring of their own children would decrease. Finally, the mothers of parenting teens answered questions about how their older daughter's childbearing had affected their daughter's life. Mothers' responses to these items were analyzed across time to determine whether a mother's perceptions of the effects of her daughter's childbearing changed across the daughter's first year postpartum.

Methods

Sample

Respondents were 189 mothers who were recruited to participate in a study on the consequences of a teenager's pregnancy and childbearing for the family. Mothers were invited to participate only when the following eligibility criteria were met: (a) They had a teenage daughter between the ages of 15–19 years who had never been pregnant, who was currently pregnant for the first time (and intended to continue with the pregnancy and parent her child), or who had delivered her first child not longer than 6 months previously and had kept her child; (b) the mother had an 11- to 16-year-old younger child who was either a full biological sibling or a half-sibling to the older daughter; (c) both siblings were currently living together and had lived together for at least the last 5 years; (d) no other child in the family had become pregnant or had sired a child as a teen; and (e) the older daughter and all participating younger children spoke English. Thus, in the families in which the teenager was pregnant or was parenting, the current pregnancy or childbearing was the first to occur. Each participating family had only one identified target older sister. The pregnant or parenting teenager always was designated the target older sister. If a family had two or more eligible, never-pregnant older sisters, the youngest sister was designated the target older sister.

Families were recruited by identifying an eligible older sister first. Teens who were pregnant for the first time and primiparous parenting teens were recruited from a university teen obstetric clinic (47% of the sample), from four local Planned Parenthood clinics (10% of the sample), and from a snowball sampling technique that asked participants to recommend families who might qualify for the study (43% of the sample). The gravida and parity status of all prospective participants recruited from the university teen obstetric clinic was verified by reviewing medical charts. Self-reported parity and gravida status was used to screen participants recruited from the Planned Parenthood clinics and from snowball sampling. Never-pregnant teens were recruited from a university adolescent medicine clinic (41% of sample). Because the adolescent medicine clinic has access to all patients' medical records, the adolescent's never-pregnant status was verified for participants recruited at this site. In addition, never-pregnant adolescent women were recruited from surrounding Planned Parenthood clinics (13%) and from snowball sampling (46%). All recruitment sites were in the same urban area in Southern California within 10 miles of the U.S.-Mexico border. Older sister's ages and race and younger siblings' age and race did not differ for participants recruited from the different sites. Approximately 90% of all eligible families invited to participate did so.

Families participated between July, 1993, and February, 1995, for the Time 1 assessment and between August, 1994, and March, 1996, for the Time 2 assessment 13 months later. Of

the 189 mothers who participated at Time 1, 161 participated at Time 2 (85%). One teen who had never been pregnant at Time 1 was pregnant by Time 2. The mother data for this teen were not used at Time 2. In addition, at Time 2, 12 mothers of teens could not be located, two mothers had died, eight mothers had moved to another state and could not be located, and seven mothers had declined to participate. Fifteen families were excluded from all analyses because an adolescent in these families other than the target older sister had either become pregnant or delivered a child. Thus, the final sample at Time 1 consisted of 174 mothers, and the final sample at Time 2 consisted of 145 mothers.

Mothers' mean age at Time 1 and Time 2 is shown in Table 1, along with the ages of the older daughters and younger children. One-hundred and thirteen mothers were Mexican American Hispanic (65%), 44 were African American (25%), 11 were non-Hispanic White (6%), two were Asian (1%), and four were of an other race (3%). Mothers' racial-ethnic composition approximated that of the general population in the recruitment sites, which had clientele who were approximately 50% Hispanic, 30% Black, 10% White, and 10% other. Mothers in all three types of families were of comparable race and age, and mothers in all three family types were equally likely to participate at Time 2. Mothers from the three family types also had comparable ages at first birth, $M = 19.96$, $F(2, 169) = 0.86$, and equivalent percentages of mothers from the three family types were aged 19 or younger at their first birth, $\chi^2(2) = 0.50$. Fifty-four percent of mothers were 19 years old or younger at their first birth. Mothers' mean level of education was 10th grade. Mothers in all family types had similar educational attainment.

Pregnant (17.2 years) and parenting (17.6 years) teens were significantly older than never-pregnant teens (16.7 years), $F(2, 136) = 5.47$, $p < .01$. The targeted older daughter was firstborn in 45% of the families, secondborn in 32% of the families, thirdborn in 22% of the families, and fourthborn in fewer than 1% of the families. The birth order of the older sisters did not vary significantly for pregnant, parenting, or never-pregnant teens. Five parenting teens were married at the time of the study, and one never-pregnant teen was separated. All other older sisters had never been married. Younger siblings across the three family types were of comparable age, $F(2, 304) = 0.53$, racial composition, $\chi^2(2) = 2.31$, and gender composition, $\chi^2(2) = 0.76$. One-hundred and sixty younger siblings were girls, and 142 were boys.

The mean total annual family income of study families was \$16,050. Families of pregnant ($M = \$14,690$) and parenting ($M = \$13,915$) teens earned significantly less than families of never-pregnant teens ($M = \$18,280$), $F(2, 168) = 3.97$, $p < .05$. Seventy-eight percent of the sample had received welfare at one time, and 64% of the families were receiving governmental subsidies at Time 1. Among those currently receiving welfare, aid had been received for an average of 2 years. Significantly more pregnant (91%) and parenting (100%) families had ever received welfare than never-pregnant families (63%), $\chi^2(2) = 28.98$, $p < .001$, and significantly more pregnant (70%) and parenting (83%) families were receiving welfare at the time of the study than were never-pregnant families (46%), $\chi^2(2) = 20.61$, $p < .001$. The average family had four children, and 47% of study families were mother-only households. Seventeen percent of mothers were divorced, 16% were separated, 12% were never married, and 2% were widowed. Family size and the percentage of mother-only households did not differ for the three family types.

Procedure

All participating families were visited at home by one female research assistant who was bilingual in English and Spanish. Teens' mothers completed a short interview and a self-administered questionnaire at Time 1 and Time 2. Sixty-three percent of teens' mothers completed the interview and questionnaire in English, and 37% were interviewed in Spanish

and completed a Spanish version of the questionnaire. There were no significant differences in responses between Spanish-speaking mothers and English-speaking mothers. The home visits at both Times 1 and 2 lasted about 1 hour. All mothers were paid \$10 each for their participation, and all mothers were assured of the confidentiality of their responses.

Measures

Mothers completed a 102-item questionnaire about their parenting, their expectations for their children, their attitudes about sex and childbearing, and their communication about sex and contraception with their children.

Monitoring—Mothers' monitoring of their children was assessed with five items that asked how much the mothers really knew about their children's friends, how their children spend their money, what they do after school, where they go at night when they go out, and what they do with their free time. Responses ranged from 1 (*don't know at all*) to 5 (*know a lot*). This scale has been shown to have good concurrent validity with other parenting dimensions (e.g., parental emphasis on achievement, joint parent-adolescent decision making) and a Cronbach's alpha of .80 for a 3-point response option set to these items (Brown, Mounts, Lamborn, & Steinberg, 1993). The Cronbach's alpha of this scale, using the current sample, was .82. Note that this scale assessed mothers' perceptions of their knowledge of their children's activities and not the accuracy of those perceptions.

Mothers' expectations for achievement—Mothers responded to four items about the likelihood that their older daughter (the target older sister) and their younger children (all participating younger siblings) would do well in school, would graduate from high school, would continue his or her education beyond high school, and would get a good job. Response options ranged from 1 (*not likely at all*) to 5 (*very likely*). If the older sister had already graduated from high school, only the average of the latter two items was used. Mothers responded separately to these four items for each participating younger sibling. Using the current sample, these items had a Cronbach's alpha of .85 for items about the older sister and .86 for items about the younger siblings.

Acceptance of teenage sex and childbearing—Mothers responded to five items asking about their acceptance of teenagers having sex (e.g., "what is your attitude about teenagers having sexual intercourse before marriage?") and to five items about their acceptance of teenage childbearing (e.g., "it is okay for teenagers to have children"). Response options ranged from 1 (*usually wrong*) to 5 (*usually right*) and from I (*disagree*) to 5 (*agree*). High scores indicated an acceptance of teenage sex and teenage childbearing. The Cronbach's alpha for the acceptance of teenage sex was .71, and the Cronbach's alpha for the acceptance of teenage childbearing was .70.

Problems and importance of teenage childbearing—Mothers' perceptions about the problems incurred from teenage childbearing were assessed with four items that asked how teenage childbearing would affect a teen's chances of finishing high school, going to college, getting a good job, and having a good marriage and family life. One item asked how it would affect a teen's life in general. (Questions were about the effect on a teenager, in general, not about the effect on the mother's pregnant or parenting daughter, in particular.) Response options ranged from I (*it would be a lot easier*) to 5 (*it would be a lot harder*). Using the current sample, the Cronbach's alpha of these items was .84.

Mothers' perceptions of the perceived status or importance of childbearing were assessed with five statements: Having a child of your own makes you an important person, gains you the respect of others, makes people admire or look up to you, makes you important in the

family, and makes you an important person in the community and neighborhood. Response options ranged from 1 (*disagree*) to 5 (*agree*). High scores reflected perceptions that high status was incurred from childbearing. Using the current sample, the Cronbach's alpha of these items was .93.

Girl transition norms—Mothers responded to three items that asked the best ages for a girl to start having sex, to get married, and to have her first baby. Mothers were instructed to write the actual age on a blank line. These questions have been used previously with adults (Neugarten, Moore, & Lowe, 1965) and adolescents (Smith & Zabin, 1993) to gauge perceptions of the perceived normative timing of life course events. The internal reliability (Cronbach's alpha) of these items using the current sample was .84.

Mothers' communication about sex and contraception with their children—Mothers indicated how often they discussed and how comfortable they felt discussing sex and how often they discussed and how comfortable and how knowledgeable they felt discussing contraception ("birth control") with their older daughter (the target older sister) and with each of their younger children (all participating younger siblings). Response options ranged from 1 (not at all, uncomfortable, and not very knowledgeable) to 5 (*often, comfortable, and very knowledgeable*). Cronbach's alpha was .82 for items about communication with the older daughter and .77 for items about communication with the younger siblings.

Mothers' time spent caring for their grandchildren—The mothers of parenting teens were asked to indicate how many hours per week they spent caring for their daughter's child. This question was asked at Time 2 only.

Mothers' responses about the effects of their daughters' childbearing—The mothers of parenting teens also were asked to complete an additional 10 questions about how they thought their older daughter having a baby as a teen had affected their daughter's life, the mother's parenting, and the mother's younger children. (See Table 4 for these items.)

Results

Differences in Mother Characteristics for Families with a Never-Pregnant Teen, a Pregnant Teen, and a Parenting Teen

To determine whether mothers of never-pregnant, pregnant, and parenting teens differed in their parenting, their expectations for their children, their attitudes about sex and childbearing, and their communication with their children, a multivariate analysis of covariance was computed on the 10 scales of mothers' parenting and attitudes assessed at Time 1. A separate MANCOVA was computed on the same 10 scales assessed at Time 2. Older sisters' pregnancy status was the independent variable (i.e., pregnant, parenting, or never pregnant), and family income, if the family had ever received Aid to Families with Dependent Children, and the older daughter's age were used as control variables because families with a pregnant or parenting teen were more likely to have lower incomes, to have ever received welfare, and to have older teenage daughters. By statistically controlling for these effects, any differences that emerge among the three family types cannot be said to be due to factors related to family income, welfare receipt, or the older daughter's age within the usual limits of measurement error. To include mothers' expectations for their children and mothers' communication with their children in the MANCOVA, mothers' scores for only one younger sibling, chosen at random, were selected for inclusion in the MANCOVA. The multivariate F for the Time 1 scores was 2.34, $df = 20, 312$, $p < .001$. Thus, univariate follow-up tests were computed on the Time 1 scores that reached statistical significance in

the MANCOVA. (See Table 2 for the means and the univariate F values of the Time 1 scores.)

Results of the univariate tests conducted on the Time 1 scores indicated that mothers of never-pregnant teens had higher scores for monitoring their children, higher achievement expectations for their older daughters, were less accepting of teenage childbearing, perceived more problems associated with early parenting, ascribed less importance to childbearing, and perceived significantly older ages for girls to achieve specific life course events than did the mothers of parenting teens. Compared with mothers of pregnant teens, the mothers of never-pregnant teens monitored their children more closely and had higher achievement expectations for their older daughters. There were no significant differences between the mothers of pregnant teens and the mothers of parenting teens.

Mothers' ratings of their achievement expectations for each of their younger children and their communication with each of their younger children were included in the ANCOVA of these scores. For these variables only, effects associated with younger siblings' gender and age were analyzed. Results showed no main effects associated with the younger sibling's age or gender for either of these variables, nor any significant interaction effects with the older sister's pregnancy status for either of these variables. Effects associated with the older sister's age were analyzed for mothers' ratings of their achievement expectations for their older daughters and their communication with their older daughters. Results indicated no significant main effects for daughter's age for either variable, but there was a significant interaction effect between daughter's age and her pregnancy status for mother's achievement expectations only, $F(2, 171) = 3.09, p < .05$. Comparing the means of older and younger teenage daughters in each family type showed that mothers held significantly higher expectations for older parenting teens than for younger parenting teens.

The multivariate F for the Time 2 scores was 2.63, $df = 20, 290, p < .001$. Univariate follow-up tests were computed on the Time 2 scores that reached statistical significance in the MANCOVA. (See Table 3 for the Time 2 means and univariate F values.) Results of the univariate contrasts for the Time 2 scores indicated that, compared with mothers of teens who were initially pregnant, the mothers of never-pregnant teens monitored their children more, had higher expectations for their older daughters, perceived more problems associated with teenage parenting, and perceived less importance and status attained through childbearing. The mothers of never-pregnant teens also had higher achievement expectations for their older daughters, perceived less importance attained through childbearing, and had older transition norms than the mothers of parenting teens. There were also significant differences at Time 2 between the mothers of teens who were initially pregnant and the mothers of teens who were initially parenting. The former group monitored their children less, had higher expectations for their older daughters, and felt that teenage parenting is less problematic than the latter group.

Effects associated with younger siblings' gender and age were analyzed for mothers' Time 2 ratings of their achievement expectations and their communication with their children. There were no main effects for gender or age, nor interaction effects with older sisters' pregnancy status associated with mothers' achievement expectations. For mothers' communication with their children, the effect associated with younger siblings' gender was nonsignificant, but there was a significant main effect associated with younger siblings' age, $F(1, 190) = 4.60, p < .05$. Mothers felt significantly more comfortable and communicated more often about sex and contraception with their older children. The interactions between younger siblings' age and gender with older sisters' pregnancy status were not statistically significant for mothers' communication with younger children.

Effects associated with older daughters' age were analyzed for mothers' Time 2 ratings of their achievement expectations and their communication with their older daughters. There were no significant main effects associated with older daughters' age for either variable, nor was there an interaction effect between daughters' age and pregnancy status for mothers' communication. However, there was a significant interaction between daughter's age and her pregnancy status for mother's Time 2 achievement expectations, $F(2, 165) = 8.09, p < .001$. Mothers had significantly higher achievement expectations for older parenting daughters than for younger parenting daughters.

Differences in Mother Characteristics Across Time

To determine how mothers in the three family types changed across time, the Time 1 scores were contrasted with the Time 2 scores. These results indicated that the mothers of never-pregnant teens monitored their children significantly less, had higher achievement expectations for their older daughters, and communicated less with their younger children over time. Although none of the scores for the mothers of parenting teens changed significantly across time, the mothers of teens who were pregnant at Time 1 monitored their children less, were more accepting of teenage sex, and had significantly less communication with their younger children at Time 2 or when their daughters were an average of 9 months postpartum. Significant differences across time within each family type are designated with a superscript "T" in Tables 2 and 3.

Relations Between Mothers' Time Spent Caring for Grandchildren and Mothers' Parenting

To determine how the number of hours that mothers spent caring for their daughters' children might be related to mothers' monitoring of their own children, correlations were computed between these two variables assessed at Time 2. Correlations were computed separately for the mothers of teens who were pregnant at Time 1 and the mothers of teens who were parenting at Time 1 because, although not statistically significant, these groups reported different number of hours caring for their daughters' children (32.8 hours per week and 28.3 hours per week, respectively; $t = 0.52$). The mothers of younger grandchildren spent more hours in child care. Moreover, daughter's age was significantly correlated with mother's time spent in child care ($r = -.34, p < .001$). Mothers helped younger teens more. Partial correlations were computed between mothers' monitoring and hours spent in child care, controlling for daughters' age. The partial correlation coefficient for mothers whose daughters were pregnant at Time 1 was .15 (*ns*), and the partial correlation coefficient for mothers whose daughters were parenting at Time 1 was $-.35 (p < .05)$. Thus, as the number of hours that mothers spent looking after their grandchildren increased, their ability to monitor their own children decreased. Recall that in this group the grandchildren were an average of 17 months old at Time 2.

Mothers' Responses to the Effects of Their Daughters' Childbearing

The mothers of parenting teens were asked 10 questions about the effects of having a baby on their daughters' lives, on the mothers' parenting, and on the mothers' younger children. Mothers' responses at Time 1 and Time 2 are shown in Table 4, along with the *t* values for the differences across time. Results of the *t* tests indicated that mothers' scores for how they thought their daughter's childbearing had affected their daughter's lives, in general, and how it had affected their daughter's chances of finishing high school increased significantly across time. Thus, mothers perceived more difficulty resulting from their daughter's childbearing across the daughter's first 18 months postpartum. Mothers' scores for how strict they are about how late their other children are allowed out and how strict they are about who their other children can date also increased significantly, indicating that mothers became less strict about monitoring their other children across time. There was also a trend (though nonsignificant) for mothers to rate that their daughter's early childbearing affected

the mothers' other children more profoundly across time. The older daughter's age was not significantly correlated with any of these effects, as perceived by the mother at Time 1 and Time 2.

Discussion

The results of the study highlight the within-family risk factors that are associated with teenage pregnancy and suggest how families may be affected by an adolescent's pregnancy and birth. Results showed that the mothers of never-pregnant teens had higher monitoring levels, higher achievement expectations, and less permissive attitudes than the mothers of pregnant and parenting teens both at Time 1 and Time 2. At both assessments, the mothers of never-pregnant teens viewed early childbearing as more problematic, perceived older ages as appropriate for when girls first should have sex, get married, and start a family, and ascribed lower status to the parenting role than the mothers of parenting teens.

These differences cannot be attributed to factors related to a mother's age, race, education, or to family size (which were comparable among all families) or to family income, family welfare receipt, or the older daughter's age (which were statistically controlled in all analyses). Rather, these differences may represent preexisting within-family risk factors that contributed to the older daughter's pregnancy and childbearing. Negligent parenting and low parental expectations have been thought to precede teenage sexual activity and teenage pregnancy (Miller, 1998). Of course, these maternal characteristics may result from the older daughter's pregnancy and childbearing. That is, mothers may be less able to monitor their children, and they may lower their achievement expectations for their children as a result of the older daughter becoming pregnant and giving birth. Disentangling the independent consequences of teenage childbearing from the preexisting background factors that likely contributed to it is an enormously complex task and is the focus of a recent literature that has challenged the traditional view of the consequences of teenage childbearing (Furstenberg, 1991; Geronimus, 1991; Geronimus & Korenman, 1992, 1993; Hoffman, 1998; Hoffman, Foster, & Furstenberg, 1993). In a succinct review of this work, Hoffman notes that, "teenage mothers ... are not a random sample of the population. They often carry with them a host of other disadvantages that contribute to their poorer economic circumstances like growing up in poor families and tough neighborhoods" (p. 236). Certainly, early childbearing does not occur in isolation but, rather in a community and in a family that in some way likely precipitated the early childbearing. It is conceivable, if not likely, that the within-family risk factors that preceded the older daughter's pregnancy continue to exist after she gives birth. Thus, the findings presented here need to be cautiously and judiciously interpreted with the understanding that the differences in mother characteristics in the three family types could reflect preexisting factors or unique effects resulting from the daughter's pregnancy and childbearing. The across-time results of this study better address the effects possibly resulting from a teenager's pregnancy and childbearing.

The across-time analyses showed no changes in the mothers of parenting teens, but several changes in the mothers of pregnant teens and in the mothers of never-pregnant teens. The mothers of teens who were pregnant at Time 1 reported that they supervised their children less, communicated with their children less about sex and contraception, and perceived teenage sex as more acceptable when the older daughter's status changed from pregnant to parenting. It may be that the time committed to caring for the older daughter's child detracts from the mother's ability to monitor her other children. This is consistent with role strain theory, which states that multiple roles are inherently stressful and detracts from one's ability to perform well in any role (Goode, 1960). Results of the correlational analyses suggested that this may be the case for the mothers of teens who were parenting at Time 1 or mothers whose grandchildren were an average of 17 months old at Time 2. However, this relation

was not present for the mothers of teens who were pregnant at Time 1 or mothers whose grandchildren were an average of 9 months old at Time 2. It could be that as the teen's child reaches toddlerhood, more supervision is needed as he or she becomes more mobile, and this level of supervision diminishes the teen's mother's capability to look after her own children. Compromised maternal monitoring also was borne out in the means presented in Table 4. The mothers of parenting teens reported that they were less strict with their other children across the daughter's first year and a half postpartum. One cannot attribute diminished maternal monitoring exclusively to the older daughter's childbearing, however, because the mothers of never-pregnant teens also reported less monitoring at Time 2, compared with Time 1. Yet, the Time 2 level of monitoring for the mothers of never-pregnant teens ($M = 3.27$) was almost identical to the Time 1 level of monitoring for the mothers of pregnant teens ($M = 3.28$). Thus, although both groups decreased their level of supervision across time, the mothers of pregnant teens reported consistently lower levels of supervision than the mothers of never-pregnant teens at both times of assessment.

Regarding the increase in the acceptability of teenage sexuality for the mothers of pregnant teens, it is possible that after the older daughter produced a grandchild—someone who is presumably loved and cherished in the family—mothers' intolerance of early sexuality diminished. This kind of attitude change is consistent with cognitive dissonance theory (Festinger, 1957). To reduce the dissonance created by inconsistent attitudes and behaviors, one dismisses the unacceptability of the behavior. This increased maternal permissiveness is likely to be significant for the mother's other children. Several studies show that parents' value orientations are highly related to the sexual and contraceptive behavior of their children (Jaccard et al., 1996; Moore et al., 1986).

The finding that the mothers of pregnant teens decreased their communication about sex and contraception with their younger children across time was unexpected and occurred for the mothers of never-pregnant teens as well. In fact, all three groups of mothers had lower communication scores at Time 2, and the across-time differences for the mothers of never-pregnant teens and the mothers of pregnant teens were statistically significant. Although the magnitude of the change was somewhat modest (going from an approximate 3.9 score at Time 1 for all three groups to an approximate 3.5 score at Time 2 for all three groups on a 5-point continuum), the change is in the undesired direction. That is, much research has shown that open and comfortable communication with parents about sex and contraception is a correlate of adolescents' delayed sexual activity and delayed pregnancy (Fox & Inazu, 1980; Furstenberg, Herceg-Baran, Shea, & Webb, 1984; Miller, 1998; Moore et al., 1986). It may be that as children enter the teenage years and sex and contraception become real issues for them, parents may feel less comfortable talking about these topics, perhaps because they are afraid of what their children may ask or tell them. Or possibly parents may talk less frequently about sex with their children because they believe that their previous discussions were sufficient. These results also may reflect the fact that the sample was predominantly Hispanic, a population for whom communication about sexual and contraceptive matters is considered taboo (Oropesa, 1996). In any case, it appears that most of the mothers in this sample were decreasing their communication with their children just as their children were entering the early teenage years when they would likely benefit from such discussions.

Another finding of this study was that, although the mothers of pregnant and parenting teens did not increase their achievement expectations for their younger children across time, the mothers of pregnant and parenting teens had higher achievement expectations for their younger children than for their older daughters at Time 2, whereas the mothers of never-pregnant teens expected less from their younger children than from their older daughters at Time 2. In the parenting and never-pregnant groups, this difference was statistically significant (for the never-pregnant group, expectations for the older daughter $M = 4.73$ vs.

expectations for the younger siblings $M = 4.35$, $t = 2.84$, $p < .01$; for the parenting group, expectations for the older daughter $M = 3.73$ vs. expectations for the younger siblings $M = 4.18$, $t = 2.17$, $p < .05$). This effect is due primarily to the large increase in achievement expectations for older daughters among the mothers of never-pregnant teens at Time 2. The other achievement scores for all three family types remain much the same across time. Thus, what may be significant for pregnant and parenting teens is that their mothers do not expect more of them with age, whereas the mothers of never-pregnant teens appropriately increase their expectations as the older daughter reaches adulthood. For families with pregnant teens and parenting teens, then, there may be a shift in mothers' expectations. A mother may begin to expect more from her younger children than from her older daughter after the older daughter becomes pregnant or bears a child.

Finally, results indicated that mothers perceived increasing difficulty for their parenting daughters across the first 18 months postpartum. Other research also has noted this particularly trying period when young mothers are struggling to remain in school and enter the job market while raising a small infant (Furstenberg, Brooks-Gunn, & Morgan, 1987). It is likely that this period may be most difficult for the teen's family, as well (Furstenberg, 1980).

The approach this study takes to ascertain the effects of teenage pregnancy and childbearing for the teen's family of origin is an admittedly exploratory one. As a first step in a relatively new area of inquiry, this study is necessarily limited. Perhaps the most significant limitation is the lack of pre-pregnancy information about the mothers of pregnant teens and the mothers of parenting teens. Indeed, prepregnancy data would have highlighted how these mothers change as a function of their daughters' transition to parenting. Future researchers in this area may wish to study families prospectively and at closer time intervals across the prenatal and postpartum period (cf. Belsky & Isabella, 1984; Belsky, Ward, & Ravine, 1986). Such a design would reveal more accurately both the stability and change in the family as a result of the teen's transition to parenthood.

Another limitation of the study is the relatively small sample of mothers of pregnant teens and, consequently, the reduced power of analyses involving this group. Recruitment of eligible families (in which only one teen was either currently pregnant or parenting for the first time and this was the first teenage pregnancy in the family) was a long and arduous task. It took almost 2 years to obtain this sample. Indeed, many of the teens who were approached to participate in this study had either been pregnant before or had a sister who was a teen parent. Assessing families at precisely the point when the first teenage pregnancy occurs contributes to the lengthy and costly nature of the current method.

The select nature of the sample ought to be considered in interpreting this study's results. For example, many restrictions were placed on participating families, not the least of which was that all pregnant and parenting teens chose to continue their pregnancies and parent their children. This necessarily omits families of teens who choose to abort or to adopt out. The families of never-pregnant teens were also constrained (i.e., no child in the family had ever been pregnant as a teen), and the resulting sample may be select on a variety of nonobservable family values and attitudes that are correlated with delayed childbearing. The sample also included mostly Hispanic and Black families. Hispanics, particularly Mexican Americans, often place a high value on premarital chastity and believe that a pregnancy outside of marriage is a personal and family disgrace (Williams, 1990). The select nature of the sample limits the degree to which the findings are likely to hold for different populations, and caution should be exercised in generalizing beyond the kinds of individuals represented here.

Moreover, although the snowball sampling procedure was a useful and necessary strategy for identifying respondents eligible to participate, the resulting sample may be biased to an unknowable extent because individuals may be part of a shared social network. Finally, keep in mind that the never-pregnant teens were significantly younger than the pregnant and parenting teens and, although daughter's age was used as a covariate in the analyses, there is still the possibility that the never-pregnant teens may become pregnant once they attain the same age as the pregnant and parenting teens.

Future research in this area could consider other domains of the family that are affected by a teenager's pregnancy and childbearing. For example, there may be an increase in family financial hardship or general family stress, and these factors may inhibit a mother's ability to parent her other children effectively. A teen's pregnancy also might intensify existing friction and conflict among family members or exacerbate sibling rivalry and competition (East, 1998b). Researchers also should be alert to the positive effects of an adolescent's childbearing on her family, such as solidifying close family bonds as all family members help to raise and nurture the infant (Furstenberg, 1980). Moreover, helping to care for the older sister's child may have positive ramifications for other children in the household if they take part in parenting the new baby.

In summary, the results of this study begin to reveal how a teen's pregnancy and childbearing affect the teens' mothers in these families and, indirectly, how they affect the other children in the household. The changes in the mothers of pregnant teens—that is, their decreased monitoring, decreased communication, and their increased acceptance of teenage sexuality—create a prime context for younger siblings to engage in delinquent or sexual behavior. Thus, these maternal changes may trigger several processes through which the younger siblings of pregnant and parenting teens become vulnerable to adolescent pregnancy (East, 1996a, 1996b). Given that the siblings of pregnant and parenting teens have elevated rates of teenage childbearing and engage in problem behaviors more than other youth their same age, race, and social status, they are a strategic population to target for pregnancy prevention (East, 1998a, 1998b). Moreover, given that the family unit is likely impacted by a teen's childbearing, it would be ideal if the family as a whole could participate in an intervention. Intervening with all family members may facilitate their coping with the changes brought about by the teen's childbearing. Future research aimed at better understanding how families are affected by a teenager giving birth will be most useful in preventing repeated teenage pregnancies within a family.

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Table 1

Participants' Ages at Time 1 and Time 2

	Time 1		Time 2	
	<i>M</i>	(<i>SD</i>)	<i>M</i>	(<i>SD</i>)
Mothers' age	39.2	(5.1)	40.5	(5.2)
Older daughters' age	17.0	(1.4)	18.3	(1.5)
Pregnant daughters	6 months (2–9 months) ^a pregnant		9 months (4–12 months) ^a postpartum	
Parenting daughters	4 months (1–6 months) ^a postpartum		17 months (14–19 months) ^a postpartum	
Younger children's age	13.7	(1.7)	15.0	(1.9)

Note: Time 2 occurred 13 months after Time 1.

^aThis is the range of months pregnant or postpartum.

Table 2

Time 1 Mean Scores of Mothers' Parenting, Attitudes, and Mother-Adolescent Communication for Families with Never-Pregnant, Pregnant, and Parenting Teens

Mothers' Scores	Never Pregnant	Pregnant	Parenting	<i>F</i> (2,171)
Monitoring	3.59 ^{ab} <i>T</i>	3.28 ^a <i>T</i>	3.30 ^b	8.64 ^{***}
Achievement expectations for older sister	4.24 ^{ab} <i>T</i>	3.93 ^a	3.92 ^b	4.29 [*]
Achievement expectations for younger siblings	4.38	4.17	4.17	2.75 (<i>df</i> = 2,237)
Acceptance of teenage sex	1.62	1.57 ^T	1.86	1.26
Acceptance of teenage childbearing	1.19 ^b	1.41	1.45 ^b	2.34 [†]
Problems with teenage childbearing	4.54 ^b	4.29	4.17 ^b	6.08 ^{**}
Importance of childbearing	1.60 ^b	1.91	2.03 ^b	2.45 [†]
Age at life course transitions	22.84 ^b	22.61	21.83 ^b	3.70 [*]
Communication with older sister	4.06	4.21	4.27	1.66
Communication with younger siblings	3.81 ^T	3.90 ^T	4.04	0.84 (<i>df</i> = 2,237)

Note: Means within the same row with the same letter superscript were significantly different ($p < .05$). The range of all scores (except age at life course transitions) was 1–5. The sample size of mothers of never-pregnant teens was 94. The sample size of mothers of pregnant teens was 32. The sample size of mothers of parenting teens was 48.

^a Contrast between the mothers of never-pregnant teens and the mothers of pregnant teens.

^b Contrast between the mothers of never-pregnant teens and the mothers of parenting teens.

^T The Time 1 score and Time 2 score were significantly different ($p < .05$).

[†] $p < .06$.

^{*} $p < .05$.

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

^{***} $p < .001$.

Table 3

Time 2 Mean Scores of Mothers' Parenting, Attitudes, and Mother-Adolescent Communication for Families with Never-Pregnant and Parenting Teens

Mothers' Scores	Never Pregnant	Was Pregnant, Now Parenting	Parenting	<i>F</i> (2,142)
Monitoring	3.27 ^{aT}	2.97 ^{ac T}	3.16 ^c	5.96 ^{**}
Achievement expectations for older sister	4.73 ^{ab T}	4.03 ^{ac}	3.73 ^{bc}	8.83 ^{***}
Achievement expectations for younger siblings	4.35	4.26	4.18	0.93 (<i>df</i> = 2,195)
Acceptance of teenage sex	1.77	2.15 ^T	1.70	3.04 [†]
Acceptance of teenage childbearing	1.35	1.40	1.37	0.64
Problems with teenage childbearing	4.39 ^a	4.14 ^{ac}	4.32 ^c	7.60 ^{***}
Importance of childbearing	1.50 ^{ab}	1.97 ^a	1.89 ^b	3.97 [*]
Age at life course transitions	23.12 ^b	22.95	22.30 ^b	3.13 [*]
Communication with older sister	3.97	4.21	4.27	0.11
Communication with younger siblings	3.51 ^T	3.41 ^T	3.81	1.36 (<i>df</i> = 2,195)

Note: Means within the same row with the same letter superscript were significantly different ($p < .05$). The range of all scores (except age at life course transitions) was 1–5. The sample size of mothers of never-pregnant teens was 78. The sample size of mothers of teens who were pregnant at Time 1 and parenting at Time 2 was 28. The sample size of mothers of parenting teens was 39.

^aContrast between the mothers of never-pregnant teens and the mothers of teens who were initially pregnant.

^bContrast between the mothers of never-pregnant teens and the mothers of parenting teens.

^cContrast between the mothers of teens who were initially pregnant and the mothers of parenting teens.

^TThe Time 1 score and Time 2 score were significantly different ($p < .05$).

[†] $p < .06$.

^{*} $p < .05$.

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

^{***} $p < .001$.

Table 4

Time 1 and Time 2 Mean Scores of Mothers' Responses to Effects of Their Daughter's Childbearing

Item	Time 1	Time 2	<i>t</i>	Time Effect
Having a child as a teenager has caused my daughter problems. ^a	3.80	3.89	0.32	
How has your daughter having a baby as a teenager affected				
your daughter's life? ^b	3.05	3.52	1.99 [*]	More difficult
your daughter's chances of finishing high school? ^b	3.66	3.86	2.27 [*]	More difficult
how strict you are about how late your other children are allowed out? ^c	2.18	2.67	2.17 [*]	More permissive
how strict you are about who your other children date? ^c	2.13	2.52	2.07 [*]	More permissive
your ability to monitor your other children? ^b	3.10	2.88	0.24	
How much has your daughter having a baby				
affected your other children? ^d	2.59	2.89	1.71 [†]	Affected more
made your other children also want to have children? ^e	3.82	3.95	0.13	
"scared" your other children about being more careful about sex? ^f	3.19	3.26	0.38	
affected you being able to spend time with your other children? ^b	2.77	2.84	1.39	

Note: The sample size of mothers at Time 1 was 48. The sample size of mothers at Time 2 was 39.

^aResponse options ranged from 1 (*disagree*) to 5 (*agree*).

^bResponse options ranged from 1 (*it has made it a lot easier*) to 5 (*it has made it a lot more difficult*).

^cResponse options ranged from 1 (*a lot more strict*) to 5 (*a lot more lax or permissive*).

^dResponse options ranged from 1 (*not affected at all*) to 5 (*affected a lot*).

^eResponse options ranged from 1 (*definitely want to have a child too*) to 5 (*definitely not want to have a child too*).

^fResponse options ranged from 1 (*not "scared" at all*) to 5 (*"scared" a lot*).

[†] $p < .10$.

^{*} $p < .05$.