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Married and Cohabiting Parents' Relationship Stability: A Focus on Race and Ethnicity

We draw on three waves of the Fragile Families Study (N = 2,249) to examine family stability among a recent birth cohort of children. We find that children born to cohabiting versus married parents have over five times the risk of experiencing their parents' separation. This difference in union stability is greatest for White children, as compared with Black or Mexican American children. For White children, differences in parents' education levels, paternal substance abuse, and prior marriage and children account for the higher instability faced by those born to cohabiting parents, whereas differences in union stability are not fully explained among Black and Mexican American children. These findings have implications for policies aimed at promoting family stability and reducing inequality.

The rise in cohabitation is well documented, with cohabitation playing an increasingly prominent

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role in the lives of American adults and children. At least one child in eight is born into a cohabiting parent family, and this rate has doubled over the course of a single decade (Bumpass & Lu, 2000). Thus, not surprisingly, researchers have begun to focus on the implications of cohabitation for children's well-being (Brown, 2004a; Manning & Lamb, 2003; Osborne, McLanahan, & Brooks-Gunn, 2005).

A primary reason why parental cohabitation is expected to influence children's well-being is that cohabiting unions are typically short lived (Bumpass & Lu, 2000), and family stability has consistently been associated with positive child well-being (Amato, 2005; McLanahan & Sandefur, 1994; Osborne & McLanahan, 2007). Indeed, one recent study showed that children born 10–25 years ago to cohabiting parents face a significantly higher risk of experiencing family instability than children born to married parents (Manning, Smock, & Majumdar, 2004).

We use three waves of data from the Fragile Families and Child Wellbeing Study (Fragile Families Study) to examine the early life course of a recent birth cohort (1998–2000) of children who were born into cohabiting unions, contrasting the stability of their parents' unions to those of children born in marriages. Focusing on a recent birth cohort is important because children are more likely to be born into cohabiting unions today (Casper & Bianchi, 2002; Fields, 2004) and cohabiting unions have become increasingly less stable (Bumpass & Lu, 2000).

Our study examines the extent to which being born to cohabiting parents increases the likelihood of experiencing the end of the parents' union. Moreover, we examine why union status differentials in family stability may exist. In this aim, we move beyond prior work by including a more comprehensive array of potential mediating variables to explain differential stability for children born to cohabiting versus married parents (Manning et al., 2004). The prospective study design allows us to evaluate the extent to which the gap in relationship stability is associated with fewer economic resources, familial support, relationship quality, and family complexity including relationship and fertility histories. Throughout, we also focus on similarities and differences for Black, Mexican American, and White children because of evidence that the prominence and role of cohabitation in family formation varies by race and ethnicity (Smock, 2000). Children are much more likely to be present in minority cohabiting couple households (67% and 70% among Blacks and Hispanics, respectively) than in White cohabiting households (35%) (McLanahan & Casper, 1995), and White children spend less of their childhood in cohabiting parent families than Black or Hispanic children (Bumpass & Lu). Similarly, there are racial and ethnic differentials in the proportion of children being born to cohabiting parents. Among Whites, only about 1 in 10 children is now born into cohabiting parent families compared with nearly 1 in 5 for Black and Hispanic children (Bumpass & Lu). Recent research indicates that some of the race and ethnic differences in family formation may be related to being foreign- versus U.S. born (Brown, Van Hook, & Glick, 2006; Phillips & Sweeney, 2005; Raley, Durden, & Wildsmith, 2004), so we also account for the nativity status of Mexican American mothers.

WHY COHABITATION MATTERS

Children born to married parents may be less likely to experience their parents' separation because marriage may confer unique economic advantages (Becker, 1991), emotional benefits (Waite, 2000), assistance from extended family (Eggebeen, 2005), and institutional support (Cherlin, 2004) to the parents that, in turn, promote greater union stability. Cohabitation is similar to marriage in many respects; two adults share an intimate relationship and a household, and in

our sample they also share a child. Thus, we might expect the same benefits to be conferred to cohabiting parents. Yet, because cohabitation is considered to be a less committed relationship and it is less institutionalized than marriage, it may not award the same benefits as marriage in terms of economic resources, familial support, and relationship quality, which may weaken the stability of the union. It is also likely that many of the differences between married and cohabiting parents in factors associated with union stability, such as sociodemographic factors and family complexity, actually predate the formation of their union, rather than being caused by the union itself.

With regard to economic resources, the empirical evidence shows that married parents have considerably higher incomes and educational attainment than cohabiting parents (Manning & Brown, 2006), and economic resources are strongly and positively correlated with union stability (Fein, Burstein, Fein, & Lindberg, 2003). The extent to which the link between marriage and higher levels of economic resources is causal rather than attributable to selection is less conclusive, but it is likely the result of both. Researchers using twin studies (Antonovics & Town, 2004) and other advanced methods to account for unobserved heterogeneity between married and unmarried men (Ginther & Zavodny, 2001; Korenman & Neumark, 1997) argue that the marriage wage premium for men is largely causal. Cohabiting men also enjoy a wage premium as compared with single men, yet this premium is smaller than married men's (Cohen, 2002) and is primarily the result of selection (Stratton, 2002). These studies are not specific to fathers, however. In addition, cohabitation may lead to the accumulation of fewer economic resources than marriage because cohabiting parents often do not share expenses or pool resources to the extent that married parents do (Kenney, 2003); inasmuch as married couples anticipate longer relationship stability, they may be more willing than cohabitators to make cooperative bargaining arrangements and pool household resources and expenses (Lundberg & Pollack, 1994).

There is also evidence that marriage is selective of couples with higher economic resources and this generalization holds when comparing married and cohabiting parents as well (Casper & Bianchi, 2002; Manning & Brown, 2006). Research focusing on marriage among cohabitators finds that cohabiting couples with greater

economic resources and higher human capital are more likely to marry following a premarital conception (Manning, 1993, 2001) or birth (Osborne, 2005) rather than to remain cohabiting. In addition, many cohabiting parents desire marriage but forgo getting married until they can achieve financial stability and resolve many of their relationship problems (Gibson-Davis, Edin, & McLanahan, 2005; Manning & Smock, 2002; Smock, Manning, & Porter, 2005).

Another type of resource is familial or social support. Social support, particularly from parents, may bolster the couple's relationship and enhance its stability, and it may be particularly important for families with young children. Cohabiting couples are less able to access support from family members and others (Brines & Joyner, 1999; Eggebeen, 2005), including financial support (Hao, 1996) and instrumental support (Marks & McLanahan, 1993), and they are less likely to report having expectations to turn to their parents in times of need (Eggebeen). These findings apply to cohabiting couples with children as well (Harknett & Knab, 2007). Lower levels of familial support directed toward cohabiting parents may be related to issues surrounding norms for childbearing outside of marriage, strained relationships with parents (Nock, 1995), as well as strapped or complex family networks (Harknett & Knab). Unlike prior studies, our data allow us to include measures of social support, although we focus on perceived social support rather than actual receipt of support because receipt of support may be contingent upon need.

With regard to relationship quality, married couples report greater relationship quality than cohabiting couples (Brown & Booth, 1996; DeMaris, 2000; Nock, 1995), and relationship quality is positively correlated with relationship stability (Carlson, McLanahan, & England, 2004; Osborne, 2005; Roebuck Bulanda & Brown, 2007). Cohabiting couples have fewer barriers to exit their relationship and thus may be less likely to remain in a relationship with poor quality. There is no conclusive evidence, however, that the link between marriage and relationship quality is causal (Brown, 2004b), and substantial evidence suggesting that marriage is selective of better relationships. Couples with greater relationship happiness, less violence, and greater anticipated stability are more likely to marry (Brown, 2000, 2004b; DeMaris, 2000), and these findings apply to unmarried parents as

well (Carlson et al.; Osborne). Previous work has not considered whether relationship quality explains the gap in the stability of cohabiting and married parent families.

Compared with marriages, cohabiting unions contain more complex families in terms of prior relationships (marriage and cohabitation) and prior fertility (Carlson & Furstenberg, 2006; Goldscheider & Sassler, 2006; Manning, 2004; Stewart, Manning, & Smock, 2003), which is notable because family complexity, in terms of cohabitation and marital history, is associated with marital instability (Raley & Bumpass, 2003; Sweeney & Phillips, 2004; Teachman, 2004). Individuals who have a history of dissolving marriages and cohabitations may be more prone to end their current union. In our analyses, we account for relationship history and distinguish between mothers' marriage and cohabitation experience.

Parents with children from prior unions are more likely to experience separation as compared to parents with only biological children present (Carlson et al., 2004; Osborne, 2005; White & Booth, 1985) because relationships with children that extend beyond household boundaries create some stress in both the resident and nonresident parents' household. Cohabiting mothers and fathers are substantially more likely than married parents to have children from prior unions, whereas married parents are more likely to share biological children (Carlson & Furstenberg, 2006; Osborne). To better understand whether the more complex nature of cohabiting relationships helps to explain their higher rates of separation, we include measures of mothers' and fathers' fertility from prior unions as well as a measure of the timing of pregnancy of the focal child relative to the marriage or cohabitation. To date, prior studies have not accounted for relationship history in terms of both cohabitation and marriage as well as parents' fertility history.

RACE, ETHNICITY, AND NATIVITY STATUS

Our conceptual model incorporates many elements tapping the potential benefits conferred by marriage, but we recognize that these benefits, as well as the selectivity of marriage versus cohabitation, may not be consistent across all race and ethnic groups. Generally, differences in economic resources, social support, relationship quality, and family complexity between married and cohabiting parents are expected to be smaller

for Black and Mexican American parents as compared to White parents.

First, the gap in economic resources of cohabiting and married parent households is smaller among minority than White families (Manning, 2001; Manning & Brown, 2006). Cohabitation appears to be more selective of the most disadvantaged among Whites, more so than for Blacks or Mexican Americans (Bumpass & Lu, 2000; Raley & Wildsmith, 2004; Wildsmith & Raley, 2006).

Second, although researchers have not examined racial and ethnic differences in social support in cohabitation and marriage, we predict it may be greater among minority families. Consensual unions and childbearing within cohabiting unions are more normative among minority families (Casper & Bianchi, 2002; Manning, 2001; Musick, 2002), and Black and Hispanic children spend more time in cohabiting parent unions than White children (Bumpass & Lu, 2000).

Third, relationship quality is lower among Black married couples than White or Mexican American married couples, but there is no racial gap in relationship quality among cohabiting couples (Brown, 2003; Roebuck Bulanda & Brown, 2007). These results suggest that Black cohabiting and married couples may have more similar relationship quality than White cohabiting and married couples, and thus, relationship quality may explain more of the difference in union stability for White than Black parents.

Fourth, family complexity is greater among African Americans because of higher levels of premarital childbearing, nonresident fatherhood, multiple partner fertility, and divorce (Carlson & Furstenberg, 2006; Phillips & Sweeney, 2006). Although, there is a smaller gap in family patterns among Whites and Hispanics, teenage and premarital fertility is greater among Hispanics than Whites (Hamilton, Martin, & Sutton, 2003). Some of these indicators of family complexity, such as premarital childbearing, have been found to have a more destabilizing influence for White than Black married couples (Sweeney & Phillips, 2004). Thus, we expect that family complexity will have a greater effect on Whites than Blacks or Mexican Americans.

Finally, marriages are less stable for Black than White families (Phillips & Sweeney, 2005; Raley & Bumpass, 2003; Teachman, 2004), whereas Mexican American and White married couples share similar relationship stability

(Roebuck Bulanda & Brown, 2007). Thus, the union status differentials in terms of cohabitation versus marriage may be smaller for Black parent families as compared to Whites and Mexican Americans.

Recent work has expanded on racial and ethnic differentials in family formation behavior by incorporating nativity status (Brown et al., 2006; Phillips & Sweeney, 2005; Raley et al., 2004). Native-born Mexican Americans more often cohabit than foreign-born Mexican Americans, and the proportion married is lower among native- than foreign-born Mexican Americans (Brown et al.). Marital disruption among native-born Mexican Americans is similar to disruption rates among Whites, whereas foreign-born Mexican Americans have significantly lower disruption rates than Whites (Phillips & Sweeney, 2005). Additionally, foreign-born Mexican Americans report fewer marital problems than Whites or Blacks, but native-born Mexican Americans do not (Roebuck Bulanda & Brown, 2007). Several arguments have been proposed to explain these differentials in family formation behavior, including selection on the basis of immigration, economic circumstances, the assimilation into American culture, and legal incentives to get and remain married. Although we will not be able to determine the source of the differential, prior work has not considered the relative stability of cohabiting and married unions according to the nativity status of parents.

Researchers theorize that cohabitation plays a different role in the family formation process across race and ethnic groups; Blacks and Mexican Americans reportedly view cohabitation as more of an alternative to marriage, whereas Whites consider cohabitation as a step toward marriage or trial status for their relationship (Manning & Landale, 1996; Sweeney & Phillips, 2004; Wildsmith & Raley, 2006). This depiction is consistent with the findings that the gap in individual (e.g., income or fertility) and relationship characteristics (e.g., relationship quality and duration) is greater among White cohabiting and married couples than Black or Hispanic couples (Brown, 2003; Bumpass & Lu, 2000; Manning & Brown, 2006). Thus, we expect that the economic resources, familial support, relationship quality, and family complexity measures may explain the gap in stability of cohabiting and marital unions among Whites more so than Blacks or Mexican Americans.

Moreover, prior research finds that the factors predicting separation from marriage differ across race and ethnic groups (Pagnini & Morgan, 1996; Phillips & Sweeney, 2005; Sweeney & Phillips, 2004). To our knowledge, no research has determined whether the factors predicting separation from cohabitation differs across groups, but it is likely. Thus, if the factors predicting separation differ, and the rates of separation differ, then it is likely that unique processes promote family stability among Whites, Blacks, and Mexican Americans.

CURRENT INVESTIGATION

We have three primary goals: (a) to determine the extent to which children recently born to cohabiting parents face higher levels of parental instability than their counterparts born to married parents; (b) to identify the factors that account for this association, paying particular attention to the roles that economic resources, social support, relationship quality, and family complexity play in explaining the higher incidence of instability among cohabiting parents; and (c) to examine how these processes operate among specific racial and ethnic groups. Our study builds on extant knowledge in five central ways.

First, the analyses are based on a very recent birth cohort of children. Prior studies are based on much earlier birth cohorts, so our work provides some of the most up to date analyses of family stability. Only a few studies have directly compared prospects for family stability for children born into cohabiting versus married couple families. These include Landale and Hauan (1992), who study the family life courses of Puerto Rican children born in the mid-1980s. They find that children born in cohabiting unions have almost twice the odds of experiencing the breakup of their parents' unions (whether or not the relationship was transformed into marriage) as children born in marriage, although the gap is narrowed with the inclusion of characteristics of the mother, father, and the union. Research on Canadian children indicates a similar pattern (Marcil-Gratton, Le Bourdais, & Lapierre-Adamcyk, 2000), as does descriptive research on U.S. children born in the early 1980s (Raley & Wildsmith, 2004; Wu, Bumpass, & Musick, 2001). Another study shows that children born between 1980 and 1994 to cohabiting parents more often experience parental disruption than children born to married parents, after controlling

for an array of characteristics of the mother (Manning et al., 2004).

Second, we use much more detailed measures of socioeconomic status that are correlated with union stability (Fein et al., 2003; Smock & Manning, 1997; Smock et al., 2005) and include these measures for both mothers and fathers. Prior work is limited because it is restricted to characteristics of the mother and does not include an indicator of family income (Manning et al., 2004). Third, unlike prior studies, we include measures of relationship quality and family complexity that may influence union stability (Carlson et al., 2004; Osborne, 2005; Sweeney & Phillips, 2004).

Fourth, we include an extensive set of control variables that may better account for selection into either marriage or cohabitation for childbearing. Cohabitors are more likely than married parents to be younger, less religious, and to come from divorced homes, and each of these factors is negatively associated with marriage and union stability (Carlson et al., 2004; Osborne, 2005). Although we account for an extensive set of control variables, we are unable to determine if the measures included in this analysis are caused by the parents' relationship status or whether they are predictive of their union status for childbearing. It is also likely that cohabiting and married parents differ in ways that we are unable to measure using survey data, and thus, we may not be able to explain fully the differential stability of their unions.

Finally, our study pays close attention to racial and ethnic variation in the life courses of children born to married versus cohabiting parents. Prior work has not focused on nativity status, which may be important for understanding family stability for Mexican American children. In addition, prior studies have not thoroughly explored how family processes may differ across race and ethnic groups.

METHOD

We use data from three waves of the Fragile Families Study, a longitudinal birth cohort survey, which between 1998 and 2000 interviewed approximately 3,500 unmarried mothers and 1,500 married mothers in the hospital at their child's birth, in 20 large cities throughout the United States. About 87% of the mothers were reinterviewed when the child was aged 1 (1999 – 2001) and 3 (2001 – 2003).

Our analyses are based on data from 2,249 mothers who were either married ($n = 886$; 39%) or cohabiting ($n = 1,363$; 61%) with their child's biological father at the baby's birth. This sample excludes 1,928 mothers (39%) who were not married to or living with their child's biological father at the child's birth. An additional 529 mothers (206 married and 323 cohabiting; 11% of the original sample) who identified their race or ethnicity as something other than White, Black, or Hispanic of Mexican origin are also excluded so that we may focus on differences across race or ethnic groups. Finally, an additional 192 mothers (83 married and 109 cohabiting; 4% of the original sample) who did not complete the follow-up interviews are excluded. The characteristics of the mothers lost to follow-up are similar to the mothers who remain in the sample with the exceptions that excluded mothers are more likely to be Hispanic, have less education, and have fewer children with the biological father or a prior partner as compared with mothers who remain in the sample.

Dependent Variable

Our dependent variable is the hazard of the separation of the couple's relationship by the third wave of interviews. Separation is defined as the couple no longer coresiding and is measured by the month and year of separation as reported by the mother in the second and third waves of the study. Mothers who report being separated at Waves 2 or 3 but who did not report a month or year of separation ($n = 19$; 0.8%) were coded as separating in January of the year of interview. We continue to consider a cohabiting relationship as stable if the relationship transitions to marriage ($n = 391$; 29% of cohabitators). Nine percent of cohabitators who married following their child's birth ($n = 36$) separated prior to the third interview date and are counted as separating. Separation is based on a discrete event and is subject to censoring at the third wave of interviews. Couples were not considered at risk of separation until after the birth of their biological child.

Independent Variables

The mother's self-reported relationship status (married or cohabiting) at the time of her child's birth is the main independent variable in this analysis. At the child's birth, mothers are considered

cohabiting if the mother reports that she lives with the child's father and is not married. Cohabitation is measured as living together *most or all of the time* at the follow-up interviews. The results are similar if we limit our measurement of cohabitation to *all of the time*.

The other independent variables include the mother's race or ethnicity, duration of the union prior to the child's birth, mothers' background characteristics, mothers' and fathers' education and economic resources, mothers' perceived social support, the couples' relationship quality, and family complexity including mothers' relationship history and the parents' fertility history.

We imputed missing data for the independent variables to the mean of the subgroup (married or cohabiting). No data are missing for the parents' relationship status at birth; for the other independent variables, missing data represent less than 2% of the cases on all variables except for household income. For this variable, we use the constructed Fragile Families household income variable that is generated using hot-decking techniques.

We use three dichotomous, self-identified measures for the mothers' race or ethnicity (non-Hispanic White, non-Hispanic Black, and Hispanic of Mexican origin). We exclude mothers who categorize their race as other or who categorize their ethnicity as Hispanic but not of Mexican origin. Of the mothers in the sample who identify as Hispanic, 61% are of Mexican origin. Because Hispanics of varying ethnic backgrounds face quite different social and economic conditions, we limit our focus to only one group for which there is adequate sample size. In addition, because immigrants face economic and social conditions that are often different from native-born Mexican Americans, we take nativity status into consideration when focusing on Mexican Americans separately.

The duration of the parents' union prior to the child's birth is based on the mothers' report of the month and year the couple began living together for cohabiting parents and month and year of marriage for parents' married at their child's birth. The questions are asked at the second- and third-wave interviews.

Controls for background characteristics of the mother include age, family background, and religiosity. These variables are all measured at baseline. Mothers' age is a continuous variable. Family background is a dichotomous measure indicating whether the mother's parents were

married when she was 15 years old. Religiosity is a measure of frequency of attendance at a religious service and is coded 1 = *yes*, 0 = *no* if the mother attends a religious service weekly.

Fathers' education is based on four categories: less than high school, high school, some college or technical training, and college degree or more. Because mothers' and fathers' education is highly correlated ($\sigma = .61$), mothers' education is based on three categories, indicating that she is in a higher, lower, or similar education category as the father.

The economic characteristics of the parents include annual household income and employment. The measure of annual household income is linear, time varying, and is constructed from the mothers' reports. Fathers' and mothers' employment are also time-varying covariates. Time-varying covariates are measured at baseline for couples who separate by Wave 2 and are measured at Wave 2 for couples who are still together at Wave 2. Fathers' employment is a dichotomous variable measured as working for earnings in the week prior to the baseline or the Wave 2 interview. Mothers' employment is based on employment from earnings in the year prior to the child's birth and in the week prior to the Wave 2 interview. These data do not provide information regarding the stability or trajectory of the mothers' or fathers' employment. Instability in employment, however, should be reflected in annual income, which we do measure.

To measure perceived social support we use two dichotomous measures, indicating that someone in the mother's family could loan her \$200 or help her with babysitting or child care. These measures are time varying. We include measures of perceived support rather than received support because receipt of support may be contingent upon need.

Our relationship quality measures have been used widely and effectively in other studies and appear to be highly predictive of union transitions (Carlson et al., 2004; Osborne, 2005). We include four characteristics of the couple's relationship quality: the emotional support the mother feels from the father, the level of disagreement the couple experienced in the month prior to the child's birth, maternal reports of domestic violence, and substance abuse. The measure for emotional support the mother feels from the father is a time-varying covariate and is based on the mean of three questions including the baby's father is fair and willing to compromise,

expresses love and affection to the mother, and encourages the mother to do things important to her ($\alpha = .69$). The responses are recoded such that 3 is equal to *often* and 1 is equal to *never*. Disagreement within the relationship is measured by a count of six variables from the mother's report of disagreeing sometimes or often with the father about money, spending time together, sex, the pregnancy, drugs or alcohol, and being faithful within the month prior to their child's birth. The measure of domestic violence is dichotomous, time varying, and based on the mothers' report. At baseline, the measure is based on whether the father sometimes or often hits or slaps the mother when he is angry; at the Wave 2 interview, the measure is based on whether the father sometimes or often kicks or slaps her when he is angry. Mothers' and fathers' substance abuse measures are also dichotomous and time varying. At baseline, mothers are considered to have a substance abuse problem if they reported using drugs during their pregnancy. At Wave 2, mothers are coded as having a substance abuse problem if they report smoking marijuana or using any hard drug in the past month or if alcohol or drugs have interfered with how they manage their daily lives or their relationships since their child's birth. For fathers, the mothers were asked at baseline and Wave 2 if the father has a drug or alcohol problem that interferes with his work or relationships.

In addition, we control for several characteristics of the mothers and fathers to account for the complex nature of these families. These include measures of the mothers' prior relationship instability and the mothers' and fathers' fertility histories. Fathers' relationship history is not available in the data. We operationalize prior relationship instability of the mother by dichotomous variables indicating whether the mother was ever married (and thus separated or divorced) or in a cohabiting relationship with another partner prior to her current union. Although these questions were asked at the third interview, our measures refer to the period prior to the focal child's birth.

We also include measures of mothers' and fathers' fertility from prior unions as well as a measure of the timing of pregnancy of the focal child and marriage or cohabitation. The parents' fertility history is measured by four dichotomous variables. One variable measures whether the couple shared a biological child at the time of the current

child's birth, which serves as an indicator of the couple's parity. We also include dichotomous measures for whether the mother has a child from a previous relationship or the father has a child from a previous relationship. A fourth variable is time varying and indicates whether the mother and father had additional children after the focal child's birth. The final indicator is the timing of the union formation relative to the pregnancy of the focal child. Couples who formed unions in response to a pregnancy may be less prepared to sustain a stable union, and the pregnancies may be less often planned. The dichotomous measure indicates whether the focal child was born fewer than 7 months following the formation of the parents' union status at the child's birth.

Analytic Strategy

Our analyses include life-table estimates and event history analyses. We use single-decrement life-table estimates to estimate the hazard rate of separation or the cumulative proportion of married and cohabiting parents who experience separation within 3 years following the birth of a child. We also use event history models to predict the factors that influence the hazard that children born into cohabiting and married parent families experience family instability by age 3. Specifically, we use Cox proportional hazard techniques, which allow us to use time-varying variables and do not require us to assume a set probability distribution (Allison, 1984).

After presenting descriptive statistics on our independent variables and discussing results from the life tables, we move to our multivariate models. We discuss the bivariate associations between union status at birth and separation and present six models. The bivariate association is the observed difference in the hazard of union status stability that we seek to explain. The first model controls only for race and ethnicity. The second model is our base model that controls for relationship duration prior to the child's birth; background characteristics of the mother including race, age, family background, and religiosity; and the mothers' and fathers' education level. We then add in sets of variables to empirically evaluate how the inclusion of specific sets of covariates influences the relationship between union status and family stability. Covariates that are associated with family instability and that differ in prevalence between married and cohabiting parents will help to explain the difference in family stabil-

ity between the two groups. In the third model, we add in controls for mothers' and fathers' economic resources and perceived social support. In the fourth model, we remove the economic resources and support measures and control for the couples' relationship quality. In the fifth model, we control for measures of family complexity including relationship and fertility history. The sixth model is the full model and includes all the measures listed above.

To investigate racial and ethnic differences, we empirically evaluate how the sets of variables in Models 2 through 6 attenuate race or ethnic differences in addition to their association with union status. We also test interactions between union status at the child's birth and race or ethnicity. On the basis of the results of the Chow test ($p < .0001$) (DeMaris, 2002) and the contrast of the log-likelihood for models with no interactions to models that include cross products of all covariates with race and ethnicity ($p < .0001$), we present separate models for each race and ethnic group. This fully interacted model also allows us to determine if the effect of certain variables differs across race or ethnic groups. In the separate model for Mexican Americans, we include a variable for native born and an interaction between cohabitation and native born, to control for the possible differences in behavior associated with nativity.

RESULTS

Descriptive Statistics

The distributions of the independent variables are shown in Table 1 for the entire sample and separately by the parents' union status at the child's birth. For time-varying covariates, the baseline measure is shown. Table 1 shows that married mothers are more often White and less frequently Black, whereas cohabiting mothers are more frequently Black rather than White. Married and cohabiting mothers are equally likely to be Mexican American.

Married mothers are about 5 years older than cohabiting mothers and are more likely to come from a married family and to attend a religious service weekly. Consistent with prior research, married parents have significantly more education and income than cohabiting parents. Approximately 20% of married fathers have less than a high school diploma compared to almost two fifths of cohabiting fathers, and the difference in

Table 1. *Distribution of Independent Variables by Union Status of Parents at Child's Birth*

	Total (N = 2,249)	Married (n = 886)	Cohabiting (n = 1,363)
Mother's race or ethnicity			
White	44.03	55.39	18.41 ^a
Black	33.85	22.99	58.35 ^a
Mexican American	22.12	21.62	23.24
Mothers' characteristics			
Age (years)	28.12	29.58	24.83 ^a
Parents married at age 15	54.42	62.32	36.59 ^a
Attend religious service weekly	24.19	27.27	17.27 ^a
Education			
Fathers' education			
Less than high school	25.60	20.59	36.88 ^a
High school	27.20	22.06	38.78 ^a
Some college	20.31	20.10	20.77
College	26.89	37.23	3.57 ^a
Mothers' education			
Same as father	60.42	63.67	53.07 ^a
More than father	18.60	18.11	19.71
Less than father	20.98	18.22	27.22 ^a
Economic resources			
Household annual income	51,324	62,376	26,400 ^a
Father's employment in prior week	89.91	94.66	79.22 ^a
Mother's employment in prior year	69.51	70.48	67.33
Perceived social support			
Able to borrow \$200 from family	91.09	95.04	82.19 ^a
Family will provide child care	92.98	94.83	88.80 ^a
Relationship quality			
Emotional support from father (1 – 3)	2.72	2.74	2.68
Disagreement (0 – 6)	1.74	1.64	1.94
Father hits or slaps	1.66	1.78	1.38 ^a
Mothers' substance abuse	3.08	2.56	4.26
Fathers' substance abuse	2.32	2.10	2.82
Mothers' relationship history			
Prior marriage	6.94	5.82	9.47
Prior cohabitation	20.93	18.19	27.09 ^a
Parents' fertility history			
Mother has prior child	22.14	13.15	42.42 ^a
Father has prior child	19.81	12.74	35.77 ^a
Couple has prior child	52.01	56.39	42.11 ^a
Couple has new child within 3 years	35.23	36.35	32.71
Child conceived prior to union	6.53	4.16	11.85 ^a
Relationship duration prior to birth (years)	3.86	5.78	2.43 ^a

Note: Weighted using sampling weights by city to adjust for marital and nonmarital birth rates. Baseline values presented for all variables except the couple has a new child within 3 years. Source: Fragile Families and Child Wellbeing Study.

^aCohabitors differ significantly from married at child's birth at the $p \leq .05$ level.

college education is even greater. Over 35% of married fathers in this sample have a college degree compared to fewer than 4% of cohabiting fathers. In terms of mothers' education, most mothers have similar levels of education as the

father, but this is especially true for married mothers (64% compared to 53%, respectively). Greater percentages of cohabiting mothers are less educated than their male partners. The different education levels between married and

cohabiting parents are likely reflected in the different levels of household income. Although married mothers report over twice the annual income as cohabitators, it is possible that cohabiting mothers are less aware of the incomes of their cohabiting partners and may be underreporting the total household's income. With regard to employment, married fathers more often than cohabiting fathers were employed at the time of their child's birth (95% vs. 79%), but there are no significant differences in married and cohabiting mothers' employment rates in the year prior to the child's birth (70% and 67%, respectively). Married mothers report that they are more likely to have access to money and child care from their extended family members.

Married and cohabiting mothers report somewhat similar levels of emotional support (2.74 out of 3 compared with 2.68 for cohabitators; $p = .09$), but cohabiting mothers report significantly higher levels of disagreement in the month prior to their child's birth. Very few mothers report domestic violence or substance abuse problems, but it is possible that these figures are underreported given that the mothers were asked about these issues shortly following childbirth.

With regard to relationship history, married mothers are equally likely as cohabiting mothers to have been married before but less likely to have lived with another cohabiting partner prior to their current union. In terms of fertility, married parents more often than cohabiting parents share another biological child (56% vs. 42%, respectively), yet cohabiting mothers and fathers more frequently than married parents have children from previous relationships. Similar proportions of married and cohabiting parents have another child within 3 years, and cohabiting parents are

almost three times more likely than married parents to have conceived the focal child prior to their current union. Finally, married parents have been together over 3 years longer than cohabiting parents prior to the birth of their child (5.78 vs. 2.43 years, respectively).

Life-Table Estimates

The life-table estimates shown in Table 2 and Figure 1 present the cumulative proportion of children who experience their parents' separation by age 3. By the end of the child's third year, almost half (49%) of children born to cohabiting parents have experienced their parents' separation compared with just over 11% of children born to married parents. In fact, almost 11% of children born to cohabiting parents have experienced their parents' separation within their first 6 months (see Figure 1). Our findings are similar to the findings of Manning et al. (2004), yet we show somewhat higher rates of separation for cohabiting parents by age 1 (22% vs. 15% in their study). Cohabiting unions are increasingly unstable (Bumpass & Lu, 2000), which might explain why our estimates are higher. Also, some of the difference may stem from the Fragile Families data focusing only on parents in urban areas.

Figure 2 shows the cumulative proportion of unions ending in separation, separately for Black, White, and Mexican American parents (race or ethnicity is defined by the mother's race or ethnicity). These results are also presented in Table 2. Consistent with results shown in Figure 1, children born to married parents, regardless of race or ethnicity, experience greater parental stability than do children born to cohabiting parents. The difference in marital and cohabiting stability,

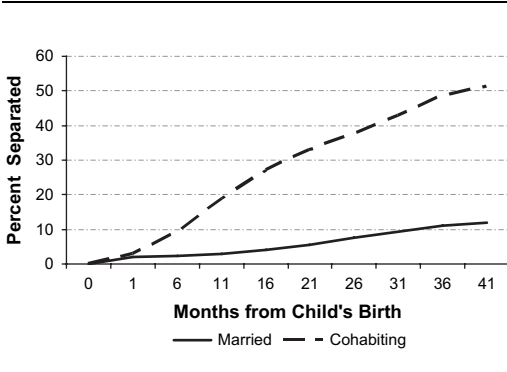
Table 2. Cumulative Proportion of Unions Ending in Separation by Union Status at Child's Birth and Race or Ethnicity

Union Status at Child's Birth	Proportion Separated by 36 Months After Child's Birth			
	Total ($N = 2,249$)	White ($n = 764$)	Black ($n = 990$)	Mexican American ($n = 495$)
Married at birth ($n = 886$)	11.1	5.8	27.2 ^a	9.3
Cohabiting at birth ($n = 1,363$)	48.7	45.4	57.4 ^b	28.8
Total ($N = 2,249$)	23.1	10.9	43.9 ^c	15.6

Note: Results based on life-table estimates. Source: Fragile Families and Child Wellbeing Study.

^aProportion separating is significantly higher than White or Mexican American married parents at the $p \leq .05$ level. ^bProportion separating is significantly higher than Mexican American cohabiting parents but statistically similar to White cohabiting parents at the $p \leq .05$ level. Separation rates for White cohabiting parents are statistically similar to Mexican American cohabitators. ^cProportion separating is significantly higher than White or Mexican American parents at the $p \leq .05$ level.

FIGURE 1. CUMULATIVE PROPORTION OF UNIONS ENDING IN SEPARATION.



Note: Life-table estimates weighted using sampling weights by city to adjust for marital and nonmarital birth rates. Married and cohabiting refer to parents' relationship status at child's birth. Source: Fragile Families and Child Wellbeing Study.

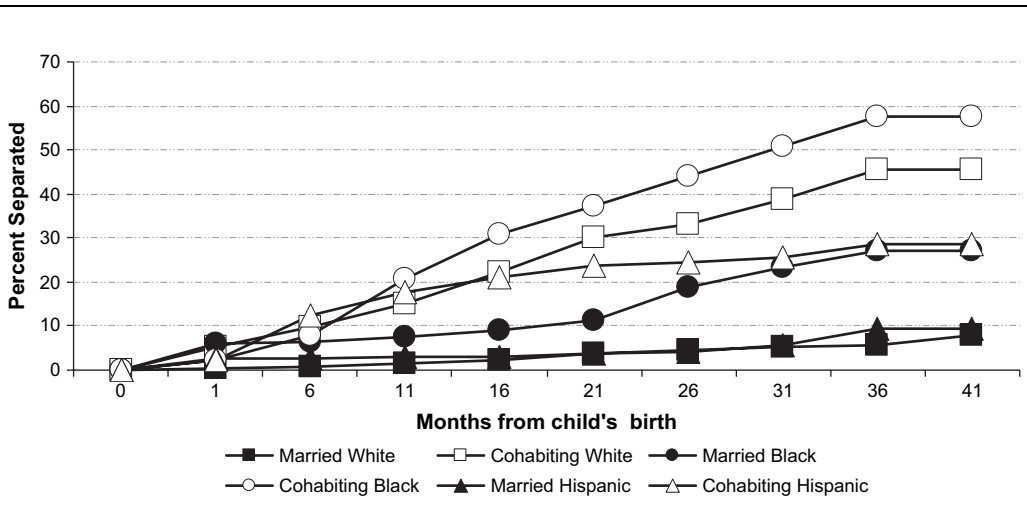
however, is smaller for Black children than it is for White or Mexican American children because of the high rates of separation of Black married parents (27%), as compared with White (6%) and Mexican American (9%) married parents. Black children born to cohabiting parents are more likely to experience their parents' separation (57%) than their Mexican American counterparts (29%), but they are (statistically) equally

likely as White children born to cohabiting parents (45%) to experience their parents' separation. Stability in the unions of Mexican American cohabiting parents does not differ significantly from White cohabiting parents.

Multivariate Analysis

Table 3 shows the association between union status at the child's birth and the hazard or relative risk of parental separation by age 3. The bivariate results (data not shown) indicate that for children born to cohabiting parents, the risk of experiencing their parents' separation by age 3 is 5.57 times that of children born to married parents. Controlling only for race or ethnic differences in union stability (Model 1) reduces the relative risk to 3.87, but it is still statistically significant. Consistent with the results shown in Table 2 and Figure 2, Mexican American and White parents have similar risks of separation (hazard ratio = 1.06; $p = .860$), and Black parents are significantly more likely than White parents to separate (hazard ratio = 2.66; $p = .000$). As stated previously, this difference in union stability between Black and White parents is driven largely by differences in marital instability (27% vs. 6%, respectively) rather than differences in cohabiting stability (57% vs. 45%, respectively) at the observed level.

FIGURE 2. CUMULATIVE PROPORTION OF UNIONS ENDING IN SEPARATION BY RACE OR ETHNICITY.



Note: Life-table estimates weighted using sampling weights by city to adjust for marital and nonmarital birth rates. Married and cohabiting refer to parents' relationship status at child's birth. Source: Fragile Families and Child Wellbeing Study.

Table 3. Hazard Ratios of Parental Separation by Year 3 (N = 3,699 Person-Years)

	(1)	(2)	(3)	(4)	(5)	(6)
Union status at child's birth						
(Married)						
Cohabiting	3.87**	2.66**	2.43**	2.84**	2.57**	2.59**
Relationship duration prior to birth (years)		0.97	0.97	0.97	0.95	0.95
Mother's race or ethnicity						
(White)						
Black	2.66**	2.30**	2.01**	2.01**	2.19**	1.72*
Mexican American	1.06	0.79	0.72	0.78	0.81	0.71
Mother's characteristics						
Age		0.97	0.98	0.97*	0.97	0.97
Parents married at age 15		0.75	0.76	0.80	0.81	0.86
Attend religious service weekly		0.98	0.96	1.09	1.06	1.11
Education						
Father's education						
(Less than high school)						
High school		0.84	0.95	0.89	0.83	0.95
Some college		0.66	0.88	0.82	0.67	0.99
College		0.57	0.92	0.74	0.53	0.92
Mother's education						
(Same as father)						
More than father		0.89	0.97	0.95	0.89	0.97
Less than father		1.45	1.29	1.36	1.68†	1.43
Economic resources						
Household annual income			0.99*			0.99*
Father's employment			1.12			1.19
Mother's employment			0.98			0.98
Perceived social support						
Able to borrow \$200 from family			1.21			1.28
Family will provide child care			0.78			0.89
Relationship quality						
Emotional support (1 – 3)				0.68*		0.73†
Disagreement (0 – 6)				1.13*		1.13*
Father hits or slaps				1.39		1.00
Mothers' substance abuse				1.59		1.64
Fathers' substance abuse				1.72†		1.89*
Relationship history						
Prior marriage					1.66†	1.43
Prior cohabitation					0.74	0.75
Parents' fertility history						
Couple has prior child					0.82	0.79
Mother has prior child					0.93	0.85
Father has prior child					1.07	1.08
Couple has new child within 3 years					0.47**	0.47**
Child conceived prior to union					0.54*	0.55
–2 log-likelihood	3213.29	3185.6	3170.2	3153.7	3155.3	3111.4

Note: Results derived from Cox proportional hazard models. Time-varying covariates include annual household income, fathers' and mothers' employment, perceived social support, emotional support, father hits or slaps, mothers' and fathers' substance abuse, and couple has new child. Reference category is in parentheses. Source: Fragile Families and Child Wellbeing Study.

† $p \leq .10$. * $p \leq .05$. ** $p \leq .01$.

Model 2 adds in controls for the duration of the parents' relationship prior to the child's birth, background characteristics of the mother, and the parents' education levels. These factors jointly reduce the relative risk of separation for cohabiting versus married parents to 2.66 from 3.87 in Model 1. Although none of the additional covariates in Model 2 is statistically significant, the inclusion of the duration and education variables significantly increase the fit of the model, determined by likelihood ratio tests. In addition, these factors, particularly differences in education levels, reduce the relative risk of separation for Blacks versus Whites (the hazard ratio corresponding to Black declines from 2.66 to 2.30).

Economic characteristics of the parents and perceived social support are included in Model 3. These measures significantly add to the fit of the model (compared with Model 2) and attenuate the relative risk for cohabitation to 2.43. Economic characteristics also account for a substantial amount of the difference in the hazard of separation between Black and White parents (the hazard ratio representing Black declines from 2.30 to 2.01 with the inclusion of the parents' economic characteristics). Annual household income predicts separation, with higher incomes related to a lower risk of separation. As shown in Table 1, married parents have over twice the annual household income as cohabiting parents have. We also find that fathers' and mothers' employment are not significantly related to separation, after accounting for education and income levels. In preliminary models, we controlled for mothers' and fathers' earnings instead of annual income and employment. The results are robust to either method, and we chose to present the more parsimonious model. It is also likely that income is representative of the length and stability of employment in addition to the wages earned. Our measures of perceived social support are not significantly associated with separation.

Measures of the parents' relationship quality are included in Model 4. Consistent with prior research, emotional support is protective against separation (Carlson et al., 2004), and higher levels of disagreement and paternal substance abuse hasten the parents' breakup. Although these measures significantly add to the fit of the model (compared with Model 2), this set of covariates does not reduce the relative risk of cohabitation as we predicted; rather the relative risk for cohabitation actually increases slightly between Models 2 (2.66) and 4 (2.84). Supplemental analyses

in which we interacted the relationship quality variables with union status showed that the effects of the relationship quality measures are somewhat stronger for cohabiting versus married parents. Cohabiting parents appear to be more sensitive to the quality of their relationships and more likely than married parents to end a relationship that involves conflict or substance abuse. Married parents appear to be more willing to remain together, despite problems in their relationship, which is consistent with the idea that marriage is a stronger commitment than cohabitation and that there are fewer barriers to exit a cohabiting relationship versus marriage. Interestingly, relationship quality (particularly emotional support and disagreement) explains a similar amount of the Black or White difference in separation as economic resources do.

Model 5 includes measures of family complexity, including mothers' relationship history and the parents' fertility histories. Including these variables significantly adds to the fit of the model but does little to account for the difference in the relative risk of separation for cohabiting and married parents (compared with Model 2). Parents who have been married previously are more likely to separate; married parents are more likely than cohabiting parents, however, to have experienced a prior marriage, which explains why this variable does not account for the difference in the risk of separation. In addition, having another child subsequent to the focal child's birth is protective against separation, but cohabiting and married parents are equally likely to have an additional child. Conceiving the focal child prior to the union status at birth is also protective against separation, and cohabitators are significantly more likely than married parents to have formed their union following conception. Interestingly, the family complexity measures do not explain as much of the Black or White difference in separation as economic resources and relationship quality measures explain. The coefficient for Black declines from 2.30 in Model 2 to 2.19 in Model 5, but it declined to 2.01 with the inclusion of the economic and relationship quality measures (Models 3 and 4).

Model 6 is the full model and includes all the sets of covariates mentioned above. Contrary to what we predicted, combining the three sets of covariates (economic resources, relationship quality, and family complexity) does not mediate the difference in the relative risk of separation for children born to cohabiting and married parents. Indeed, we find that the hazard ratio is reduced

more by controlling only for differences in union duration, background characteristics, education, and economic resources (Model 3), rather than including controls for relationship quality and family complexity. Controlling for relationship quality differences actually increases the risk of separation for cohabiting relative to married parents because cohabitators are more likely to separate given a poor relationship, and they have somewhat lower relationship quality. Although cohabitators have more complex families than married parents, these factors are not as strongly associated with union stability and thus do little to attenuate the difference in separation.

By contrast, including economic, relationship quality, and family characteristics does help to account for the difference in the hazard of separation for Black as compared with White parents (the coefficient declines from 2.30 in Model 2 to 1.72 in Model 6, and the fit of the model is also significantly improved). The race gap, however, is not completely mediated by the inclusion of these indicators in the model.

Although we have accounted for over half (54%) of the observed relative risk of separation between cohabiting and married parents (the hazard ratio declined from a bivariate of 5.57 to 2.59 in Model 6), we have not accounted for all the observed difference in separation. Parents who are cohabiting at their child's birth still have over two and a half times the risk of separating as compared with parents who are married at their child's birth, after controlling for an extensive set of covariates. Model 6 also suggests that the economic, relationship quality, and family complexity variables have largely independent effects on separation, as indicated by the small change in the size of the respective coefficients when all variables are included in the same model as compared with the model in which only a particular set of covariates is included. Children who have parents with more household income and better relationship quality and parents who have another child within 3 years of the focal child's birth have a significantly lower risk of experiencing their parents' separation. Children with parents who argue often and who have substance abuse problems experience a higher risk of separation, all else equal.

Racial and Ethnic Differences

Race-ethnic differences in the relative risk of separation persist after the inclusion of an array of

demographic, economic, relationship quality, and family complexity variables. These variables account for a significant portion of the racial gap, yet children born to Black mothers as compared with White mothers have a 72% higher risk of experiencing their parents' separation by year 3, all else equal. As stated previously, the Black or White gap in union disruption is greater among women who are married than cohabiting (see Figure 2; Table 2). Investigative analysis shows that with no additional controls, Black married parents have 5.33 times the risk of separating within 3 years following their child's birth relative to White married parents, whereas Black cohabitators have a similar risk of separation as White cohabitators over this time frame. With the inclusion of the controls in Model 6, the racial gap in marriage instability becomes more similar, yet married Blacks still have 2.95 times the risk of separating as married White parents (results not shown).

To further investigate race and ethnic differences, we ran each of our models separately by race and ethnicity. As discussed above, this strategy is supported by our Chow tests. Our goal was to determine whether the factors that explain the differences between marital and cohabiting stability are similar for each race and ethnic group. We present two panels in Table 4: the first panel shows the relative risk of separation for cohabiting versus married parents separately for White, Black, and Mexican American parents regardless of nativity status; the second panel shows the results for Mexican American parents only and includes controls for native-born status and an interaction between native born and cohabitation.

Because of limitations in cell sizes, we did not create separate groups for native- and foreign-born Mexican Americans. In effect, the coefficient associated with cohabitation in Panel B represents the risk of separation for foreign-born cohabitators relative to foreign-born married parents; the coefficient associated with native born illustrates whether there are differences in the risk of separation between native-born married parents and foreign-born married parents; and the coefficient for the interaction term illustrates whether the risk of separation for native-born and foreign-born cohabitators is similar.

At the bivariate level, all cohabiting parents have a higher risk of separation than do married parents, regardless of race or ethnicity. The difference in stability between cohabiting and married parents is particularly large for White parents, however. White cohabiting parents have

Table 4. Hazard Ratio of Parental Separation for Cohabiting Versus Married at Birth Separately for Each Race or Ethnicity

	Bivariate (1)	Demographic Characteristics (2)	Economic Resources (3)	Relationship Quality (4)	Family Complexity (5)	Full Model (6)
Panel A						
White	9.79**	2.35*	2.33*	2.08*	2.07†	1.78
Black	2.65**	2.11**	1.94*	2.18**	2.11**	2.09*
Mexican American	3.56*	3.33*	2.71†	3.79**	3.47**	2.98**
Panel B						
Mexican American Only (Foreign born)						
Cohabitation	1.09	1.25	0.96	1.16	1.14	0.78
Native born	0.60	0.51	0.55	0.34†	0.57	0.41
Interaction	7.29†	5.73†	5.94*	8.24**	7.64*	11.15**

Note: Cox proportional hazard models run separately by race. Each model in Panel A includes the same covariates, respectively, as included in Table 3. In Panel B, the models add controls for native born and an interaction term between native born and cohabitation status in order to isolate the hazard ratio of separation from cohabitation for foreign-born Mexican Americans. Source: Fragile Families and Child Wellbeing Study.

† $p \leq .10$. * $p \leq .05$. ** $p \leq .01$.

almost 10 times the risk of separation by their child's third year as compared with White married parents, whereas Mexican American cohabiting parents have 3.56 times the risk and Black cohabiting parents have 2.65 times the risk of separating relative to their married counterparts. The relative risk of separation is significantly different for White versus Black and Mexican American cohabitators, determined by results from a model interacting only race and cohabitation. Note that Black parents, however, have the highest disruption rates overall, particularly for married parents, whereas Whites and Mexican Americans have similar lower dissolution levels (see Table 2; Figure 2).

Panel A in Table 4 shows the difference in the risk of separation for cohabiting versus married parents across the series of models. Differences in demographic characteristics explain a considerable portion of the difference in separation for each race or ethnic group, but this is particularly true for Whites. Accounting for differences in relationship duration prior to the child's birth, maternal background characteristics, and parents' education levels reduces the hazard ratio on cohabitation for White parents from 9.79 to 2.35 and significantly adds to the fit of the model, using a likelihood ratio test (data not shown). By contrast, these variables account for a smaller reduction in the hazard ratio for Black parents (from 2.56 to 2.11) and for Mexican American parents (3.56 to 3.33), although the fit of the

model is improved for each group. Differences between cohabiting and married parents in relationship duration, maternal age, and education are much larger for White parents as compared with Black or Mexican American parents, which helps to explain why these factors explain so much more of the cohabitation effect for Whites (data not shown). For example, the relationship duration differential is over 4 years for White parents (6.14 years for White married compared with 1.94 years for White cohabiting parents), but it is fewer than 3 years for Black or Mexican American parents. Similarly, the age differential is over 7 years for White parents, but it is fewer than 4 years for Black parents and not statistically significant for Mexican American parents. In terms of education, 31% of White cohabiting fathers have less than a high school degree, compared with only 4.5% of White married fathers; for Blacks, the corresponding numbers for fathers with less than a high school degree are 29% versus 14%, and for Mexican Americans, there are no significant differences between married (69%) and cohabiting (61%) fathers; both groups have very low levels of education.

Differences in economic resources (household income and employment) between cohabiting and married parents further reduces the difference in the risk of separation for each race and ethnic group, although the difference in log-likelihoods is not significant for Whites, but this finding is particularly true for Mexican Americans (see

Model 3). Economic characteristics reduce the hazard ratio on cohabitation by 19% for Mexican Americans but only 8% for Blacks and less than 1% for Whites (Model 3 as compared with Model 2). We find that income and paternal employment are not the economic factors driving the union status differential among Mexican Americans. One possible explanation is that maternal employment seems to increase the risk of separation for Mexican Americans, whereas it has no significant effect on union stability for the other groups. The difference in maternal employment for Mexican Americans by union status is negligible for foreign-born Latinas (and very few are employed at their child's birth or when the child is age one), but the union status differential is large and significant for native-born Mexican Americans when the child is age one (37% of married mothers are employed as compared to 66% of cohabiting mothers). Because native-born cohabitators are the most likely Mexican American group to separate (as discussed below), this differential could explain why economic resources seem to explain more of the union status differential for Mexican Americans than for Whites or Blacks.

By contrast to the economic characteristics, relationship quality characteristics explain a large portion of the relative risk of separation for White cohabitators but explain none of the difference in separation for Blacks and Mexican Americans. In fact, for Blacks and Mexican Americans, the relative risk of separation for cohabitators actually increases relative to Model 2 with the inclusion of the relationship quality characteristics. The reason for this finding is likely twofold: first, differences in relationship quality between married and cohabiting parents are substantially large for White parents but statistically insignificant for Black and Mexican American parents; and second, the effects of relationship quality on separation, particularly emotional support, are greater for White parents as compared with Black or Mexican American parents. Again, we tested these differences across race and ethnic groups by running a fully interacted model (results not shown).

The family complexity measures yield somewhat mixed results across race and ethnic groups. For White parents, these variables significantly add to the fit of the model and jointly reduce the hazard of separation for cohabitators from 2.35 in Model 2 to 2.07 in Model 5. Higher levels of prior marriage and children from prior unions

among White cohabiting versus married parents account for this reduction in the hazard. White cohabitators are twice as likely as White married parents to have been married before and about 10 times as likely to have children from prior unions (data not shown). There is no union gap on these variables for Black or Mexican American parents, however. Thus, not surprisingly, the family complexity variables do not explain any of the cohabitation effect for Blacks or Mexican Americans.

The inclusion of economic, relationship quality, and family complexity covariates in Model 6 explains almost a quarter of the relative risk of separation between White married and cohabiting parents, relative to controlling for demographic characteristics alone (Model 2), and over 80% of the higher risk of separation for cohabitators relative to the bivariate model (Model 1). Indeed, the combination of these variables explains all the significant difference in instability between White married and cohabiting parents. Four variables are primarily responsible for the reduction in the relative risk between Models 2 and 6: paternal substance abuse, previous marriages, and prior children from other unions. Thus, it is differences in relationship quality and family complexity that mediate the difference in stability between cohabiting and married White parents, controlling for the of background characteristics of these families.

By contrast, the combination of these variables does little to explain the higher risk of separation for cohabiting Black and Mexican American parents relative to their married counterparts. Economic factors make the largest contribution to the fit of the model and seem to explain more of the difference in instability between married and cohabiting minority parents than the other factors.

The inclusion of the full set of covariates in Model 6 significantly reduces the differences across race or ethnic groups in the differential separation rates for married and cohabiting parents relative to the bivariate models. Nevertheless, despite the inclusion of these rich sets of covariates, the higher risk of separation for cohabiting parents relative to married parents persists for Black and Mexican American parents. This effect appears to be strongest for Mexican American parents, yet the difference between Black and Mexican Americans is not statistically significant (on the basis of a fully interacted model).

Combining all Mexican American parents into one group may be problematic, however, given that social and economic conditions often differ by nativity status. Panel B in Table 4 presents the results for Mexican Americans only; each model controls for nativity status and an interaction term between cohabiting at birth and being native born. The results suggest that the findings for Mexican Americans presented in Panel A of Table 4 are largely reflective of native-born Mexican Americans but not of Mexican Americans born in Mexico.

Foreign-born cohabitators are not more likely to separate relative to foreign-born married parents (the reference group) at the bivariate level or after controlling for any of the covariates included in the models (none of the coefficients for cohabitation is significant at the $p \leq .10$ level). Moreover, native-born married parents have similar risks of separation as foreign-born married parents, indicated by the lack of significance in the hazard ratio for native born in each of the models (with the exception of Model 4, which is marginally significant). By contrast, the results suggest that native-born cohabitators are much more likely than native-born married parents to separate within their child's first 3 years, and they are more likely to separate than foreign-born cohabiting or married parents. Thus, native-born Mexican Americans are driving the results for all Mexican Americans shown in Panel A of Table 4.

DISCUSSION

Recent increases in the percentage of children born to cohabiting parents and growth in cohabitation make it important to provide timely assessments of how cohabitation relates to family stability. We extend prior work by focusing on the relative stability of cohabiting and married parents for a recent birth cohort of children and by examining the factors that help explain the differential rates of separation, paying close attention to whether these processes differ by race and ethnicity.

Our findings both mirror and move beyond prior studies; like those studies, we find that children born to cohabiting parents face a considerably higher risk of parental instability than children born to married parents and that this holds true across racial and ethnic groups. Cohabitation appears to be particularly less stable for Whites, however. Three years following the birth

of a child, White cohabiting parents have almost 10 times the risk of union disruption than White married parents. One explanation may be that White mothers who have a birth while cohabiting are quite (negatively) selective (10% of White births are to cohabiting mothers, as compared to one fifth of Black and Hispanic [Bumpass & Lu, 2000]), whereas White mothers who have a birth while married are more common (76% of White births are marital, as compared to 31% of Black births and 55% of Hispanic births [Hamilton et al., 2003]). Thus, there are greater differences between White married and cohabiting mothers as compared with married and cohabiting Black or Mexican American mothers in economic and sociodemographic characteristics related to union instability.

Our second goal was to introduce potential factors, specifically economic resources, social support, relationship quality, and family complexity measures, that may help explain why children born into cohabiting families face a higher risk of experiencing their parents' breakup than those born to married parents. Prior work has lacked detailed measures of income and economic well-being, social support, relationship qualities, histories of relationship instability, and prior fertility behavior.

One of our key findings is that, on the whole, cohabiting parents are more likely to separate even after accounting for differences in demographic, economic, relationship quality, and family complexity indicators. These indicators explain over half of the observed difference in union stability, but cohabiting parents remain over two and a half times as likely to separate as their married counterparts. We find that differences in economic resources explain a greater share of the cohabitation effect than the relationship quality or family complexity indicators. All three sets of indicators add to the fit of the model, however, and appear to be operating independently of one another.

Although we include economic characteristics of the biological father, indicators of relationship quality and family complexity, and a richer array of demographic characteristics in our models as compared with prior studies, our results are largely similar to those of Manning et al. (2004) who include only mothers' demographic and economic characteristics. We find that children born to cohabiting versus married parents have a 184% higher risk of experiencing their parents' separation by age three, in comparison to a 119% higher

risk by age 10 in the study of Manning et al. At the same time, our multivariate analyses account for a much larger portion of the union status differential relative to our bivariate models. The higher rates of cohabiting versus marital instability in the current study may be explained by the fact that cohabiting unions are increasingly less stable and that our sample focuses primarily on lower income, urban residents who might have less stable relationships than the general population.

One of the new findings in our study is that among Whites, the gap in the instability of cohabiting and marital unions can be explained by demographic, relationship quality, and family complexity indicators. The higher gap in union stability for White parents is consistent with prior work (Manning et al., 2004); the study by Manning et al., however, did not explain the effect of cohabitation among Whites. In this analysis, parents' education level, fathers' substance abuse, prior marriage, and children from prior unions explain the significant differences in union stability between married and cohabiting White parents. White cohabiting parents have much lower levels of education and higher paternal substance abuse and are more likely to have been married previously and to have children from a prior union than White married parents. These factors are largely exogenous to their current relationship status, which implies that the risk of greater instability among White cohabitators relative to their married counterparts is largely the result of selection into cohabitation versus marriage, rather than something caused by the relationship status per se.

In contrast, controlling for relationship quality and family complexity measures actually exacerbates the difference in union stability for Blacks and Mexican Americans, and the socioeconomic and economic variables explain only a small portion of the cohabitation effect. Our analyses find that among Black and Mexican American parents, there are few differences between cohabiting and married parents in the measures included in this analysis and that the effect of these measures on instability is relatively weak. By contrast, there are considerable differences between White married and cohabiting parents on these indicators, and the effect of these indicators on instability is stronger. Prior work on married parents suggests that the factors related to marital stability differ across race or ethnic groups (Sweeney & Phillips, 2004), and future work needs to explore

more fully how the factors differ for cohabiting parents as well.

Another contribution is the finding that among foreign-born Mexican Americans (who represent approximately half of our sample of Mexican Americans), we find no difference in the risk of separation between cohabiting and married parents at the bivariate level. Among second or higher generation Mexican Americans, however, the differences in union stability between cohabiting and married parents is considerable and actually higher than the differential for Whites and Blacks after accounting for an extensive set of covariates. To our knowledge, no study has shown that the greater instability of cohabiting relationships among Mexican Americans is driven by the behaviors of native-born Mexican Americans and that there are no differences in cohabiting and marital union stability among foreign-born Mexican Americans. Prior research that has disaggregated foreign- and native-born Mexican Americans has focused on marital stability and the risk factors (Phillips & Sweeney, 2006), including premarital cohabitation (Phillips & Sweeney, 2005), that lead to greater disruption. That research finds significant differences by nativity status; marriages are more stable among foreign-born Mexican Americans relative to their native-born counterparts (Phillips & Sweeney, 2006), and premarital cohabitation seems to have a greater negative effect on marriage stability for foreign born as compared with native-born Mexican Americans (Phillips & Sweeney, 2005). Our research shows that foreign-born cohabiting relationships are also more stable than cohabiting relationships of native-born Mexican Americans, despite similar low levels of economic resources.

This finding highlights the importance of considering family processes separately by nativity status. It is possible that cohabitation represents more of an informal marriage to foreign-born Mexican American cohabitators on the basis of their cultural roots (Castro Martin, 2002) and that cohabitation is a less committed union for native-born Mexican Americans. Oropesa and Landale (2004) find that foreign-born Hispanic women have more pronuptial attitudes and behaviors than native-born Hispanics and that subsequent generations adopt the social behaviors more closely associated with their socioeconomic status. Thus, the significance and nature of cohabitation may differ by nativity status (Brown et al., 2006) and needs further consideration.

There are several limitations to these analyses. One limitation is that we are unable to examine whether marriage among cohabiting parents enhances union stability. Prior work suggests that marriage promotes stability, but the protective effect of marriage differs for race and ethnic groups (Manning et al., 2004). Our data do not identify mothers who transition to marriage and then separate between the Wave 2 and Wave 3 interviews, precluding our ability to track all transitions into and out of marriage among cohabitators. Another limitation is that we attempt to incorporate a broader range of observed characteristics than has been used in prior work, but some of the measures available in the Fragile Families Study may not be ideal indicators of what we desire to measure. For example, perceived social support is limited to financial aid and child care, employment does not indicate length or stability of employment, and relationship quality focuses primarily on negative aspects of the relationship. The mechanisms underlying the union status gap in family stability may be better understood with improved measurement and insights gleaned through qualitative methods. Refined measures might be particularly necessary for Black and Mexican American parents as the measures included in this analysis do not predict union stability similarly for all groups. Another limitation is that we are unable to determine a causal link between union status and stability, and it is probable that unobserved or unmeasured characteristics are omitted from this analysis.

Our findings contribute to the ongoing effort to better understand the role that cohabitation plays in family formation, and how the nature of cohabitation may differ across race and ethnic groups. The growing consensus is that cohabitation is a temporary relationship for White couples that is generally short lived and often precedes marriage; by contrast, cohabitation is viewed more as an alternative to marriage for Black and many Mexican American parents who are unable to make a successful transition to marriage (Manning & Landale, 1996; Phillips & Sweeney, 2005). Our findings support this in that at the zero-order level Black and Mexican American cohabitators have more similar union stability as their married counterparts than Whites. Yet, our findings indicate that understanding of cohabitation and family stability needs to be more nuanced to take account of nativity status (Brown et al., 2006). Important to note is that although the difference in union stability between cohabiting

and married parents is greatest for Whites, Whites still have very low rates of instability, particularly marital instability. Mexican Americans have a moderate differential at the bivariate level because of low cohabitation instability, driven by the low cohabitation instability of foreign-born Mexican Americans. In contrast, Blacks evidence a smaller cohabitation-marriage differential because of high marital instability. Thus, the meaning and significance of marriage may differ by race or ethnicity and nativity status, and it is essential to understand these differences more fully in order to adequately grasp the meaning of cohabitation relative to marriage for various racial and ethnic groups.

Our findings also contribute to knowledge about the ramifications of cohabitation for children. The marital status of two biological parents at the time of a child's birth has implications for the stability of children's early family life course. Researchers examining the implications of cohabitation should account for the greater instability experienced by children born to cohabiting parents and should further explore to what extent a transition to marriage from cohabitation enhances relationship stability.

This article speaks to current policy initiatives aimed at promoting marriage among unmarried parents by providing relationship counseling. Our findings show that although relationship quality is an important predictor of union stability, it does little to help explain the difference in instability between cohabiting and married parents for Black and Mexican American parents. Thus, policies aimed at promoting stability among parents must take race or ethnic differences into account; for minorities, economic resources are better predictors of union stability.

Although our knowledge is expanding, the implications of cohabitation for children are still largely undefined, despite the increasing likelihood that a child will be born into a cohabiting union. An important difference between these children and those born to married parents is that they are significantly more likely to experience their parents' separation early in their life course, which may have serious consequences for their subsequent development. In addition, these family experiences and processes differ considerably across race and ethnic groups and by nativity status. Thus, any deleterious consequences associated with the increase in cohabiting births may exacerbate the existing inequalities in children's life trajectories.

REFERENCES

- Allison, P. (1984). *Event history analysis*. Beverly Hills, CA: Sage.
- Amato, P. (2005). The impact of family formation change on the cognitive, social, and emotional well-being of the next generation. *Future of Children, 15*, 75 – 96.
- Antonovics, K., & Town, R. (2004). Are all the good men married? Uncovering sources of the marital wage premium. *American Economic Review, 94*, 317 – 321.
- Becker, G. (1991). *A treatise on the family*. Cambridge, MA: Harvard University Press.
- Brines, J., & Joyner, K. (1999). The ties that bind: Principles of cohesion in cohabitation and marriage. *American Sociological Review, 64*, 333 – 355.
- Brown, S. L. (2000). Union transitions among cohabitators: The role of relationship assessments and expectations. *Journal of Marriage and the Family, 62*, 833 – 846.
- Brown, S. L. (2003). Relationship quality dynamics of cohabiting unions. *Journal of Family Issues, 24*, 583 – 601.
- Brown, S. L. (2004a). Family structure and child well-being: The significance of parental cohabitation. *Journal of Marriage and Family, 66*, 351 – 367.
- Brown, S. L. (2004b). Moving from cohabitation to marriage: Effects on relationship quality. *Social Science Research, 33*, 1 – 19.
- Brown, S. L., & Booth, A. (1996). Cohabitation versus marriage: A comparison of relationship quality. *Journal of Marriage and the Family, 58*, 668 – 678.
- Brown, S. L., Van Hook, J., & Glick, J. (2006). *Generational differences in cohabitation and marriage in the US* (Working Paper Series 06 – 03). Bowling Green, OH: Center for Family and Demographic Research, Bowling Green State University.
- Bumpass, L., & Lu, H. (2000). Trends in cohabitation and implications for children's family contexts. *Population Studies, 54*, 29 – 41.
- Carlson, M., & Furstenberg, F. (2006). The prevalence and correlates of multipartnered fertility among urban US parents. *Journal of Marriage and Family, 68*, 718 – 732.
- Carlson, M., McLanahan, S., & England, P. (2004). Union formation in fragile families. *Demography, 41*, 237 – 262.
- Casper, L., & Bianchi, S. (2002). *Continuity and change in the American family*. Thousand Oaks, CA: Sage.
- Castro Martin, T. (2002). Consensual unions in Latin America: Persistence of a dual nuptiality system. *Journal of Comparative Family Studies, 33*, 35 – 55.
- Cherlin, A. (2004). The deinstitutionalization of American marriage. *Journal of Marriage and Family, 66*, 848 – 861.
- Cohen, P. N. (2002). Cohabitation and the declining wage premium for men. *Work and Occupations, 29*, 346 – 363.
- DeMaris, A. (2000). Till discord do us part: The role of physical and verbal conflict in union disruption. *Journal of Marriage and the Family, 62*, 683 – 692.
- DeMaris, A. (2002). Regression models. In M. Wiederman & B. Whitley (Eds.), *Handbook for conducting research on human sexuality* (pp. 255 – 288). Mahway, NJ: Erlbaum.
- Etgebeen, D. (2005). Cohabitation and exchanges of support. *Social Forces, 83*, 1097 – 1110.
- Fein, D., Burstein, N., Fein, G., & Lindberg, L. (2003). *The determinants of marriage and cohabitation among disadvantaged Americans: Research findings and needs*. Cambridge, MA: Abt Associates.
- Fields, J. (2004). *American families and living arrangements: 2003* (Current Population Reports, Series P-20, No. 553). Washington, DC: U.S. Census Bureau.
- Gibson-Davis, C., Edin, K., & McLanahan, S. (2005). High hopes but even higher expectations: The retreat from marriage among low-income couples. *Journal of Marriage and Family, 67*, 1301 – 1312.
- Ginther, D. K., & Zavodny, M. (2001). Is the male marriage premium due to selection? The effect of shotgun weddings on the return to marriage. *Journal of Population Economics, 14*, 313 – 328.
- Goldscheider, F., & Sassler, S. (2006). Children and stepfamily formation. *Journal of Marriage and Family, 68*, 275 – 291.
- Hamilton, B., Martin, J., & Sutton, P. (2003). Births: Preliminary data for 2002. *National Vital Statistics Reports, Center for Disease Control, 51*(11).
- Hao, L. (1996). Family structure, private transfers, and the economic well-being of families with children. *Social Forces, 75*, 269 – 292.
- Harknett, K., & Knab, J. (2007). More kin, less support. Multipartnered fertility and perceived support among mothers. *Journal of Marriage and Family, 69*, 237 – 253.
- Kenney, C. T. (2003). Household economies: Money management and resource allocation among married and cohabiting parents. *Dissertation Abstracts International, A: The Humanities and Social Sciences, 63*(7), 2709-A.
- Korenman, S., & Neumark, D. (1997). Does marriage really make men more productive? *Journal of Human Resources, 26*, 282 – 307.

- Landale, N., & Huan, S. (1992). The family life course of Puerto Rican children. *Journal of Marriage and the Family*, *54*, 912 – 924.
- Lundberg, S., & Pollack, R. A. (1994). Noncooperative bargaining models of marriage. *American Economic Review*, *84*, 132 – 137.
- Manning, W. D. (1993). Marriage and cohabitation following premarital conception. *Journal of Marriage and the Family*, *55*, 839 – 850.
- Manning, W. D. (2001). Childbearing in cohabiting unions: Racial and ethnic differences. *Family Planning Perspectives*, *33*, 217 – 223.
- Manning, W. D. (2004). Children and the stability of cohabiting couples. *Journal of Marriage and Family*, *66*, 674 – 689.
- Manning, W. D., & Brown, S. L. (2006). Children's economic well-being in married and cohabiting parent families. *Journal of Marriage and Family*, *68*, 345 – 362.
- Manning, W. D., & Lamb, K. (2003). Parental cohabitation and adolescent well-being. *Journal of Marriage and Family*, *65*, 876 – 893.
- Manning, W. D., & Landale, N. S. (1996). Racial and ethnic differences in the role of cohabitation in premarital childbearing. *Journal of Marriage and the Family*, *58*, 1 – 15.
- Manning, W. D., & Smock, P. J. (2002). First comes cohabitation, then comes marriage? *Journal of Family Issues*, *23*, 1065 – 1087.
- Manning, W. D., Smock, P. J., & Majumdar, D. (2004). The relative stability of marital and cohabiting unions for children. *Population Research and Policy Review*, *23*, 135 – 159.
- Marcil-Gratton, N., Le Bourdais, C., & Lapierre-Adamcyk, E. (2000). The implications of parents' conjugal histories for children. *Canadian Journal of Policy Research*, *1*, 32 – 40.
- Marks, N., & McLanahan, S. (1993). Gender, family structure, and social support among parents. *Journal of Marriage and the Family*, *44*, 481 – 493.
- McLanahan, S., & Casper, L. (1995). Growing diversity and inequality in the American family. In R. Farley (Ed.), *State of the union: America in the 1990s* (Vol. 2, pp. 1 – 45). New York: Russell Sage.
- McLanahan, S., & Sandefur, G. (1994). *Growing up with a single parent: What hurts, what helps?* Cambridge, MA: Harvard University Press.
- Musick, K. (2002). Planned and unplanned childbearing among unmarried women. *Journal of Marriage and Family*, *64*, 915 – 930.
- Nock, S. (1995). A comparison of marriages and cohabiting relationships. *Journal of Family Issues*, *16*, 53 – 76.
- Oropesa, R. S., & Landale, N. S. (2004). The future of marriage and Hispanics. *Journal of Marriage and Family*, *66*, 901 – 920.
- Osborne, C. (2005). Marriage following the birth of a child among cohabiting and visiting parents. *Journal of Marriage and Family*, *67*, 14 – 26.
- Osborne, C., & McLanahan, S. (2007). Partnership instability and child well-being. *Journal of Marriage and Family*, *69*, 1065 – 1083.
- Osborne, C., McLanahan, S., & Brooks-Gunn, J. (2005). *Young children's behavioral problems in married and cohabiting families* (Working Paper No. 2003-09-FF). Princeton, NJ: Center for Research on Child Well-Being, Princeton University.
- Pagnini, D., & Morgan, S. P. (1996). Racial differences in marriage and childbearing: Oral history evidence from the South in the early twentieth century. *American Journal of Sociology*, *101*, 1694 – 1718.
- Phillips, J. A., & Sweeney, M. M. (2005). Premarital cohabitation and marital disruption among White, Black, and Mexican American women. *Journal of Marriage and Family*, *67*, 295 – 313.
- Phillips, J. A., & Sweeney, M. M. (2006). Can differential exposure to risk factors explain recent racial and ethnic variation in marital disruption? *Social Science Research*, *35*, 409 – 434.
- Raley, R. K., & Bumpass, L. L. (2003). The topography of the plateau in divorce levels and trends in union stability after 1980. *Demographic Research*, *8*, 246 – 258.
- Raley, R. K., Durden, T. E., & Wildsmith, E. M. (2004). Understanding Mexican American marriage patterns using a life course approach. *Social Science Quarterly*, *85*, 872 – 890.
- Raley, R. K., & Wildsmith, E. M. (2004). Cohabitation and children's family instability. *Journal of Marriage and Family*, *66*, 210 – 219.
- Roebuck Bulanda, J., & Brown, S. (2007). Race-ethnic differences in marital quality and divorce. *Social Service Review*, *36*, 945 – 967.
- Smock, P. J. (2000). Cohabitation in the United States: An appraisal of research themes, findings, and implications. *Annual Review of Sociology*, *26*, 1 – 20.
- Smock, P. J., & Manning, W. D. (1997). Cohabiting partners' economic circumstances and marriage. *Demography*, *34*, 331 – 341.
- Smock, P. J., Manning, W. D., & Porter, M. (2005). Everything's there except the money: How economic factors shape the decision to marry among cohabiting couples. *Journal of Marriage and Family*, *67*, 680 – 696.

- Stewart, S. D., Manning, W. D., & Smock, P. J. (2003). Union formation among men in the US: Does having prior children matter? *Journal of Marriage and Family*, *65*, 90 – 104.
- Stratton, L. S. (2002). Examining the wage differential for married and cohabiting men. *Economic Inquiry*, *40*, 199 – 212.
- Sweeney, M. M., & Phillips, J. A. (2004). Understanding racial differences in marital disruption: Recent trends and explanations. *Journal of Marriage and Family*, *66*, 639 – 650.
- Teachman, J. (2004). The childhood living arrangements of children and the characteristics of their marriages. *Journal of Family Issues*, *25*, 86 – 111.
- Waite, L. (2000). Trends in men's and women's well-being in marriage. In L. Waite (Ed.), *The ties that bind: Perspectives on marriage and cohabitation* (pp. 368 – 392). New York: Aldine De Gruyter.
- White, L., & Booth, A. (1985). The quality and stability of remarriages: The role of stepchildren. *American Sociological Review*, *50*, 689 – 698.
- Wildsmith, E., & Raley, K. (2006). Race-ethnic differences in nonmarital fertility: A focus on Mexican American women. *Journal of Marriage and Family*, *68*, 491 – 508.
- Wu, L., Bumpass, L., & Musick, K. (2001). Historical and life course trajectories of nonmarital childbearing. In L. Wu & B. Wolfe (Eds.), *Out of wedlock: Causes and consequences of nonmarital fertility* (pp.3 – 48). New York: Russell Sage.