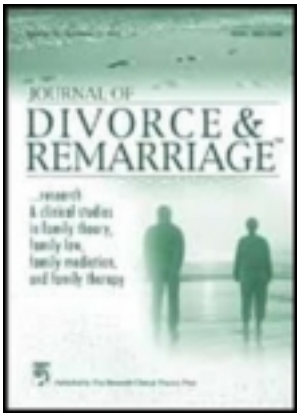

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Parental Divorce Among Young and Adult Children: A Long-Term Quantitative Analysis of Mental Health and Family Solidarity

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Parental Divorce Among Young and Adult Children: A Long-Term Quantitative Analysis of Mental Health and Family Solidarity

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This analysis uses a middle-aged sample (age 35–84, N = *2,496) to document the long-term effects of parental divorce on the child's depressive affect and familial solidarity. Those who experienced parental divorce as a child (OR: 1.77,* p < *.05) or as an adult (OR: 1.82,* p < *.05) had a higher risk of depression compared to those whose parents are still married. Similar results were found for family solidarity, suggesting that parental divorce was associated with long-lasting effects on the children who experienced it. However, the pathways through which parental divorce potentially affects the well-being of children differ, based on whether the child experienced parental divorce as a child or as an adult.*

KEYWORDS adult children, age at divorce, depression, family solidarity

In 2008, it was estimated that 40% of all marriages ended in divorce (U.S. Census Bureau, 2004). Research has long suggested that the consequences of divorce can be profound for the children of divorced families (Amato, 2000). For example, children who experienced parental divorce were 50% more likely to develop health problems than children from intact two-parent families (Angel & Worobey, 1988; Strohschei, 2005; Tucker et al., 1997). Similarly, children from divorced families also exhibit poorer academic performance (Astone & McLanahan, 1991; Wolfinger, Kowaleski-Jones, & Smith, 2003), delayed psychological development (Kurdek, Fine, & Sinclair, 1994), strained relationships with family members (Hurre, Junkkari, & Aro, 2006; Poortman, 2009), and poorer mental health (Ängarne-Lindberg, 2009). Some

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research has focused on the consequences of parental divorce as immediate or short-term consequences that are faced by the children—this is often referred to as a *crisis model*—whereas other research has documented the long-term effects of divorce—this is often referred to as the *chronic strain model*—those consequences that persist for many years after parental divorce (Amato, 2000). Furthermore, scant research has attempted to isolate the potentially differential experiences of adult children (those who experience parental divorce as adults) compared to those who experience parental divorce earlier in the life course. About 20% of divorces occur in couples married over 15 years (Cooney, 1994), suggesting that parental divorce is not isolated only to young children. The purpose of this analysis is to identify whether children exhibited different types of consequences based on the age at which their parents divorced. Specifically, we explore whether the timing of parental divorce has long-term consequences on two distinct outcomes: the child's perceptions of family solidarity and their mental health status later in life. These two outcomes were chosen because they represent a range of consequences involving both personal mental health and subsequent relationships with family.

THE TIMING OF DIVORCE

Timing can be conceptualized in two distinct ways—either as the elapsed time between parental divorce and the assessed childhood outcomes or as the age at which a child experienced parental divorce. *Time since divorce* assesses how much time has passed since divorce and suggests that passing time could play an important mediating role in the consequences associated with parental divorce. *Age at parental divorce* suggests that the life stage in which one experiences parental divorce could be an important predictor of the consequences associated with parental divorce. Few studies have purposefully focused on the potentially differential effects associated with divorce timing (Allison & Furstenberg, 1989, and Cooney, 1994, are possible exceptions). Even fewer have attempted to differentiate effects between these two notions of timing.

Research documenting the consequences of divorce often adopts the crisis perspective, assuming that children experience immediate or temporary effects associated with their parents' divorce. The crisis model assumes that divorce represents a disturbance to which most individuals adjust over time based on their personal resources (Amato, 2000). The conclusions of these studies suggest that the recentness of parental divorce can have profound effects on a child's mental and social well-being. For example, some studies have cited disruptions in the parent–child relationship and increased levels of depression and anxiety that accompany parental divorce (Cooney, 1994; Størksena, Røysamba, Moumc, & Tambsa, 2005). Allison and

Furstenberg (1989) found that the effects of parental divorce on the child's general feelings of dissatisfaction and disinterest in life were almost completely confined to those who experienced parental divorce within 6 years. Furthermore, one study found that the levels of distress following parental divorce tend to dissipate within 18 months to 2 years (Aseltine, 1996). Overall, these studies suggest that the consequences of parental divorce tend to be most profound when measured in close proximity to the event, and also tend to dissipate over time.

On the other hand, there are a number of studies that have tried to identify the specific consequences of parental divorce. Most of these have focused on outcomes associated with young children (Allison & Furstenberg, 1989; Amato, 1996; Bouchard, Lachance-Grzela, & Goguen, 2008; Kaufman & Uhlenber, 1998; McCabe, 1997; Pett, Lang, & Gander, 1992; Riggio, 2001, 2004), but far fewer studies have focused on the consequences of parental divorce for those who experienced the dissolution of their parents' marriage as adult children (Aquilino, 1994; Cherlin, 1998; Shapiro, 2003). These studies attempt to document the consequences that parental marital dissolution can create for children—based on the life stage in which children experience parental divorce, but no research that we are aware of has directly compared the experiences of young and adult children of parental divorce.

EFFECTS OF PARENTAL DIVORCE

Although previous research has not done a very good job at disentangling how the different notions of divorce timing affect the child, the consequences of parental divorce are fairly well-documented in the literature (Amato, 2000). The following section attempts to review both the social and emotional consequences associated with parental divorce, and how these consequences might differ depending on when a child experienced parental divorce. We pay particular attention to those consequences that persist through the later stages of the child's life, rather than just the most immediate consequences associated with parental marital dissolution.

First, although some young children might actually benefit or thrive after parental divorce if they were living in a hostile environment (Amato, 2000; Riggio, 2004), most studies conclude that young children exhibit lower academic performance (Astone & McLanahan, 1991, Wolfinger et al., 2003), delayed psychological development (Kurdek et al., 1994), strained relationships with family members (Poortman, 2009), and poorer mental health (Ängarne-Lindberg, 2009). These consequences, especially those that have the potential to persist into the later stages of the child's life course, could be initially affected through short-term disruptions in education (Amato 2000; Booth & Amato, 1991) and social networks (Cotton, 1999; Kim & Woo, 2011).For example, when experiencing parental divorce at a young age, the

custody arrangements agreed on by the parents might disrupt a child's social network and education (e.g., by moving between parent's houses), thereby decreasing later educational attainment (Wolfinger et al., 2003), which often leads to poor occupational outcomes. As evidence of this pathway, children whose social networks were disrupted by parental divorce had a lower sense of control (Kim & Woo, 2011) and thus were less motivated to attain a higher level of education and then acquire a good job. The immediate disruption caused by parental divorce and the subsequent trajectories set off by those disruptions have the potential to affect a child's social and familial relationships, as well as overall mental health throughout the life course (Poortman, 2009).

On the other hand, adult children are not typically as affected by issues related to custody, visitation, and child support. Adult children might have already established solid social support networks, finished educational degrees, and started a career trajectory prior to the disruption of their parents' divorce. However, that is not to say that the experience of parental divorce is a nonissue for adult children. The consequences of parental divorce for these older children are often translated through the loss of stability that adult children face when the family that they have known since early childhood disintegrates (Zill, Morrison, & Coiro, 1993). The stress associated with changing family dynamics and the perceived lack of familial-level support could have a negative impact on the adult child's relationship with family members (Shapiro, 2003). These changes could further fuel the adult child's self-doubt about his or her own personal relationships (Amato, 2000).

Plenty of research has documented differences in relationship quality, whether it is with family members (Zill et al., 1993) or with romantic partners (Tallman, Gray, Kullberg, & Henderson, 1999), among children who have experienced parental divorce, regardless of at what age they experienced parental divorce. Thus, for children of divorce, marital status during adulthood might be an important proxy to capture the long-term consequences associated with parental divorce. Parental divorce might affect a child's future marital status through different mechanisms, depending on the age at which a child experiences parental divorce. For young children, parental divorce can affect the child's own marital success through actions that increase the likelihood of divorce such as early marriage, cohabitation, and marrying another child of divorce (Bumpass, Martin, & Sweet, 1991; Wolfinger, 2000). For adult children, some research has shown that the child's marital status is affected by observations or experiences of marriage saliency, in which the adult child experiences anxiety, mistrust, and fear about the future success of their own marriages (Duran-Aydintug, 1997). Negative attitudes about marriage can reduce the amount of time and effort that is put into maintaining the marriage, thus increasing the likelihood for divorce. In general, less successful marriages or failed romantic partnerships are correlated with higher risks for later life depression (Bulloch, Williams,

Lavorato, & Patten, 2009), which suggests a long-term chain of consequences that persist into the later stages of the life course for the child.

Another long-lasting effect of parental divorce is on family relationships. A growing body of literature has documented the importance of family relationships as an important mechanism for both social support and emotional health (Cohen, 2004; Ross, 1995). As suggested earlier, parental divorce—regardless of the age at which it is experienced—can have lasting effects on familial relationships, including parent–child and sibling relationships (Riggio, 2001). The initial consequences of parental divorce include higher levels of conflict across the family members, as well as lowered levels of contact (Noller, Feeney, Sheehan, & Darlington, 2008; Shapiro & Cooney, 2007). These heightened levels of conflict, however, often persist beyond the most immediate transition period (Cooney, 1994), thereby leading to long-term detriments in both the quality and quantity of contacts between family members (Cooney, 1994). Research on social support suggests that poorer familial relationships might be associated with overall lower levels of emotional well-being (Riggio & Valenzuela, 2011). These effects are assumed to be present no matter if the child experienced parental divorce as a young child or as an adult.

In sum, parental divorce can have lasting and serious effects on children. This happens because a low sense of self-control, brought on by the environment of divorce, affects future educational attainment, future marital status, social support, mental health, and family relationships. This study expands on these ideas by examining the long-term consequences of parental divorce, and specifically how age at parental divorce might explain the different pathways through which the consequences of parental divorce persist throughout the child's life course.

RESEARCH AIMS

Aim 1: What Are the Long-Term Consequences of Parental Divorce? Do These Consequences Differ by Divorce Timing?

We utilize a sample of midlife persons (age 25–75) to explore two separate, long-term consequences of parental divorce: the likelihood for depression and the child's perceptions of family solidarity during midlife. Two dimensions of timing are also explored: The first dimension of timing is the amount of time that has passed since parental divorce. The second dimension is the age at which parental divorce occurred.

Aim 2: What Might Explain These Differences?

This study explores how divorce timing affects later life mental and social well-being. Based on previous literature (McLeod, 1991), current marital status might mediate the relationship between later life well-being and the

earlier life experience of parental divorce. Furthermore, family solidarity might also mediate the relationship between the experience of parental divorce and later life mental health (Aquilino, 1997; Riggio, 2004). However, given the potentially unique consequences associated with the timing of divorce, we hypothesize that both the nature of the consequences and the mediating role that social support plays could differ for children who experience parental divorce as a child versus as an adult. The goal of this research aim is to establish the pathways through which parental divorce affects the child's later life well-being.

The importance of this study is its ability to identify the long-term sustained effects of parental divorce using a midlife and older sample. Second, by looking at multiple outcomes, we can begin to understand how the effects of parental divorce are carried over a life course and how these effects can manifest through different forms of well-being (i.e., mental health, marital status, and family solidarity). Finally, by focusing on the specific effect of divorce timing, we are able to show that it is the age at which parental divorce is experienced, not necessarily how much time has elapsed since divorce, that determines how the effects of parental divorce can manifest differently on the child's later life mental and social well-being. In conclusion, parental divorce is not something that you recover from, but it is something that you carry with you throughout life (Amato & Cheadle, 2005; Hurre et al., 2006).

METHOD

Data

Data came from the National Survey of Midlife Development in the United States (MIDUS). The study was innovative because of its broad scientific scope and its exclusive focus on the midlife stage of the life course, which was defined as ages 25 to 75. This study, carried out by the MacArthur Midlife Research Network, was done in two waves. The first wave, completed in 1995 and 1996 was a national survey of more than 7,000 midlife Americans (age 25–75), drawn from a nationally representative random-digit-dialed sample of noninstitutionalized, English-speaking adults. Approximately 84% of the original sample was reinterviewed 10 years later between 2004 and 2006, creating a longitudinal data set. The current analysis utilizes only the sample provided by the cross-sectional follow-up wave conducted in 2004 to 2006 (MIDUS II).

MIDUS II respondents were aged 35 to 86 during the time of the second data collection. Like MIDUS I, data were collected using computer-assisted personal interviews, computer-assisted telephone interviews, and mailed questionnaires. Although the vast majority of the MIDUS II sample was derived from the original MIDUS sample, a new African American sample

($n = 592$) was recruited from Milwaukee, Wisconsin. Overall, the MIDUS II sample included nearly 5,900 individuals.

The subsample used for these analyses consisted of MIDUS II respondents who had information regarding their parents' marital status ($N = 2{,}546$). The analytic sample was further restricted to only those who answered the question regarding the age at which their parents' divorced ($n = 2{,}496$). It included 1,916 (77%) who had never experienced parental divorce, 392 (16%) who had experienced parental divorce between the ages of 0 and 17, and 188 ($n = 8\%$) who had experienced parental divorce between the ages of 18 and 53. The analytic subsample represents approximately 42% of the original MIDUS II sample. Analyses comparing the analytic subsample ($n = 2{,}496$) to the full MIDUS II sample showed that there were very few demographic differences between those who were selected for the analyses and those who were not.

Measures

The primary independent variables measured divorce timing, whereas the dependent variables assessed two possible consequences of divorce: depression and perceived familial solidarity.

Independent variables

Two separate variables measured the timing of parental divorce: (a) the age at which a child experienced parental divorce, and (b) the time elapsed between parental divorce and the completion of the survey during midlife. The variable used to measure the age at parental divorce was created from two separate survey questions. The first question gathered information about parents' marital status and the second variable specified the age at which parents divorced for those who experienced parental divorce. If respondents answered that their parents had not divorced (i.e., that they remained married), those individuals were classified as not having experienced a parental divorce (reference group, $n = 1{,}916$). Those who reported that their parents had divorced ($n = 580$) were classified as being either a young child of parental divorce (YCOPD) or an adult child of parental divorce (ACOPD) based on how old they were at the time of parental divorce. The youngest reported age of parental divorce was 0 and the oldest reported age was 53. The YCOPD subsample included those whose parents divorced when they were between the ages of 0 and 17 ($n = 392$); the ACOPD subsample included those whose parents divorced when they were 18 or older ($n = 188$). Eighteen was chosen as the cut-point because 18 is traditionally the age when children begin to leave home and begin college or enter the workforce. Such developmental milestones might, in turn, initiate changes in the parent–child relationship (Whiteman, McHale, & Crouter, 2011). The overall

mean age at parental divorce was 14, with the mean age at parental divorce for YCOPD at 9 years, and 24 years for the ACOPD.

The second timing variable, time since divorce, was constructed by subtracting the respondents' age at the time of the survey from their age at parental divorce. This variable was only calculated for the subsample who experienced parental divorce ($n = 580$). It is reported in years, and ranges from 1 to 73 with a mean of 36.

Dependent variables

Two separate outcomes measured potential long-term consequences of parental divorce. The first variable used in this analysis was the individual's likelihood for depression (yes, no). This dummy variable was created using the Composite International Diagnostic Interview (CIDI) depression diagnosis classification, which combines scores indicating one's level of depressed affect and anhedonia (World Health Organization [WHO], 1990). First, respondents answered a series of seven questions assessing depressed affect during the past 12 months (e.g., lose interest in most things, feel more tired out or low on energy, feel down on yourself, no good, worthless). The answers were coded as "Yes" or "No" and summed to create an individual score (range = 0–7). Respondents were then asked if these feelings lasted "all day long" or "most of the day" and whether they were present "everyday" or "almost every day." If they indicated that they felt sad, blue, or depressed often and their score was greater than 4, then they were coded as a 1, meaning they had depressed affect, or 0 meaning they did not. Symptoms of anhedonia were assessed in an identical fashion. According to the American Psychiatric Association (1987), anhedonia is the loss of the capacity to experience pleasure from normally pleasurable experiences. Anhedonia is a core clinical feature of depression. Finally, the two constructs (depressed affect and anhedonia) were added together to create a single dummy variable that assigned those who had a score of 1 for both depression and anhedonia a 1 (indicating depressed) or 0 (no depression). All 2,496 participants in the analytic sample had valid data for this variable and the differences across groups of the age at parental divorce variable were found to be significant (refer to Results). WHO field trials (Wittchen, 1994) and other methodological studies (Blazer, Kessler, McGonagle, & Swartz, 1994) have documented good test–retest reliability and clinical validity of the CIDI depression diagnoses.

The second outcome used in these analyses was how the child rated his or her relationship quality with family members. Family Affectual Solidarity (FAS; Ryff et al., 2009) is an eight-item scale combining four items related to family support and four items related to family strain into a single linear scale ranging from 1 to 4, with 1 indicating low family solidarity and 4 indicating high levels of family solidarity. The Family support items were the following:

- Not including your spouse or partner, how much do members of your family really care about you?
- How much do they understand the way you feel about things?
- How much can you rely on them for help if you have a serious problem?
- How much can you open up to them if you need to talk about your worries?

These answers were coded on a scale ranging from 1 (*a lot*) to 4 (*not at all*), but were later reverse coded so that lower numbers would indicate lower levels of family solidarity. The following were among the family strain items:

- Not including your spouse or partner, how often do members of your family make too many demands on you?
- How often do they criticize you?
- How often do they let you down when you are counting on them?

Responses were coded on a scale ranging from 1 (*often*) to 4 (*never*). The FAS scale was constructed by calculating the mean values of the four family support items and the four family strain items. It was computed for cases that had at least one valid value for family support and family strain (n = 2,480); thus less than 1% of the analytic sample had missing values for this variable.

Control variables

Previous research has found that a child's adjustment to parental divorce is associated with resources and characteristics such as their educational attainment (Amato, 2000; Booth & Amato, 1991), availability of social networks (Cotton, 1999), and employment history (Booth & Amato, 1991; Hurre et al., 2006). Therefore, all models control for a set of demographic variables, which are included to account for possible confounding between the timing of parental divorce and the two outcome measures. These variables include sex (male, female), educational attainment (some grade school, general equivalency diploma or high school graduate, some college, college graduate, and graduate school), marital status (married, separated/divorced, widowed, never married), age (in years), and age^2. Age^2 is used to account for the curvilinear effect of age on depression as indicated by previous literature (Kessler, Foster, Webster, & House, 1992). Finally, we included an indicator for the mother's and father's current vital status (coded "yes" if alive and "no if dead) because some literature has found associations, although weak, between early childhood parental death and later life mental health well-being (Maier & Lachman, 2000; McLeod, 1991). All control variables were measured at the time of survey completion, when the respondents were in midlife (ages 35–86).

Statistical Analysis

First, bivariate or unadjusted regressions were used to measure the effects of divorce timing (i.e., time since and age at parental divorce) on later life outcomes such as depression and family solidarity. These results were performed to explore how the timing of divorce affects the longer term consequences of divorce. Next, a series of nested regression models were estimated to more closely explore how and why the consequences of parental divorce might differ between those who experienced it as a child versus as an adult. Models predicting the likelihood of depression used logistic regression techniques, whereas models predicting family solidarity utilized ordinary least squares regression. All analyses were conducted using STATA version 9 (StataCorp, 2005) between January 2011 and April 2011.

RESULTS

About 12% of the sample was depressed. The average FAS score was 3.27 on a scale ranging from 1 to 4. The age range was 33 to 83 ($M = 56$). The mean age for those who did not experience parental divorce ($n = 1{,}916$) was 59, whereas the mean age for the subsample of those who experienced parental divorce ($n = 580$) was 51. The adult children of divorce were, on average, 52 years old, and the young children of divorce were, on average, 51 years old at the time of survey completion. Additional descriptive statistics comparing the characteristics of the subsamples are shown in Table 1.

As shown in Table 2, bivariate regression estimates suggest that the timing of parental divorce did indeed have a differential effect on later life outcomes among children. For example, those who experienced parental divorce as a child had a higher risk of depression compared to those whose parents were still married (OR: 1.77, $p < .05$). Likewise, those who experienced parental divorce as an adult had a higher risk of depression when compared to those whose parents were still married (OR: 1.82, $p < .05$). On the other hand, time since divorce did not have a significant effect on the likelihood of depression.

Both age at parental divorce and time since divorce had a significant effect on family solidarity. Those who experienced parental divorce as a child had lower family solidarity when compared to those whose parents remained married ($-.13$, $p < .001$). Furthermore, adult children of parental divorce also exhibited lower family solidarity scores when compared to those whose parents are still married ($-.11$, $p < .01$). According to the results presented in Table 2, age at parental divorce appeared to be the more robust predictor of these two outcome measures, compared to the alternate measure of timing—time since divorce. Thus, we focus on untangling the effects of "age at parental divorce" in the remaining multivariate analyses.

TABLE 1 Sample Sizes and Descriptive Statistics of the Total Sample and Subsamples Based on Whether Children Experienced Parental Divorce

	Total sample[a]	No parental divorce[b]	Parental divorce at age 0–17[c]	Parental divorce at age 18+[d]
Depressed*				
Yes	262 (10%)	174 (9%)	59 (15%)	29 (15%)
No	2,234 (90%)	1742 (91%)	333 (85%)	159 (85%)
Family Affectual Solidarity	$M = 3.27$	$M = 3.29$	$M = 3.15$	$M = 3.18$
Scale* (Range = 1–4)	$SD = .48$	$SD = .47$	$SD = .53$	$SD = .52$
Age* (Range = 28–83)	$M = 56.96$	$M = 58.7$	$M = 50.75$	$M = 52.47$
	$SD = 12.49$	$SD = 12.21$	$SD = 11.69$	$SD = 11.80$
Sex				
Male	1,085	84 (44%)	159 (41%)	79 (42%)
Female	1,411	1,069 (56%)	233 (59%)	109 (58%)
Education				
Some grade school	144	114 (6%)	25 (6%)	5 (3%)
GED/high school graduate	666	511 (27%)	105 (27%)	50 (27%)
Some college	553	405 (21%)	101 (26%)	47 (25%)
College graduate	754	586 (31%)	105 (27%)	63 (34%)
Graduate school	379	300 (16%)	56 (14%)	23 (12%)
Marital status*				
Married	1,781	1,381 (72%)	267 (68%)	133 (71%)
Separated/divorced	329	237 (12%)	69 (18%)	23 (12%)
Widowed	202	168 (9%)	21 (5%)	13 (7%)
Never married	180	128 (7%)	34 (7%)	18 (10%)
Mother alive*				
Yes	1,093	757 (28%)	219 (56%)	117 (63%)
No	1,388	1,902 (72%)	173 (44%)	70 (37%)
Father alive*				
Yes	658	447 (31%)	131 (33%)	80 (43%)
No	1,818	1,450 (76%)	261 (67%)	107 (57%)

Note. Data from the National Survey of Midlife Development in the United States. [a]$N = 2{,}496$. [b]$n = 1{,}916$. [c]$n = 392$. [d]$n = 188$.

*Significance difference across groups, $p < .05$, as assessed by independent samples t tests and analyses of variance.

TABLE 2 Bivariate (Unadjusted) Regression Coefficients Predicting Depression and Family Affectual Solidarity by the Age at Which a Child Experienced Parental Divorce (N = 2,496) and Time Since Divorce (n = 576, Only Those Exposed to Divorce)

	Likelihood of depression (odds ratio)	Family affectual solidarity (beta)
Age at parental divorce		
No parental divorce[a]	—	—
0–17	1.77*	−0.13***
18+	1.82*	−0.11**
Time since divorce (in years)	0.98	0.005**

Note. Each cell represents a separate bivariate regression equation. Depression (yes, no) was assessed by a logistic regression. Family Affectual Solidarity (range = 1–4) was predicted by ordinary least squares regression.

[a]Reference category.

*$p < .01$. **$p < .001$. ***$p < .0001$.

TABLE 3 Logit Regressions (Odds Ratios) of Adult Depression on Age of Parental Divorce

	Model 1[a]	Model 2[b]	Model 3[c]	Model 4[c]
Parental divorce				
No parental divorce[d]	—	—	—	—
Parental divorce at age 0–17	1.38*	1.34	1.24	1.83
Parental divorce at age 18+	1.58*	1.60*	1.51	1.43
Vital status of parents				
Mother died (still alive[d])	1.42*	1.40*	1.39	1.39*
Father died (still alive[d])	0.95	0.93	0.95	0.94
Age (in years)	1.12*	1.14*	1.11	1.11
Age^2	1.00**	1.00**	1.00*	1.00*
Female (Male[d])	2.29***	2.06***	2.05***	2.06***
Education				
Some grade school[d]	—	—	—	—
GED/high school graduate	0.67	0.73	0.76	0.76
Some college	0.50*	0.54*	0.57	0.57
College graduate	0.52*	0.58*	0.62	0.62
Graduate school	0.40**	0.44*	0.50*	0.50*
Marital status				
Married[d]			—	—
Separated/divorced		1.67**	1.42	1.40
Widowed		2.55***	2.77***	2.77***
Never married		1.12	0.96	0.95
Perceived family solidarity (Range = 1–4)			0.38***	0.37
Interaction				
Family Solidarity (FAS) × Age of Parental Divorce (PD)				
FAS × PD at 0–17				0.87
FAS × PD at 18+				1.44
Adjusted R^2	0.064	0.074	0.10	.10

Note. Model 1: Adjusting for confounders. Model 2: Adjusting for mediators. Model 3: Adjusting for the effect of family solidarity. Model 4: Adjusting for the interaction effect of family solidarity and age of parental divorce. Data from the National Survey of Midlife Development in the United States (n = 2,453).
[a]n = 2,473. [b]n = 2,469. [c]n = 2,453. [d]Reference category.
*$p \leq .05$. **$p < .01$. ***$p < .001$.

Table 3 presents estimates from multivariate logistic regression models predicting the likelihood of depression. Overall, these results indicate that there is no major difference in the likelihood of depression between those who experienced parental divorce as a child or as an adult. However, those who experienced parental divorce (regardless of life stage) were more likely to be depressed than those who had continuously married parents. Through a series of nested models, we see that the associations between divorce timing (age at parental divorce) and depression risk were partially explained by different mediators: marital status for those who experienced parental divorce as a child and family solidarity for those who experienced parental divorce as an adult.

Model 1 contained control variables for sex, age, age^2, mother and father vital status, and educational status. In general, these results support the

bivariate results presented in Table 2, but the addition of socio-demographic variables to the unadjusted regression analyses altered the coefficients slightly from those presented in Table 2. Still, the odds of depression remained significantly different among the subgroups: among the YCOPD, it was 38% greater and among ACOPD, it was 58% greater than the odds of depression among those children whose parents' marriage remained intact.

Model 2 controlled for the aforementioned socio-demographic variables but also controlled for the child's marital status during midlife. Those children who were currently separated or divorced had a 66% higher odds of depression compared to those who were married ($p < .01$). Also, as expected, those who were widowed were twice as likely to be depressed than those who were married (OR: 2.55, $p < .001$). After controlling for marital status, the effect of experiencing parental divorce as a young child lost its association with depression, whereas those who experienced parental divorce as an adult child still had 60% higher odds of depression when compared to those whose parents were still married. This suggests that the effect of parental divorce, at least when experienced as a child, is mediated or at least partially explained by the child's own marital status. Approximately 18% of the YCOPD subsample was divorced, compared to 12% of the ACOPD subsample.

Model 3 controlled for family solidarity as measured by FAS. Including this variable in the model resulted in a nonsignificant effect among ACOPD. That is, the effect of experiencing parental divorce as an adult was mediated or at least partially explained by differential levels of family solidarity. This indicates that the FAS is an important factor in understanding how experiencing parental divorce as an adult might relate to long-term risks for depression. Descriptively, the ACOPD subsample had a mean FAS score of 3.15 compared to 3.18 among YCOPD ($p < .15$), and 3.29 among those who had continuously married parents ($p < .007$). Finally, Model 4 illustrates that FAS does not moderate the effect of divorce timing on depression. In other words, there is not an interaction between FAS levels and the timing of divorce that compounds or heightens the depression risk of children experiencing divorce ($p > .05$).

Table 4 illustrates the effect of divorce timing on another outcome—the child's reported levels of family solidarity during midlife. Like the depression results, these analyses indicate a difference between those who experienced parental divorce and those whose parents are still married. Specifically, those who experienced divorce, at whatever age, had lower levels of family solidarity compared to those children who have continuously married or intact parents. Model 1 contained control variables for sex, age, age^2, mother and father vital status, and educational status. Even after controlling for these potentially confounding variables, these results supported the bivariate results presented earlier in Table 2: Those who experienced parental divorce as children or as adults have lower family solidarity scores by −.13 and −.11

TABLE 4 Least Squares Regression of Family Solidarity on Age of Parental Divorce

	Model 1[a]	Model 2[b]
Parental divorce		
No parental divorce[c]	—	—
Parental divorce at age 0–17	−0.08**	−0.07*
Parental divorce at age 18+	−0.07*	−0.07
Vital status of parents		
Mother dead (still alive[c])	−0.002	0.0005
Father dead (still alive[c])	0.01	0.02
Age (in years)	−0.01	−0.006
Age^2	0.0001*	0.0001
Female (male[c])	−0.0007	0.009
Education		
Some grade school[c]	—	—
GED/high school graduate	0.11*	0.11*
Some college	0.11*	0.12*
College graduate	0.11*	0.11*
Graduate school	0.16***	0.18***
Marital status		
Married[c]		—
Separated/divorced		−0.16***
Widowed		0.006
Never married		−0.13***
Adjusted R^2	0.05	0.06

[a]$n = 2{,}457$. [b]$n = 2{,}453$. [c]Reference category.
*$p < .05$. **$p < .01$. ***$p < .001$.

(on the family solidarity scale), respectively, when compared to those whose parents were continuously married. Model 2 shows that when controlling for current marital status there is no longer an association between family solidarity and the experience of parental divorce as a young child. However, the effects remain for the subsample that experienced parental divorce as an adult child. Those who experienced parental divorce as a child had a .70 lower score on the family solidarity scale when compared to those whose parents were still married.

DISCUSSION

Using a midlife sample (ages 35–86) obtained from the MIDUS II study, this analysis explored whether children sustained long-term detriments associated with the dissolution of their parents' marriage. In particular, the analyses explored whether children of parental divorce had elevated depression risks or reduced connection or solidarity with family members compared to those children who were not exposed to parental divorce. These effects were measured in midlife, on average 36 years after parental divorce had occurred, as a way to focus on the long-term consequences that persist after the immediate or initial periods of adjustment that children

face on parental divorce (Allison & Furstenberg, 1989; Amato & Cheadle, 2005; Hurre et al., 2006).

In sum, experiencing parental divorce appears to have a long-lasting effect on the child's mental health and family solidarity: Those who experienced parental divorce exhibited a significantly higher risk for depression as well as lower levels of family solidarity during midlife and older ages, compared to those children whose parents' marriage was intact throughout their childhood and adult lives. Although the magnitude of these effects was generally the same for children of parental divorce no matter when they experienced the divorce, our results found that the potential mechanisms through which parental divorce affects children might differ based on when during the child's development the divorce occurred. For those who experienced parental divorce as a child, their own marital history might explain why they have sustained elevated levels of depression compared to those who did not experience parental divorce. On the other hand, those who experienced parental divorce as an adult might be more likely to have higher depression risk because of their inability to maintain higher levels of family solidarity when compared to those whose parents are still married.

Those who experienced parental divorce exhibited a significantly higher risk for depression as well as lower levels of family solidarity during midlife and older ages. These findings support previous research that has suggested that the negative consequences of stress from parental divorce are present throughout the life course and are manifested through lower levels of family solidarity (Hurre et al., 2006) and a higher likelihood for divorce (Wolfinger, 1999), especially in YCOPD when compared to those whose parents were continuously married. Furthermore, these findings, along with previous research (Amato & Cheadle, 2005; Hurre et al., 2006), indicate that marital status and family solidarity affect later life outcomes such as depression and family relationships

For those who experienced parental divorce as a child, their own marital history might explain why they have sustained elevated levels of depression. This finding supports previous research (Amato & Cheadle, 2005; Hurre et al., 2006), but what is unique about our findings is the differentiation between young and adult children of parental divorce. This differentiation further enhances the understanding of why parental divorce and marital status affect later life depression, because it illustrates the importance of age on the effects of parental divorce and marital status. There is something about being a young child and experiencing parental divorce that leads to thinking about divorce and engaging in conflict more often when compared to those whose parents are still married (Kessler et al., 1992; Webster, Orbuch, & House, 1995).

On the other hand, those who experienced parental divorce as an adult might be more likely to experience depression because of their inability to maintain higher levels of family solidarity when compared to those whose

parents are still married. Furthermore, this study has illustrated the complex relationship between marital status and family solidarity for ACOPD. The initial stress of parental divorce on adult children might for a short time affect feelings about their current or future marital status (Cooney, 1986), but as this study has illustrated, the effect of parental divorce on an adult child's marital status is not long term. The majority of ACOPD had the same marital status (mostly married, few divorced) as those whose parents were still married. Furthermore, the effect of parental divorce on adult children's later life family solidarity is mediated by the child's current marital status. This suggests that because ACOPD have similar marriage patterns as those whose parents are still married, but they report lower family solidarity scores, their marital quality might not be as high. This relationship then affects overall family solidarity and thus increases the likelihood for depression. This connection might explain why they have sustained elevated levels of depression compared to those who did not experience parental divorce.

The findings on family solidarity support previous research findings that parental divorce leads to weakened family ties (Amato & Cheadle, 2005) and interpersonal relationships (Hurre et al., 2006). However, this study begins to untangle why children of parental divorce have lower levels of family solidarity, because it finds that marital status and age of parental divorce are important considerations when assessing later life mental well-being.

Several limitations in this study are noteworthy. In terms of data, both outcomes, depression and family solidarity, were self-reported. Self-reported data create the potential for errors in internal validity. However, the scales that were used in these analyses have been documented in their ability to actually measure depression and family solidarity (WHO, 1990). Furthermore, due to the cross-sectional nature of this study, causal inferences are limited in the findings. Future research should address these questions using longitudinal data that have the ability to focus on age groups, specifically within adult children who experience parental divorce. A data set of this type would allow for a nuanced examination of the consequences of parental divorce at specific stages of the life course.

Furthermore, because the age groups examined in this study were dichotomously broken down into children versus adults, this study does not provide a nuanced examination of age effects. It is possible that the effects of parental divorce have substantial variability depending on the precise age at which the child experienced divorce (e.g., age 17 vs. age 12 vs. age 2). The ages included in the childhood (under age 18) and adult (18+) categories each contain substantial variability associated with different stages of psychological, behavioral, and emotional development. Thus, a more precise estimate of age might be more sensitive to the effects of parental divorce than the dichotomous measure used. However, we reran our analyses using a generalized additive model (results not shown, but available from the author on request), which relaxes assumptions on the

actual relationships between two variables and thus allowed for depression to be modeled using a linear measurement of age. The findings suggest that there are no differences across specific developmental ages in determining the effect of parental divorce on depression. In fact, the models using a dichotomous measure (e.g., parental divorce during childhood vs. adulthood) produced more stable and robust estimates than the model using precise estimates of the age at which a child experienced parental divorce. This suggests that there is something qualitatively different about experiencing parental divorce as a child versus an adult. Future research might wish to explore specifically how stress associated with parental divorce affects the long-term marital status of young children of parental divorce and how stress specifically affects family solidarity levels for adult children of parental divorce.

CONCLUSION

This study suggests that parental divorce can have long-lasting effects on the child's well-being. More important, it highlights some important ways in which the age at parental divorce affects how children's feelings, behaviors, and thoughts interact to create lifelong consequences, such as low family solidarity and a greater likelihood for depression during later stages of the adult life course. Having access to this information can aid therapists in addressing age-specific mechanisms, such as family solidarity and marital relationships, related to parental divorce and mental health by changing thoughts and behaviors related to each one.

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