

Marital Separation, Divorce, and Health Consequences\*

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### Abstract

Marital separation is legally and socially ambiguous. Does it indicate an end of a marriage or a process of reconciliation? Little is known about the duration of separation and why some initiate separation and some others move straight to divorce. It is also unclear whether negative health consequences associated with divorce apply to separation. We use data from the National Longitudinal Survey of Youth 1979 to explore in detail marital separations. Separation is commonplace: 60% of first marriages lead to separations and 54% of first divorces are preceded by separations. Minorities, women with young children, and the less educated tend to initiate separations rather than divorces and tend to remain separated for a long period of time. Furthermore, negative health consequences for separation are statistically indistinguishable from those for divorce. Our results suggest that disadvantaged and vulnerable populations tend to remain separated and the health consequences are likely to be longer lasting for them than for those whose divorces were not preceded by separation.

Marital separation is a legally and socially ambiguous state – being “not quite married, not quite divorced” (Amato, 2010). Yet, many people experience marital separation at some time in their life course. Indeed, separation is often a precursor to divorce, but not all marital separations end this way: some return to marriage while some others continue for a long period of time (Bramlett & Mosher, 2002). Because of this ambiguous state, we know little about the duration of separation and why some initiate separation and others move straight to divorce. Divorce foreshadows declines in mental and physical health (Waite, 2009) and the links between divorce and health are well established (Amato, 2010). It is unclear whether separated individuals have the same health consequences as divorced individuals. Of course, experiences of separation vary from person to person. For some, it is a quick transition from marriage to divorce. In this case, does separation mediate the effect of divorce on health? For others, separations can be a long-term process. The health consequences of these marital separations are largely unknown.

In this paper, we use data from the National Longitudinal Survey of Youth 1979 to provide new estimates of the incidence and length of marital separations; explore why some people separate rather than divorcing or persist in the separated state rather than divorcing or reconciling; and compare marital separations to divorces as predictors of new health limitations. We find that 60% of first marital exits are marital separations, of which 79% end in divorce. The average length of a separation is three years when it precedes a divorce, but almost a decade for couples still separated. Our analysis shows that separating rather than divorcing is more common among people who marry at older ages, racial/ethnic minorities, women with young children, and less educated individuals. Those who divorce after separating are more likely to be White and to have a college degree than those who remain separated. Separation from a first spouse predicts

an increase in the risk of a new health limitation over remaining in a first marriage. Yet the risk associated with being separated is statistically indistinguishable from the risk associated with having divorced, whether or not the divorce was preceded by a marital separation. Furthermore, our results show that separation does not appear to have a mediating health effect on divorce among divorced individuals who are preceded by separation. We discuss the implications of our findings at the end of the paper.

### *Marital separations in the U.S.*

Marital separation can be an informal change in living arrangements, an agreement negotiated through the courts, or, in some states, a required prelude for divorce. In the legal system, separation requirements for divorce have diminished over time or have been abolished as no-fault divorce gained ground (Vlosky & Monroe, 2002). By contrast, separation agreements can serve as an alternative to divorce and are now recognized in most states (Sharp, 1987). And informal separations, not governed by a written contract, can be used as the first step in the move towards legal separation or divorce, or as a break from married life for couples who go on to reunite (Bruch, 1977). In short, marital separation has become more of a choice and less of a necessity for couples ending their marriage. Little is known on why some couples choose separation while others proceed straight to divorce. Separation appears to be a recourse for couples who have more shared obligations, are less certain about ending the relationship, or simply cannot afford to get divorced (Bramlett & Mosher, 2002).

A marital separation can end in various ways, and events that happen during a separation might affect its course. An early study characterizes fertility between separation and divorce as “surprisingly frequent,” attributing a large portion of it to pregnancies beginning just before or

just after the end of a marriage (Rindfuss & Bumpass, 1977). Among Blacks but not Whites, children born after separation increase the chance of divorce after separation (Suchindran, Koo, & Griffith, 1985). Later studies examine reconciliation as another possible outcome of a marital separation. Short separations followed by reconciliation are frequently reported by women who later divorce (Wineberg & McCarthy, 1994). About half of separated women attempt a reconciliation, especially Black women and women who were more reliant on the relationship (Wineberg & McCarthy, 1994; Wineberg, 1996). The episode of separation appears to be a turbulent time in the life course, including attempts at reconciliation, pursuit of new relationships, and formal and informal struggles to renegotiate the relationship between former spouses.

The most recent estimates on the incidence and length of marital separation in the U.S. are based on the 1995 National Survey of Family Growth (NSFG). In the NSFG, women age 15-44 report cohabitation and marriage histories, including any marital separations. Out of 6,841 first marriages in the sample, 2,386 (35%) ended in separation (Bramlett & Mosher, 2002). Life tables constructed from these data indicate 84% of women transition from marital separation to divorce after three years, with White, well-educated, and high-income women being especially likely to make this transition. Only 5% of women did not divorce after 10 years of marital separation. As of 1995, marital separation was a common but temporary stage on the path to divorce, with a small minority remaining separated for longer than three years.

#### *Anticipated health effects*

Marital disruptions cause stress and the withdrawal of resources attendant to the married state, such as income and social support (Williams & Umberson, 2004; Hughes & Waite, 2009). Prior

research has usually defined marital disruptions as divorces only, or as divorces and marital separations, not distinguishing between the two. A series of reviews (Ross, Mirowsky, & Goldsteen, 1990; Amato, 2000; Amato, 2010) has summarized the key findings of this research: after marital disruption, stress levels increase, and mental and physical health worsens. Although the initial psychological distress subsides over time (Booth & Amato, 1991), health does not fully recover, creating a long-lasting health gap between continuously married and ever-divorced adults (Lorenz et al., 2006; Menaghan & Cooksey, 2008; Meadows, 2009). Though it is clear marital disruptions have profound consequences for health, few studies have isolated marital separations from divorces. It is unknown if marital separation – either as a period before the divorce, or as an alternative to it – exerts its own harmful effect on health, and how this compares in magnitude to the effects of divorce.

The diverse types of marital separation imply several possible health effects of marital separation, as compared to the health effects of divorce. Relative to marital separation, divorce can be a crisis, a release, or only a formality. The stress perspective expects transitions out of marriage to entail a spike in psychological distress, and a corresponding rise in health risk (Booth & Amato, 1991). Divorce can be an episode of very high stress, even relative to the baseline strains of the separated state, and thus would make an independent contribution to health problems (Pearlin et al., 2005). In this perspective, marriage is a period of low strain, separation is a period of medium strain, and divorce is a period of high strain. The crisis hypothesis, therefore, is that separation exerts a weaker effect on health than divorce.

Stress response is conditional on the stress level in the initial state (Wheaton, 1990; Amato & Hohmann-Marriott, 2007). With respect to divorce after marital separation, if the separation is a turbulent period in which the ex-spouses fight for income, property rights,

custody, and other matters, a formal divorce can offer release and a sense of closure. Some evidence suggests that marital separation is independently linked to psychological distress and suicidal ideation (Mastekaasa, 1994; Wyder, Ward, & De Leo, 2009; Kolves, Ide, & De Leo, 2010). One qualitative study describes the separation stage as “pulling apart,” characterized by “intense emotions” and “strained relationships,” whereas the post-divorce period is one of “moving beyond” and “redefining the self,” in which the damage of the separation period is repaired (Radford et al., 1997). It is possible that marriage entails low strain, separation entails high strain, and the following divorce entails medium strain. Thus, the release hypothesis anticipates that divorce after marital separation exerts a stronger effect on health than the preceding separation.

Another theory stresses the difference in access to resources between the married state and the separated or divorced state. Marriage provides access to a bundle of economic, social and emotional resources that are difficult to obtain outside it (Waite, 1995). These resources can be deployed in various ways, from paying for health insurance to monitoring a spouse’s behavior, to protect and improve health (Link & Phelan, 1995; Phelan, Link, & Tehranifar, 2010). As marital separation disrupts couples’ living arrangements and shared finances, it endangers health no less than a divorce. Among couples who separate, division of resources often occurs before a divorce is obtained (Bruch, 1977; Radford et al., 1997). So both marital separation and divorce could be periods of elevated strain, with neither more stressful than the other. Hence, the formality hypothesis anticipates that marital separation and a subsequent divorce exert equal effects on health.

### *Current study*

Our study answers renewed interest in marital separations by pursuing three tasks. First, we obtain new estimates of the incidence of marital separations and the descriptive differences among people who remain married, people who divorce without separating, people who divorce after separating, and people who separate but do not divorce. Second, we examine race, socioeconomic status, fertility and marital history as predictors of transition from marriage to separation, and from separation to divorce. Third, we examine the independent contribution of marital separations to the risk of mental or physical health limitations, and compare this contribution to the effect of divorce. Here, we test three competing hypotheses about the comparative health effects of separation and divorce. We review our findings from all three parts to describe the contemporary significance of marital separation in the U.S.

### Method

#### *Sample*

We use data from the National Longitudinal Survey of Youth 1979 (NLSY79) (Bureau of Labor Statistics, 2006). The NLSY79 is a nationally representative survey of Americans age 14-21 in 1979. Respondents were surveyed yearly from 1979 to 1994, and every other year since then, reaching the 23<sup>rd</sup> wave of the survey in 2008. The NLSY79 originally included 12,686 cases. We exclude 2,923 cases in the military and economically disadvantaged non-Hispanic White oversamples. We exclude 2,226 cases where the respondent either never reported a marriage or reported being never married as of 2008. We further exclude 96 respondents already divorced at the 1979 baseline interview, and 169 respondents whose first marriage ended in widowhood. This constitutes our primary sample of 7,272 respondents, from which we draw descriptive

statistics and which we use to analyze the predictors of transitions to and from marital separation. We then analyze the contribution of marital separation to the risk of a new health limitations, using a subsample that excludes 313 respondents never observed to be at risk for a health limitation, 206 respondents with incomplete data on the end of a marital separation, and 211 respondents missing data on baseline controls. These exclusions create a subsample of 6,542 cases. Appendix A outlines the differences between this subsample and the full sample.

### *Marital history*

The NLSY79 contains a wealth of information on marital status and transitions. In each survey year, respondents report their current marital status and up to three marital transitions since their last interview. Respondents can report becoming married, separated, reunited, divorced, remarried, or widowed. Respondents also report the year and month of each marital transition. Prior studies typically construct respondents' marital history over a range of person-years, and do not take advantage of the more precise dates available in the data file (Oppenheimer, 2003; Teachman, 2007; Light & Ahn, 2011). This approach is not well suited to a study of marital separations. Many marital separations are short, and may last less than a year (Wineberg & McCarthy, 1994). Further, the legal ambiguity of some separations may lead respondents to describe their current status as "married" or "divorced," rather than "separated" if a separation has occurred and did not yet resolve in either reunification or divorce.

[Table 1 about here]

We construct a marital history from the transition variables, following three steps. First, we collect all the marital transitions reported by each respondent. Second, we sort these into marital formations (marriage, remarriage, reunification) and marital disruptions (separation,

divorce, widowhood), and separately sort formations and disruptions by date. Third, we create a sequence of marital formations and marital disruptions, beginning with the first marriage, and proceeding with any separation, any divorce, any remarriage, a subsequent separation or divorce, and so on. This reconstructed marital history allows us to identify marital status at the level of the person-month, as opposed to the person-year. Table 1 illustrates the marital history of a select case in the data. Through 1987-1991, this person is in a first marriage. In 1991, the person enters a period of marital separation, and two years later, in 1993, divorces. The person remains divorced until 2008, the most recent wave of the NLSY79.

#### *Transitions to and from marital separation*

We model the risks of transitioning to and from marital separation as a function of baseline and time-varying characteristics. Race and socioeconomic status have been linked to the odds of a separation ending in divorce or reconciliation rather than in ongoing separation (Wineberg, 1996; Bramlett & Mosher, 2002). We measure socioeconomic status at baseline using parents' education in years and a binary indicator of whether the respondent lived in a non-intact family at age 14. We measure socioeconomic status over the life course using time-varying binary indicators of having no high school diploma (or G.E.D.) and completing a bachelor's degree, leaving a high school diploma without any postsecondary degree as the reference category. As children may affect the decision to separate, divorce, or reunite (Suchindran, Koo, & Griffith, 1985), we include time-varying measures of having any children under 5, any children 5-18, and, for women, being currently pregnant. In the models predicting transition from first marriage, we control for age at marriage and years spent in the marriage. In the models predicting transition

from the first separation, we control for age at marriage, age at separation, the length of the first marriage, the number of children at separation, and years spent in marital separation.

### *Health limitations*

To analyze the effects of marital separation on health, we use data about respondents' health limitations. In every round, the NLSY79 includes two questions about health limitations. Respondents are asked if anything does or would limit (1) how much they can work, or (2) the kind of work they can do. We define having a health limitation as answering yes to either question. If respondents answer yes to either question, they are also asked to provide the date health limitations began. Starting in 1991, the survey also asked if health limitations are solely due to pregnancy. From 1991 onwards, we ignore health limitations reported to be solely due to pregnancy. Prior to 1991, we ignore all health limitations reported by pregnant women. Judging by the prevalence of health limitations among pregnant women in 1991, our treatment of pre-1991 data correctly reclassifies 9% of women pregnant in 1990 as having no health limitation that is unrelated to their pregnancy, while misclassifying 3% of pregnant women who do have an unrelated health limitation.

We use the data on health limitations and their onset to define risk episodes for each person, beginning when they are first observed without any health limitations, and ending at the date of the first new health limitation. In cases where the date of a new health limitation is missing, we use the date of the interview at which that health limitation is reported. The resulting health history is illustrated in Table 1. In this case, the person was first observed to have no health limitations in 1987. Later, this respondent reported developing a new health limitation in 1989. This date terminates the first risk episode. The second risk episode begins in 1990, when

the person is again observed having no health limitations, and continues through the most recent interview.

Health limitations defined with respect to respondents' ability to work have been used elsewhere as a concise measure of health (Teachman, 2010). This variable is comparable to a simplified version of the more common self-rated health scale (Idler, Russell, & Davis, 2000). In both cases, respondents themselves define thresholds for what is a "limitation," or what constitutes "good" health, and evaluate their health against these thresholds. Although such measures can give a holistic view of respondent health, they obscure the specific nature of health problems. Respondents' ability to work may be limited due to any number of physical or mental health issues. Unfortunately, the simple measure of health limitations we use gives no indication of what these health problems might be.

To explore what might constitute a health limitation, we compare our measure of health limitations to health status at age 40. We use Short-Form 12 scores, constructed from 12 questions measuring self-reported physical and mental health issues such as depression, emotional problems, pain, and difficulty climbing stairs (Ware, Kosinski, & Keller, 1996). Separate scores are computed for physical and mental issues. For each score, a value of 50 corresponds to the population mean, and a 10 unit difference corresponds to the population standard deviation. Among respondents with no health limitation at age 40, the mean physical score is 54.1, and the mean mental score is 53.9. Both scores are lower among respondents with a health limitation at age 40: the mean physical health score is 37.5 and the mean mental health score is 48.2. Though the differences in both scores are significant at a confidence level exceeding 99.9% using a two-tailed t-test, the absolute difference is three times as large for physical health as for mental health. Further, the magnitude of the correlation between physical

health score and a health limitation at age 40 is 0.62, whereas it is 0.20 for mental health. Our measure of health limitations captures both mental and physical problems, but it corresponds much more strongly to self-reported physical limitations.

### *Control variables*

In estimating the effect of marital separations on the incidence of health limitations, we include several control variables to adjust for potential confounding. We expect that baseline differences in socioeconomic status have consequences for both marital trajectory and health problems later in the life course (Haas, 2008; Amato & DeBoer, 2001). We control for race and ethnicity (non-Hispanic White, non-Hispanic Black, or Hispanic), parents' educational attainment, measured in years, and whether the respondent lived in a non-intact family at age 14. We also control for respondent gender, as some studies find gender differences in the way respondents assess their own health (Gonzalez, Chapman, & Leventhal, 2002). We include other variables to adjust for potential time-variant confounders. We control for whether the respondent has any children 5 and under and any children over 5 but under 18 years of age. Having young children is linked to a lower risk of marital disruption, (Waite & Lillard, 1991) but may predict a higher risk of health problems (Evenson & Simon, 2005). Finally, we control for educational attainment (no high school diploma, high school diploma or G.E.D. only, or Bachelor's or equivalent), as greater educational attainment predicts better health (Ross & Wu, 1995) and a lower risk of marital disruption (Sweeney & Phillips, 2004).

*Plan of analysis*

We begin by describing the incidence and length of marital separations in the primary sample of NLSY respondents. We divide respondents by their marital trajectory following a first marriage, giving particular attention to the various ways a separation from that marriage might end: in divorce, in reunification, or in ongoing separation. We describe the characteristics of respondents in each marital trajectory at the 1979 baseline interview, at the most recent wave of the survey, and at the time of their first marital exit, if applicable.

We use discrete-time survival analysis to test how these baseline and time-varying characteristics affect the chances of a first marriage ending in divorce vs. separation, and a first separation ending in reconciliation vs. divorce. Survival analysis models the risk of a respondent experiencing a transition (divorce, separation, or reunification) as a function of time and other independent variables. Discrete-time survival analysis splits the data file into person-period units, which in our case are person-months. Then, the odds of the transition occurring in any given person-month can be modeled with logistic regression (Box-Steffensmeier & Jones, 2004). Time effects on the odds of the transition are often modeled as a polynomial function of time spent at risk (Allison, 1982). We find a linear model best describes the relationship between time and the risk of transitions from a first marriage or a first separation.

Since we anticipate multiple outcomes of marriage or separation, we apply a multinomial logistic model to the data. This model estimates the relative risks of one outcome vs. another for a given observation, or person-month (Allison, 1982). When modeling the outcome of a first marriage, we use divorce as the base outcome and compare it to remaining married and entering marital separation. Our choice of base outcome highlights any differences between people who end a first marriage in separation and people who divorce right away. We truncate observations

before the marriage began and censor observations after the marriage has ended. When modeling the outcome of a first marital separation, we use divorce as the base outcome again, and compare it to remaining in a marital separation or reconciling. We truncate observations before the separation began and censor observations at the end of the marital separation. In either case, we censor observations at the date of the last interview and use robust standard errors to correct for the clustering of observations within cases.

We use a binary logistic discrete-time model to estimate the health consequences of marital separation. In this analysis, we add a random effect to the regression model to adjust for a propensity to develop a new health limitation that is shared across all observations from a single person (Agresti et al., 2000). As the same person may develop multiple health limitations over the course of data collection, we expand the discrete time survival analysis to accommodate repeated events (Teachman, 2011). Each person may experience multiple risk episodes, where the person is observed over the course of a risk episode until a new health limitation appears. We model duration-dependency using a linear form of duration spent at risk of a new health limitation, and a measure of episode order, or how many times a respondents was observed to enter a risk episode. Observations are truncated before the date of the first interview, if the respondent has not yet reached the first marriage, or if the respondent has not yet been observed to have no health limitation. Observations are censored at the date of reunification, remarriage, or the latest available interview.

We estimate two models of developing a new health limitation. The first defines marital status as being in a first marriage; being separated after a first marriage; and being divorced after a first marriage. We test the coefficients of being separated and being divorced as a way of comparing first separations to any first divorces. The second model splits divorces into those

that were preceded by a marital separation and those that were not. Here, we test our three hypotheses for divorces that follow a marital separation: whether they are a crisis, a formality, or a release. Both models contain all time-invariant and time-variant control variables, including duration in risk episode and episode order.

## Results

### *Incidence and length of marital separations*

Among 7,272 ever-married respondents, 3,533, or 49%, have exited their first marriage. Of these, 60% (2,125) report having gone through a marital separation. Most of these respondents – 1,670, or 79% of those who separate – resolve this separation in a divorce. The average length of a first separation is about 4 years. It is 3 years for respondents who divorce after separating, 9 years for respondents still separated as of their most recent interview, and 2 years for respondents who reunite with their spouse. Respondents who divorce and remarry may sometimes experience higher-order separations. As of 2008, 375 respondents have separated from someone else after divorcing from their first spouse.

### *Trajectories of marital disruption*

In Table 2, we present descriptives for ever-married respondents, split by marital trajectory. We include measures collected in the 1979 baseline interview, measures collected in 2008, and measures constructed for the time of any first marital exit. We identify the following marital trajectories: still in first marriage; divorced; separated and then divorced; separated but not yet divorced; and separated and then reunited. Relative to respondents still in their first marriage, all other groups are more likely to have health limitations in 2008. Further, respondents who have

left their first marriage are more likely to be Black or Hispanic, to have lived in a non-intact family at age 14, and to have parents with fewer years of schooling. Baseline disadvantages are greatest for respondents who remain separated, or who separate and later reunite. In this group, almost 75% are Black or Hispanic, about half lived in a non-intact family at age 14, and over 15% have a health limitation in 2008 – compared to 8% among respondents still in their first marriage.

[Table 2 about here]

Table 2 reveals interesting differences across trajectories of marital disruption. Women are more likely to report separating rather than immediately divorcing. Blacks and Hispanics are especially likely to report a separation that does not result in a divorce. People who separate and resolve their separation, either by divorcing or reuniting, tend to be younger and more recently married than people who divorce or have an ongoing separation. Compared to people who divorce, those who separate without divorcing tend to have more children. The oldest child is almost twice as old in families where the couple remains separated, compared to families where the couple separates but reunites. These cross-sectional comparisons suggest that people who divorce are similar to people who separate and divorce, but people who separate and do not divorce are especially disadvantaged at baseline, and experience worse health at midlife.

#### *Predictors of transitioning to and from separation*

We use survival analysis to test whether baseline and time-variant characteristics affect the chances of transitioning to or from separation. In Table 3, we present relative risk ratios comparing separation to divorce as an outcome of a first marriage. Among both men and women, Hispanics are more likely than non-Hispanic Whites to end the first marriage in separation rather

than divorce. Among men, those with better-educated parents are more likely to divorce right away rather than separating first. Men without a high school diploma are more likely to separate rather than divorcing relative to men who have completed high school. Marital history and childbearing may also contribute to the decision to divorce rather than separate. Respondents who marry later in life and spend less time in the first marriage are more likely to end that marriage in separation rather than divorce. Women who have young children are at greater risk of separating rather than divorcing, compared to women with no children.

[Table 3 about here]

In Table 4, we present relative risk ratios comparing reunification, divorce, and ongoing separation as outcomes of the first marital separation. As seen in Table 2, divorce is the normative outcome of a marital separation. The risk of remaining separated rather than divorcing is greater for Blacks and Hispanics, as well as respondents with lower educational attainment. Among women, this risk is also greater if they have children age 5-18. The risk of reuniting rather than divorcing is greater for Hispanics and people who grew up in a non-intact family. Among men, this risk is also greater for Blacks. Spending more time in a marital separation increases the risk of remaining in the separation rather than divorcing, but does not affect the risk of reconciling rather than divorcing.

[Table 4 about here]

### *Health consequences*

Using the risk of a new health limitation as the outcome, we perform survival analysis on a subsample that includes 6,542 cases. (Appendix A outlines differences between this subsample and the full sample.) Table 5 presents odds ratios from the random effects logistic regressions.

Net of baseline and time-variant controls, the risk of a new health limitation exhibits no significant time dependence. While the odds ratios for episode order are greater than 1, implying people who had developed a health limitation in the past are at greater risk for another health limitation, these are also not significant at the 95% confidence level. Further, the variance of the random effect is significantly different from zero in all of the models, indicating variation across respondents in baseline propensity to develop a new health limitation.

[Table 5 about here]

Relative to being in a first marriage, exiting a first marriage by either separation or divorce predicts an increase in the odds of a new health limitation. Being divorced increases these odds by 89% for men and 45% for women. Being separated increases these odds by 38% for men and 69% for women. When we divide the divorced state into divorce after a separation and divorce without a separation, we find no significant difference between being separated and being divorced after a separation. We also find no significant difference between being separated and being divorced without separating first, or between the two divorce states. As with a divorce, marital separation is associated with greater risk of health limitations, and this risk neither increases nor diminishes when the separation is resolved in divorce.

## Discussion

Marital separation, like divorce, is a trying time in the lives of those who experience it. Yet marital separation does not share the finality and formality of divorce. For many, it is a stage on the road to divorce, but for others it is an enduring post-marital state, or a prelude to reconciliation. Marital separation is becoming an alternative to divorce, thanks to the easing of separation requirements for divorce and the introduction of legal separation agreements. We use

data from a U.S. cohort observed from early adulthood to middle age to shed new light on this under-studied marital state. We provide updated estimates of the incidence and resolution of marital separations, explore predictors of transitioning to and from marital separation, and compare the health effects of separation to those of divorce.

We find that 60% of respondents who leave a first marriage do so by separation, and 79% of those who separate proceed to divorce. Our estimates of the incidence of separation are slightly lower than those in Bramlett and Mosher (2002): 29% of all first marriages end in separation in our sample, vs. 35% of first marriages in the 1995 NSFG. Yet people who separate are spending more time in the separated state. Whereas Bramlett and Mosher calculate that 16% do not transition from separation to divorce within three years, we find 33% of the separations we observe exceed three years, and the *average* length of separation preceding a divorce is just under this mark. Relative to the most recent estimates prior to our study, we observe two trends. First, that the incidence of separation is declining, and second, that time spent in separation is increasing. Both trends may be explained by the easing of separation requirements for divorce (Vlosky & Monroe, 2002). Whereas people seeking an immediate divorce would have had to obtain separation first in the past, they are now proceeding straight to divorce, leaving marital separation to those couples who may need more time to negotiate the end of their marriage.

Divorce is but one of several resolutions to the separated state. We identify groups of respondents who either remain separated or reconcile with their spouse. Consistent with prior findings (Wineberg, 1996; Bramlett & Mosher, 2002), these groups are characterized by greater social disadvantage compared to people who divorce either after or without separating. The most disadvantaged people, it seems, cannot afford to divorce, and either persist in separation (for almost 9 years, on average) or reunite with their spouse (after an average of 2 years).

Reconciliation after separation is often unsuccessful in the long run: half of this group are no longer married as of 2008, compared to about 55% of those who divorce their first spouse without separating. Those who remain separated and those who reunite after separation together account for almost 13% of respondents who ended their first marriage, and represent an especially vulnerable population experiencing the problems of a marital exit without ever registering a formal divorce.

Our analysis of transitions to and from divorce shows marital separations are associated with social disadvantage. Blacks, Hispanics, and people with lower educational attainment are more exposed to marital separation, whether because they are more likely to separate rather than divorce, or because they are more likely to remain separated after the first marriage. Marital separation may also be shaped by childbearing: mothers of young children are more likely to separate rather than divorce, but mothers of older children are more likely to remain separated than to obtain a divorce. These results suggest two overlapping reasons to get and remain separated. First, separation may be attractive to those reliant on the financial resources of the marriage. It can mean avoiding the costs of the divorce process, and perhaps retaining some shared expenses. Second, separation may be attractive to those reliant on the social resources of the marriage. Mothers may be reluctant to cut all ties with their ex-husband, whether for the logistic purpose of sharing child-care responsibilities or to maintain greater contact between children and their fathers. These reasons to separate rather than divorce anticipate separation to be intermediate between marriage and divorce. Yet how close a separation is to marriage or divorce is likely negotiated by each couple, as no standard exists.

One of the most studied aspects of divorce is its contribution to health problems; generalizing from this literature to the state of marital separation is problematic because

separation is typically either not measured at all or combined with divorce. We draw on prior research on the health consequences of marital disruption and the few studies available that explicitly describe marital separations to develop three competing hypotheses. In the first hypothesis, divorce is a crisis, amplifying stress and health problems that begin to emerge in separation. In the second hypothesis, stress peaks during separation and divorce offers release and closure. In the third hypothesis, divorce is a mere formality: becoming detached from the resource-rich marital state is the main force behind increased health risk. We use discrete-time survival analysis to estimate the effects of separation and divorce on the odds of developing a health limitation that restricts how much one can work or the kind of work one can do. Our results support the third model: both separation and divorce predict increased health risk over remaining in a first marriage, and the effects of separation and divorce are not significantly different.

There are limitations to our descriptive estimates as well as our regression analysis. By its nature, separation is an ambiguous marital status, and as such it is especially liable to be misreported. Whereas survey statistics on divorce can be corrected by matching the data to administrative records, (Weaver, 2000) a separation might not be documented as such anywhere else. Therefore, surveys are the only plausibly complete source of data on separations in the U.S. Our study of a single cohort offers high quality longitudinal data on the incidence of separations, but it may not be generalizable to younger cohorts. By reconstructing marital status from questions on recent marital transitions, we can identify marital transitions down to the month, as well as better capture short marital separations. But this approach makes our estimates more vulnerable to omissions and inconsistencies in respondents' answers to these questions, which are more complex than the item measuring current marital status. This problem is manageable

for the task of sorting respondents into marital trajectories, but it requires we drop up to 3% of otherwise eligible cases for the regression analysis.

Our analysis of health consequences uses established techniques to ensure correct time order of dependent and independent variables, to account for shared frailty among observations from a single case, and to allow for repeated transitions to a new health limitation. Yet it is limited to the outcome of health limitations by the NLSY79 data set: no other health variable is collected with enough frequency to be used in an event history analysis. Though health limitations are a useful indicator of self-rated health, the structure of the survey does not allow us to identify new health limitations when one already exists, or to identify the specific nature of a new health limitation. Further, data limitations prevent us from distinguishing marital separations by the quality of the preceding marriage or by contact and conflict with the ex-spouse during separation. Given that a minority of separated couples do not follow the normative path from separation to divorce, we suspect there may be some variation in how different types of separation affect our specific measure of health as well as general well-being.

Despite these limitations, our paper sheds new light on marital separations and their health consequences. Marital separations as distinct from divorces have received infrequent, scattered attention over the previous four decades. Following divorce law reform, marital separations have become less of a required prelude to divorce and more of an alternative to it. A significant minority experiences separation without divorce, and people who separate and divorce are spending more time in the separated state. On at least one measure of health, separation is just as harmful as divorce, raising concern that initiatives to help people cope with divorce under-serve people who have not made this formal transition. As past research on the difficulties of divorced people has spurred efforts to discover and ameliorate the problems of

divorce, future work should illuminate the diverse challenges of marital separation in its modern form.

## Appendix A: Differences between full sample and analytic subsample

Table A1 illustrates descriptive statistics for the analytic subsample of 6,542 cases comparable to statistics generated for the whole sample (Table 1). For the purposes of analyzing health limitation transitions, cases were excluded from the full sample if (a) they were not observed at risk of a new health limitation, (b) they were missing data on the timing of a divorce following a separation, or (c) they were missing data on family structure at age 14 or parents' education. Condition (a) may be met if a respondent has a health limitation at every survey round, does not answer the health limitation questions at every survey round, or misreports the date of health limitation onset. Condition (b) may be met if the respondent fails to report a divorce after a separation and before a remarriage, or if the respondent misreports or omits the date of this separation.

[Table A1 about here]

Social disadvantage, especially low educational attainment, predicts misreporting and nonresponse in surveys (Green, 1996; Mackenbach, Looman, & van der Meer, 1996), and the first condition necessarily excludes individuals with lifelong disabilities. Comparing Table A1 to Table 1 reveals differences that are expected but small. Respondents from a socially advantaged background are slightly overrepresented in the subsample, and fewer respondents report a health limitation in 2008. Yet differences in estimates of health limitations' prevalence are only 1-4%, depending on the marital trajectory. And estimates of the proportion in each marital trajectory, characteristics at the time of first marital exit, and years spent in marital separation are remarkably robust. Thus, it is unlikely that the survival analysis misrepresents the true association between marital status and health limitation risk in the full sample.

## References

- Agresti, A., J. G. Booth, J. P. Hobert, & B. Caffo. (2000). Random-effects modeling of categorical response data. *Sociological Methodology*, 30(1), 27 – 80.
- Allison, P. D. (1982). Discrete-time methods for the analysis of event histories. *Sociological Methodology*, 13, 61 - 98.
- Amato, P. R. (2000). The consequences of divorce for adults and children. *Journal of Marriage and the Family*, 62, 1269 - 1287.
- Amato, P. R. (2010). Research on divorce: continuing trends and new developments. *Journal of Marriage and Family*, 72, 650 - 666.
- Amato, P. R., & D. D. DeBoer. (2001). The transmission of marital instability across generations: relationship skills or commitment to marriage? *Journal of Marriage and Family*, 63, 1038 – 1051.
- Amato, P. R., & B. Hohmann-Marriott. (2007). A comparison of high- and low-distress marriages that end in divorce. *Journal of Marriage and Family*, 69, 621 - 638.
- Blekesaune, M., & A. E. Barrett. (2005). Marital dissolution and work disability: a longitudinal study of administrative data. *European Sociological Review*, 21:3, 259 - 271.
- Booth, A., & P. Amato. (1991). Divorce and psychological stress. *Journal of Health and Social Behavior*, 32:4, 396 - 407.
- Box-Steffensmeier, J. M., & B. S. Jones. (2004). *Event History Modeling: A Guide for Social Scientists*. Cambridge: Cambridge University Press.
- Bramlett, M. D., & Mosher, W. D. (2002). Cohabitation, marriage, divorce, and remarriage in the United States. *Vital and Health Statistics, Series 23*. Washington, DC: U.S. Government Printing Office.

- Bruch, C. S. (1977). The legal import of informal marital separations: a survey of California law and a call for change. *California Law Review*, 65(5), 1015 - 1085.
- Bureau of Labor Statistics, U.S. Department of Labor. National Longitudinal Survey of Youth 1979 cohort, 1979-2008 (rounds 1-23) [computer file]. Produced and distributed by the Center for Human Resource Research, The Ohio State University. Columbus, OH: 2008.
- Evenson, R. J., & R. W. Simon. (2005). Clarifying the relationship between parenthood and depression. *Journal of Health and Social Behavior*, 46(4), 341 – 358.
- Gonzalez, J. S., G. B. Chapman, & H. Leventhal. (2002). Gender differences in the factors that affect self-assessments of health. *Journal of Applied Biobehavioral Research*, 7(2), 133 – 155.
- Green, K. E. (1996). Sociodemographic factors and mail survey response. *Psychology & Marketing*, 13(2), 171—184.
- Haas, S. (2008). Trajectories of functional health: the ‘long arm’ of childhood health and socioeconomic factors. *Social Science & Medicine*, 66(4), 849 – 861.
- Hughes, M. E., & L. J. Waite. (2009). Marital biography and health at midlife. *Journal of Health and Social Behavior*, 50, 344 - 358.
- Idler, E. L., L. B. Russell, & D. Davis. (2000). Survival, functional limitations, and self-rated health in the NHANES I epidemiologic follow-up study, 1992. *American Journal of Epidemiology*, 152:9, 874 - 883.
- Johnson, D. R., & J. Wu. (2002). An empirical test of crisis, social selection, and role explanations of the relationship between marital disruption and psychological distress: a pooled time-series analysis of four-wave panel data. *Journal of Marriage and Family*, 64, 211 – 224.

- Kolves, K., I. Naoko, & D. De Leo. (2010). Suicidal ideation and behaviour in the aftermath of marital separation: gender differences. *Journal of Affective Disorders*, 120, 48 - 53.
- Light, A., & T. Ahn. (2011). Divorce as risky behavior. *Demography*, 47(4), 895 – 921.
- Link, B. G., & J. C. Phelan. (1995). Social conditions as fundamental causes of disease. *Journal of Health and Social Behavior*, 35:Extra Issue, 80 - 94.
- Lorenz, F. O., K. A. S. Wickrama, R. D. Conger, & G. H. Elder, Jr. (2006). The short-term and decade-long effects of divorce on women's midlife health. *Journal of Health and Social Behavior*, 47, 111 - 125.
- Mackenbach, J. P., C. W. N. Looman, & J. B. W. van der Meer. (1996). Differences in the misreporting of chronic conditions, by level of education: the effect on inequalities in prevalence rates. *American Journal of Public Health*, 86(5), 706—711.
- Mastekaasa, A. (1994). The subjective well-being of the previously married: the importance of unmarried cohabitation. *Social Forces*, 73(2), 665 - 692.
- Meadows, S. O. (2009). Family structure and fathers' well-being: Trajectories of mental health and self-rated health. *Journal of Health and Social Behavior*, 50, 115 - 131.
- Menaghan, E. G., & E. C. Cooksey. (2008). Well-being at mid-life: family predictors of continuity and change. Stress Processes across the Life Course. *Advances in Life Course Research*, 13, 257 - 281.
- Oppenheimer, V. K. (2003). Cohabiting and marriage during young men's career-development process. *Demography*, 40(1), 127 – 149.
- Pearlin, L. I., S. Schieman, E. M. Fazio, & S. C. Meersman. (2005). Stress, health, and the life course: some conceptual perspectives. *Journal of Health and Social Behavior*, 46, 205 – 219.

- Phelan, J. C., B. G. Link, & P. Tehranifar. (2010). Social conditions as fundamental causes of health inequalities: theory, evidence, and policy implications. *Journal of Health and Social Behavior*, 51(suppl.), S28 – S40.
- Radford, B., D. Travers-Gustafson, C. Miller, C. L'Archevesque, E. Furlong, & J. Norris. (1997). Divorcing and building a new life. *Archives of Psychiatric Nursing*, 11(5), 282—289.
- Rindfuss, R. R., & L. L. Bumpass. (1977). Fertility during marital disruption. *Journal of Marriage and the Family*, 39(3), 517 – 528.
- Ross, C. E., J. Mirowsky, & K. Goldsteen. (1990). The impact of the family on health: the decade in review. *Journal of Marriage and the Family*, 52, 1059 – 1078.
- Ross, C. E., & C. Wu. (1995). The links between education and health. *American Sociological Review*, 60(5), 719 - 745.
- Sharp, S. L. (1983). Fairness standards and separation agreements: a word of caution on contractual freedom. *University of Pennsylvania Law Review*, 132, 1399 - 1460.
- Suchindran, C. M., H. P. Koo, & J. D. Griffith. (1985). The effects of post-marital childbearing on divorce and remarriage: an application of hazards models with time-dependent covariates. *Population Studies*, 39, 471 – 486.
- Sweeney, M. M., & J. A. Phillips. (2004). Understanding racial differences in marital disruption: recent trends and explanation. *Journal of Marriage and Family*, 66, 639-650.
- Teachman, J. (2007). Race, military service, and marital timing: evidence from the NLSY-79. *Demography*, 44(2), 389 – 404.
- Teachman, J. (2010). Work-related health limitations, education, and the risk of marital disruption. *Journal of Marriage and Family*, 72, 919 - 932.

- Teachman, J. (2011). Modeling repeatable events using discrete-time data: predicting marital dissolution. *Journal of Marriage and Family*, 73, 525 – 540.
- Vlosky, D. A., & P. A. Monroe. (2002). The effective dates of no-fault divorce laws in the 50 States. *Family Relations*, 51(4), 317 - 324.
- Waite, L. J. (1995). Does marriage matter? *Demography*, 32:4, 483 - 507.
- Waite, L. J. (2009). Marital history and well-being in later life. In P. Ulhenberg, ed. *International Handbook of Population Aging*. Springer.
- Waite, L. J., & L. A. Lillard. (1991). Children and marital disruption. *American Journal of Sociology*, 96(4), 930 – 953.
- Ware, J. E., M. Kosinski, & S. D. Keller. (1996). A 12-item short-form health survey: construction of scales and preliminary tests of reliability and validity. *Medical Care*, 34(3), 220 – 233.
- Weaver, D. A. (2000). The accuracy of survey-reported marital status: evidence from survey records matched to social security records. *Demography*, 37(3), 395—399.
- Wheaton, B. (1990). Life transitions, role histories, and mental health. *American Sociological Review*, 55, 209 - 223.
- Williams, K., & D. Umberson. (2004). Marital status, marital transitions, and health: a gendered life course perspective. *Journal of Health and Social Behavior*, 45, 81 - 98.
- Wineberg, H. (1996). The resolutions of separation: are marital reconciliations attempted? *Population Research and Policy Review*, 15, 297 – 310.
- Wineberg, H., & J. McCarthy. (1994). Separation and reconciliation in American marriages. *Journal of Divorce & Remarriage*, 20(1), 21 - 42

Wyder, M., P. Ward, & D. De Leo. (2009). Separation as a suicide risk factor. *Journal of Affective Disorders*, 116, 208 - 213.

**Table 1.** Data structure in person-month file for a select case.

Year	Month	Marital status			Survival analysis	
		In first marriage <sup>a</sup>	Separated <sup>a</sup>	Divorced <sup>a</sup>	Episode order <sup>b</sup>	Health limitation <sup>a</sup>
1987	5	1	0	0	1	0
1987	6	1	0	0	1	0
...						
1989	4	1	0	0	1	0
1989	5	1	0	0	1	1
...						
1990	9	1	0	0	2	0
1990	10	1	0	0	2	0
...						
1991	10	1	0	0	2	0
1991	11	0	1	0	2	0
...						
1993	1	0	1	0	2	0
1993	2	0	0	1	2	0
...						
2008	1	0	0	1	2	0

<sup>a</sup> 1 = Yes; 0 = No.

<sup>b</sup> Episodes begin when respondent is observed to have no health limitations. Episodes end when respondent develops a new health limitation, remarries, or reaches the date of last interview.

**Table 2.** Sample descriptives by marital trajectory.

	In first marriage	Divorced	Separated, then divorced	Separated, not yet divorced	Separated, then reunited
	% or mean (s.d.)				
<i>In 1979:</i>					
Female	49.4%	50.6%	58.0%	60.3%	53.1%
Black non-Hispanic	19.1%	19.5%	20.4%	21.5%	33.9%
Hispanic	19.6%	24.1%	26.1%	52.3%	40.8%
Nonintact family at 14	23.4%	31.8%	35.3%	45.2%	52.7%
Parents' education in years	12.0 (3.7)	11.8 (3.2)	11.5 (3.2)	10.8 (3.5)	10.3 (3.5)
<i>In 2008:</i> <sup>a</sup>					
Age	46.7 (2.2)	46.6 (2.2)	46.7 (2.2)	46.6 (2.3)	46.8 (2.2)
Health limitation	8.2%	12.7%	14.3%	18.6%	15.5%
Currently married	-	42.6%	46.1%	-	50.0%
No longer married	-	57.5%	53.9%	-	50.0%
Number of children	2.2 (1.3)	2.1 (1.4)	2.2 (1.5)	2.5 (1.4)	2.6 (1.5)
H.S. diploma or G.E.D.	89.6%	86.5%	85.6%	74.2%	81.5%
Bachelor's degree	32.3%	18.0%	15.8%	9.0%	10.2%
<i>At first marital exit:</i>					
Age	-	31.5 (7.4)	28.5 (6.3)	35.7 (8.1)	27.6 (6.5)
Length of marriage	-	7.8 (6.3)	5.6 (5.3)	8.8 (7.6)	5.1 (5.2)
Number of children	-	1.4 (1.2)	1.4 (1.3)	2.1 (1.4)	1.7 (1.3)
Age of oldest child	-	9.6 (6.7)	7.2 (5.5)	13.4 (7.9)	6.9 (5.7)
<i>After first marital exit:</i> <sup>b</sup>					
Years in marital separation	-	-	2.7 (3.5)	8.9 (7.7)	2.2 (2.9)
Cases	3739	1408	1670	325	130

<sup>a</sup> Out of 7,272 ever-married respondents in the sample, 5,874 were interviewed in 2008.

<sup>b</sup> Out of 2,125 ever-separated respondents in the sample, 1,942 report the date their separation ended.

**Table 3.** Relative risk ratios from multinomial logistic regression of transition from first marriage<sup>a</sup>

	Men			Women		
	Remain married	Divorce (ref.)	Separate	Remain married	Divorce (ref.)	Separate
<i>Time-invariant:</i>						
White non-Hispanic (ref.)	-	-	-	-	-	-
Black non-Hispanic	0.97	-	1.00	0.93	-	1.19
Hispanic	0.79*	-	1.39*	0.87	-	1.50**
Nonintact family at 14	0.80*	-	1.11	0.77**	-	1.16
Parents' education in years	0.96**	-	0.98	0.97**	-	0.99
Age at first marriage	1.00	-	1.03*	1.00	-	1.04**
<i>Time-variant:</i>						
Years in marriage	1.02**	-	0.95***	1.03***	-	0.96***
Pregnant	-	-	-	2.59***	-	1.24
Any children under 5	1.15	-	1.10	1.56***	-	1.53***
Any children 5-18	1.11	-	1.16	1.14	-	1.20
No H.S. diploma	0.90	-	1.36*	0.75**	-	0.97
Bachelor's degree or higher	2.23***	-	1.06	1.77***	-	0.84
Cases <sup>a</sup>	3349			3672		
Observations	524285			591269		
Chi-square	436.45***			624.14***		

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$  (two-tailed tests).

<sup>a</sup> Sample excludes 246 cases with missing data on time-invariant controls and 5 cases with incomplete data on the transition from marriage to separation or divorce.

**Table 4.** Relative risk ratios from multinomial logistic regression of transition from first marital separation<sup>a</sup>

	Men			Women		
	Remain separated	Divorce (ref.)	Reunite	Remain separated	Divorce (ref.)	Reunite
<i>Time-invariant:</i>						
White non-Hispanic (ref.)	-	-	-	-	-	-
Black non-Hispanic	1.86***	-	5.12**	1.77***	-	2.15*
Hispanic	2.99***	-	4.31**	3.19***	-	2.85**
Nonintact family at 14	1.13	-	1.39	1.01	-	1.69
Parents' education in years	1.00	-	0.93	0.98	-	0.97
Age at first marriage	0.81	-	1.23	1.09	-	0.68
Age at first marital separation	1.20	-	0.89	0.93	-	1.55
Length of first marriage	0.77	-	1.18	1.04	-	0.73
Number of children at separation	1.10	-	1.24	1.04	-	1.00
<i>Time-variant:</i>						
Years in marital separation	1.07*	-	0.88	1.05*	-	0.92
Pregnant	-	-	-	1.08	-	1.24
Any children under 5	1.05	-	1.11	1.07	-	1.83
Any children 5-18	0.96	-	0.95	1.32*	-	0.83
No H.S. diploma	1.57**	-	1.63	2.22***	-	1.61
Bachelor's degree or higher	0.57**	-	2.26	0.55**	-	0.77
Cases <sup>a</sup>	747			1050		
Observations	2970			4692		
Chi-square	192.72***			238.09***		

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$  (two-tailed tests).

<sup>a</sup> Sample excludes 5147 cases where no separation occurred, 87 cases with missing data on time-invariant controls, and 241 cases with incomplete data on the transition from separation to reunification or divorce.

**Table 5.** Odds ratios from random effects logistic regressions of health limitation onset

	Men		Women	
<i>Time-invariant controls:</i>				
White non-Hispanic (ref.)	-	-	-	-
Black non-Hispanic	0.98	0.98	0.66***	0.66***
Hispanic	1.04	1.03	1.12	1.12
Nonintact family at 14	1.13	1.13	1.16	1.16
Parents' education in years	0.98	0.98	0.98	0.98
<i>Episode order and duration:</i> <sup>a</sup>				
Episode order	1.19	1.19	1.45	1.45
Duration	1.00	1.00	1.00	1.00
<i>Marital state:</i>				
In first marriage (ref.)	-	-	-	-
Separated	1.83***	1.82*** <sup>d</sup>	1.42**	1.42*** <sup>d</sup>
Divorced	1.36*** <sup>c</sup>	-	1.68*** <sup>c</sup>	-
Divorced without separating	-	1.38* <sup>c</sup>	-	1.68*** <sup>c</sup>
Divorced after separating	-	1.34* <sup>cd</sup>	-	1.68*** <sup>cd</sup>
<i>Time-variant controls:</i>				
Pregnant	-	-	1.65***	1.65***
Any children under 5	0.91	0.91	0.74***	0.74***
Any children 5-18	1.13	1.13	1.05	1.05
No H.S. diploma	1.50**	1.51**	1.58***	1.58***
Bachelor's degree or higher	0.43***	0.44***	0.56***	0.56***
Cases <sup>b</sup>	3111	3111	3431	3431
Observations	587621	587621	687509	687509
Log likelihood	-4910.16	-4910.15	-7059.82	-7059.82
Chi-square	110.90***	111.06***	205.69***	205.67***
Rho	0.22*	0.22*	0.17*	0.17*

\*  $p < .05$  ; \*\*  $p < .01$ ; \*\*\*  $p < .001$  (two-tailed tests).

<sup>a</sup> Episodes begin when respondent is observed to have no health limitations. Episodes end when respondent develops a new health limitation, remarries, or reaches the date of last interview. Duration in episode is measured in months.

<sup>b</sup> Sample excludes 313 cases never observed in a risk episode, 206 cases with missing data on time-invariant controls, and 211 cases with incomplete data on the transition from separation to divorce.

<sup>c</sup> Not significantly different from "Separated" at 95% confidence level.

<sup>d</sup> Not significantly different from "Divorced without separating" at 95% confidence level

**Table A1.** Sample descriptives by marital trajectory (health limitation analytic subsample only<sup>a</sup>).

	In first marriage	Divorced	Separated, then divorced	Separated, not yet divorced	Separated, then reunited
	% or mean (s.d.)				
<i>In 1979:</i>					
Female	50.0%	50.4%	58.5%	60.0%	57.4%
Black non-Hispanic	18.5%	19.8%	19.0%	20.7%	34.8%
Hispanic	18.7%	22.9%	25.2%	53.1%	41.7%
Nonintact family at 14	22.4%	30.8%	33.6%	44.7%	50.4%
Parents' education in years	12.0 (3.7)	11.8 (3.2)	11.7 (3.2)	10.9 (3.5)	10.2 (3.6)
<i>In 2008:</i> <sup>b</sup>					
Age	46.7 (2.2)	46.5 (2.2)	46.7 (2.2)	46.6 (2.2)	46.9 (2.1)
Health limitation	7.3%	11.5%	13.1%	14.6%	17.2%
Currently married	-	42.8%	44.2%	-	50.0%
No longer married	-	57.2%	55.8%	-	50.0%
Number of children	2.1 (1.3)	2.1 (1.4)	2.1 (1.4)	2.4 (1.4)	2.5 (1.5)
H.S. diploma or G.E.D.	90.5%	87.8%	86.7%	77.3%	83.3%
Bachelor's degree	33.3%	18.9%	17.0%	10.5%	9.4%
<i>At first marital exit:</i>					
Age	-	31.6 (7.4)	28.8 (6.3)	36.2 (8.1)	27.8 (6.6)
Length of marriage	-	7.9 (6.2)	5.8 (5.4)	9.2 (7.7)	5.3 (5.3)
Number of children	-	1.4 (1.2)	1.4 (1.2)	2.1 (1.4)	1.7 (1.3)
Age of oldest child	-	9.6 (6.7)	7.4 (5.6)	13.7 (8.0)	7.1 (5.8)
<i>After first marital exit:</i>					
Years in marital separation	-	-	2.7 (3.5)	8.7 (7.5)	2.1 (2.4)
Cases	3459	1289	1404	275	115

<sup>a</sup> Sample excludes 313 cases never observed in a risk episode, 206 cases with missing data on time-invariant controls, and 211 cases with incomplete data on the transition from separation to divorce.

<sup>b</sup> Out of 6,542 ever-married respondents in the sample, 5,350 were interviewed in 2008.