Brown, S.L., & Lin, I.-F., (2012). The gray divorce revolution: rising divorce among middle-aged and older adults, 1990–2010. *Journals of Gerontology Series B: Psychological Sciences and Social Sciences, 67(6)*, 731–741, doi:10.1093/geronb/gbs089. Advance Access publication October 9, 2012

The Gray Divorce Revolution: Rising Divorce Among Middle-Aged and Older Adults, 1990–2010

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Purpose. Our study documents how the divorce rate among persons aged 50 and older has changed between 1990 and 2010 and identifies the sociodemographic correlates of divorce among today's middle-aged and older adults.

Design and Method. We used data from the 1990 U.S. Vital Statistics Report and the 2010 American Community Survey (ACS) to examine the change in the divorce rate over time. ACS data were analyzed to determine the sociodemographic correlates of divorce.

Results. The divorce rate among adults aged 50 and older doubled between 1990 and 2010. Roughly 1 in 4 divorces in 2010 occurred to persons aged 50 and older. Demographic characteristics, economic resources, and the marital biography were associated with the risk of divorce in 2010. The rate of divorce was 2.5 times higher for those in remarriages versus first marriages, whereas the divorce rate declined as marital duration rose.

Implications. The traditional focus of gerontological research on widowhood must be expanded to include divorce as another form of marital dissolution. Over 600,000 people aged 50 and older got divorced in 2010 but little is known about the predictors and consequences of divorces that occur during middle and later life.

Key Words: Cohort—Demographic characteristics—Divorce rate—Economic resources—Marital duration—Marriage order.

THE United States has the highest divorce rate in the world, with roughly 45% of marriages expected to end through divorce (Amato, 2010; Cherlin, 2010). Although divorce has been studied extensively among younger adults, the research to date has essentially ignored divorce that occurs to adults aged 50 and older (Amato, 2010; Cooney & Dunne, 2001; Sweeney, 2010).

This omission is notable considering that the United States is an aging society. Baby boomers were the first cohort to divorce and remarry in large numbers during young adulthood. Now, they are aging into their fifties and sixties, and this portends that a growing number of older adults will experience divorce because remarriages are more likely than first marriages to end through divorce (Sweeney, 2010). Indeed, the proportions ever divorced, currently divorced, and married at least twice are highest among individuals aged 50 and older (Kreider & Ellis, 2011).

Social gerontologists have called attention to the growing diversity of older adult family living arrangements—including the rise in the proportion currently divorced—and the poorer economic, social, and health outcomes of older unmarrieds (Allen, Blieszner, & Roberto, 2000; Cooney & Dunne, 2001; Lin & Brown, 2012). Yet, it is unclear whether older adults are at a higher risk of divorce today than in the past, a trend forecasted by scholars decades ago and more recently by computer microsimulation models of older adult kinship ties (Berardo, 1982; Hammond & Muller, 1992; Uhlenberg & Myers, 1981; Wachter, 1997). Although there has been considerable speculation about rising divorce in later life, there is essentially no empirical evidence.

In this article, we establish how the divorce rate among middle-aged and older (i.e., aged 50 and older) adults has changed between 1990 and 2010 by comparing the 1990 age-specific divorce rate data from the U.S. Vital Statistics with our own estimate of today's divorce rate using the 2010 American Community Survey (ACS). The ACS offers a unique opportunity to measure the incidence of divorce because all sample members are asked whether they divorced in the past 12 months, which can be used to calculate an annual divorce rate. Additionally, we are able to establish key correlates of divorce among today's middle-aged and older adults, including demographic characteristics, economic resources, and the marital biography (i.e., marriage order and marital duration). Another advantage of our approach is attention to cohort differences through comparisons of middle-aged baby boomers versus older adults from the World War II generation.

The Prevalence Versus the Incidence of Divorce

The marital status composition of older adults has shifted in recent decades such that a larger proportion is divorced and a smaller share is widowed. Comparing adults aged 65 and older in 1980 and 2008, the share reporting their marital status as divorced doubled among men, rising from 5% to 10%. Among women, the percentage currently divorced tripled during this time period, climbing from 4% to 12%. In

Received August 18, 2011; Accepted August 30, 2012
Decision Editor: Merril Silverstein, PhD

contrast, levels of widowhood among older men remained unchanged and actually fell among women between 1980 and 2008 (Manning & Brown, 2011). Thus, the prevalence of divorce has increased (and the prevalence of widowhood has declined) among older adults.

The growing prevalence of divorce suggests that the divorce rate, or the incidence of divorce, may be rising among older adults. But prevalence and incidence are not synonymous. Prevalence measures describe the proportion of the population occupying a particular status at a given point in time. In contrast, incidence measures tell us about the risk of experiencing a new condition or event (i.e., divorce) during a specified period of time. Although a prevalence measure illustrates how widespread divorce is among older adults, it obscures *when* the divorce occurred. Many older adults who are currently divorced actually experienced divorce much earlier in the life course. For this reason, it is not clear why the prevalence of divorce has increased. It is possible that today's older adults are simply less likely to remarry following divorce and thus their prevalence in the population is greater now. In this scenario, the incidence or rate of divorce remains unchanged. Alternatively, the growing prevalence of divorce may reflect an increase in the actual risk of divorce. That is, the incidence of divorce (i.e., the divorce rate) may have climbed in recent years. In this study, we shed light on why the prevalence of divorce among older adults has increased by documenting how the incidence of divorce has changed over the past two decades.

Significance of Later Life Divorce

As early as 30 years ago, researchers argued that divorce among older adults would be a growing trend (Berardo, 1982; Hammond & Muller, 1992). Uhlenberg and Myers (1981) posited several reasons why the divorce rate for older adults would be likely to climb. First, a growing share of older adults is in a higher order marriage, reflecting divorce experienced at earlier stages of the life course. Remarriages are more likely to end in divorce than are first marriages. Second, divorce in the United States is a common occurrence, which means older adults will continue to be more accepting of divorce in the future as either they or people around them experience divorce (cf. McDermott, Fowler, & Christakis, 2009). Third, rising female labor force participation is also conducive to divorce in that women have the economic autonomy (e.g., employment, retirement benefits) to support themselves outside of marriage. Finally, lengthening life expectancies decrease the likelihood that marriages will end through death and increase the length of exposure to the risk of divorce (Uhlenberg & Myers, 1981).

More recently, Wu and Schimmele (2007) suggested that broad cultural shifts in the meanings of marriage and divorce influence all generations, including older adults. Specifically, the weakening norm of marriage as a lifelong institution coupled with a heightened emphasis on individual fulfillment and satisfaction through marriage may contribute to an increase in divorce among older adults, including those in long-term first marriages. Marriages change and evolve over the life course and thus may no longer meet one's needs at later life stages. Qualitative research indicates that many older couples that divorce simply have grown apart (Bair, 2007). Lifelong marriages are increasingly difficult to sustain in an era of individualism and lengthening life expectancies; older adults are more reluctant now to remain in empty shell marriages (Wu & Schimmele, 2007).

Despite these theoretical suppositions for a sustained rise in divorce among older adults, the empirical research on this topic is limited, and most studies are quite dated (Berardo, 1982; Hammond & Muller, 1992; Uhlenberg, Cooney, & Boyd, 1990; Uhlenberg & Myers, 1981; although see Wu & Penning, 1997). Early research documented empirically that divorce was on the rise for older adults during the 1980s but did not establish the predictors of divorce in later life (Hammond & Muller, 1992; Uhlenberg et al., 1990). Recently, the Association of American Retired Persons (AARP) conducted an internet survey of people aged 40–79 who divorced between the ages of 40 and 69, although their study did not include a comparison sample of continuously marrieds, so it was not possible to identify correlates of older adult divorce (Montenegro, 2004).

One study using Canadian data from 1990 suggests a modest increase in the divorce rate for women in their forties and fifties during the 1980s, with factors such as marital duration negatively associated with the odds of divorce (Wu & Penning, 1997). However, women in a remarriage were less likely to divorce than those in a first marriage, and education was positively associated with divorce, results that are not consistent with U.S. patterns (cf. Amato, 2010). Either these findings from the Canadian context have limited applicability in the United States or they suggest that correlates of divorce operate differently for older versus younger adults. There is mixed evidence in the U.S. context about whether and how the predictors of divorce vary by age at divorce, and this literature is rather dated and also restricted to a younger age range than considered here (Booth, Johnson, White, & Edwards, 1986; South & Spitze, 1986; Wang & Amato, 2000; White, 1990).

It is likely that the precursors to divorce during middle and later life are distinctive given the unique events and experiences characterizing these life course stages. During middle and older adulthood, many couples confront empty nests, retirement, or declining health, which can pose considerable challenges for marital adjustment (Booth & Johnson, 1994; Davey & Szinovacz, 2004; Hiedemann, Suhomlinova, & O'Rand, 1998). These turning points can prompt spouses to reassess their marriages, ultimately leading them to divorce (Bair, 2007). For example, a marriage that was satisfactory when both spouses worked and shared activities such as child rearing may flounder once the couple retires and the nest is empty. Growing apart over the marital

life course assumes greater significance with lengthening life expectancies (Bair, 2007).

Apart from these turning points, there are several key sets of factors related to divorce, including demographic characteristics, economic resources, and the marital biography (Amato, 2010). Some of these indicators are expected to operate uniquely for older adults. *Demographic characteristics* include cohort, gender, and race. Middle-aged adults face a higher risk of divorce than older adults because divorce declines with age (Amato, 2010). Blacks and Hispanics are more likely to divorce than Whites (Sweeney & Phillips, 2004).

Economic resources tend to reduce the risk of divorce. The college educated are much less likely to divorce than those with lower levels of education (Martin, 2006). Employment and earnings are also protective against divorce (Amato, 2010), but how these operate for older adults who are typically retired and are relying on fixed incomes is unclear. The availability of economic resources could actually facilitate divorce during later life, especially for women (Bair, 2007). Financial autonomy allows older women to consider divorce as a viable alternative to remaining married. Thus, we examine whether gender and economic resources have interactive effects on the risk of divorce.

Finally, the *marital biography*, or marriage order and marital duration, shape the likelihood of divorce. Higher order marriages are more likely to end through divorce than first marriages as those who divorced in the past presumably are willing to divorce again, whereas some fraction of those in first marriages is unwilling to ever divorce (Sweeney, 2010). The risk of divorce declines as marital duration increases. Dissatisfied couples are weeded out over time, leaving a disproportionate share of the most stable, well-adjusted couples (Amato, 2010). During later life, remarriages can be plagued by strained adult stepchildren relationships and conflict over wills, assets, and health care decisions that undermine marital stability. Marital biographies may have differential associations with women's and men's risks of divorce as women are less likely than men to remarry after divorce and women are more likely to marry older men.

The current investigation is designed to examine whether the risk of divorce is higher now than it was in the past for middle-aged and older adults. We anticipate that the rate of divorce among middle-aged and older adults may have increased since 1990, particularly for those in midlife as it was the baby boomers (b. 1946–1964) that came of age during the rapid acceleration of divorce and remarriage during the 1970s and early 1980s who are now middle aged. This study also attends to heterogeneity in the divorce experience of today's middle-aged and older adults by estimating divorce rates across sociodemographic subgroups and examining key correlates of divorce. Thus, we provide new empirical evidence on the changing incidence or rate of divorce as well as the risk factors associated with divorce for both middle-aged and older adult cohorts.

Methods

We conduct original analyses of the 2010 ACS data to estimate the current divorce rate for middle-aged and older adults, which we compare with existing data from the U.S. Vital Statistics on the divorce rate in 1990 to illustrate how the risk of divorce has changed over the past two decades. We also use the 2010 ACS to examine sociodemographic subgroup variation in divorce rates and the correlates of divorce, including the roles of demographic characteristics, economic resources, and the marital biography in the risk of divorce among middle-aged and older adults.

2010 ACS

The ACS is a nationwide annual survey that began with a demonstration phase during 2000–2004 and was fully implemented in 2005. It was designed to obtain information formerly gathered through the census long-form sample, including demographic, economic, housing, and social characteristics of the U.S. population (U.S. Census Bureau, 2009). Marital history questions have been added to the survey since 2008 in response to the lack of national data on the incidence of marriage and divorce (Elliott, Simmons, & Lewis, 2010). We considered middle-aged and older adults both together and separately. The 2010 ACS sample of 3,061,692 persons included 1,138,468 people aged 50 and older, 647,657 people aged 50–64, and 490,811 people aged 65 and older.

Divorce Rate.—ACS respondents are asked whether they experienced a divorce in the past 12 months. To calculate the divorce rate, we divide the number of people who reported a divorce in the past 12 months by the number at risk of divorce during the past 12 months. Those at risk of divorce include those who divorced or were widowed in the past 12 months and those who remained married or separated at the time of the interview. A recent report documents the superiority of the ACS over other data sources (e.g., the National Survey of Family Growth and the Survey of Income and Program Participation) for estimating the divorce rate (Ratcliffe, Acs, Dore, & Moskowitz, 2008).

Correlates of Divorce.—Demographic characteristics, economic resources, and the marital biography are related to divorce and measured in the ACS. Demographic characteristics include cohort, gender, and race/ethnicity. *Cohort* is coded dichotomously to compare middle-aged (i.e., aged 50–64) and older adults (i.e., aged 65 and older, reference category). *Gender* is coded 1 for women and 0 for men (reference category). *Race/ethnicity* is a series of dummy variables: Non-Hispanic Black, Hispanic, non-Hispanic other (includes multiracial individuals as well as people who identify as single race—Asian, American Indian or Alaska Native, Native Hawaiian and Pacific Islanders, or some other race), and non-Hispanic White

(reference category). Economic resources encompass education, employment, and income. *Education* distinguishes among those with less than a high school degree, a high school degree (reference category), some college, and a college degree or more. *Employment* is a series of dummy variables, including employed full time (at least 35 hr/week), employed part time (1–34 hr/week), unemployed, and not in the labor force (reference category) in the past 12 months. *Personal income* is a measure of the individual's income over the past year from all sources and is classified as follows: less than $10,000, $10,000–$24,999, $25,000–$39,999, $40,000–$55,000, $55,000–$69,999, and $70,000 or more (reference category). These categories reflect the overall distribution of personal income for persons aged 50 and older. There are two variables that capture the marital biography (prior to any divorce). First, a *marriage order* dummy variable differentiates between those in a first (reference category) versus higher order (i.e., remarriage) marriage. Second, *marital duration* of the current (or dissolved in the past 12 months) marriage is coded categorically as follows: 0–9, 10–19, 20–29, 30–39, and 40 or more years (reference category).

1990 U.S. Vital Statistics Report

The U.S. Vital Statistics Report includes both the divorce rate and the number of persons who divorced during 1990 by 5-year age intervals separately for men and women (Clarke, 1995). The characteristics (including age) of divorcing couples come from the divorce-registration area (DRA) sample of 31 states and District of Columbia. Two states (Ohio and South Dakota) in the DRA sample did not report the ages of divorcing persons in 1990. Nonetheless, the age-specific divorce rates for men and women reported in the U.S. Vital Statistics Report are representative of the 1990 population (Clarke, 1995). To calculate the divorce rate, we begin by dividing the number of divorced persons by the divorce rate to obtain the number of persons at risk of divorce. Summing the numbers divorced and numbers at risk across age intervals (and gender) as appropriate and then dividing the numbers divorced by the numbers at risk yields the 1990 divorce rates for persons aged 50 and older, 50–64, and 65 and older.

Estimating the numbers of persons aged 50 and older, 50–64, and 65 and older who divorced at the national level requires adjusting the data to reflect the fact that the DRA sample represents 49% of all divorces that occurred in the United States in 1990 (Clarke, 1995). We explored two approaches. First, we divided the age-specific numbers of persons in the DRA sample by 0.49. Second, we multiplied the 1990 divorce rate by the number of married persons in the 1990 census to estimate the national number of divorces for each of the three age groups (Ruggles et al., 2010). The second approach generated a larger increase in the number of divorces over time (i.e., between 1990 and 2010) than the first method, and thus we report the numbers from the first method for a more conservative estimate.

Despite its limitations, the Vital Statistics offers the best available data with which to estimate the national divorce rate in 1990. A state-by-state validation study conducted by the U.S. Census Bureau staff indicates that marital events data in the ACS and U.S. Vital Statistics (including the DRA sample) are comparable (Elliott et al., 2010). Estimates for more recent years are not possible because the federal government discontinued the collection of vital statistics on marriages and divorces at the state level in 1996.

To ensure that our results are robust, we performed a supplemental analysis by restricting the 2010 ACS data to only the DRA sample states for which age at the time of divorce was reported in 1990. The results from this supplemental analysis are nearly identical to those based on the entire nation, suggesting that the rise in the divorce rate is not an artifact of including ACS data from all states.

Analytic Strategy

Our approach is primarily descriptive as we aim to provide trend data on divorce and to identify the factors associated with divorce among today's middle-aged and older adults. All results are presented for the total sample and separately for middle-aged (aged 50–64) and older (aged 65 and older) adults to assess whether there is cohort variation. To begin, we calculate the 1990 and 2010 divorce rates (and numbers of divorces) to determine whether the risk of divorce has increased over the past two decades. Additionally, we estimate 2010 divorce rates for various subgroups to show how the likelihood of divorce varies by sociodemographic factors (demographic characteristics, economic resources, and the marital biography). Next, we present bivariate comparisons of those who divorced versus remained married across these same sets of factors. Finally, we estimate logistic regression models to examine how demographic characteristics, economic resources, and the marital biography are related to divorcing in the past 12 months (coded 1) versus remaining married (coded 0). Individuals who experienced widowhood in the past 12 months are included in the remained married category because they were at risk of divorce in the past 12 months. Excluding them from the analysis produced substantively similar findings (results not shown). These models provide correlational evidence only; divorces took place during the past 12 months, whereas the sociodemographic characteristics are measured at interview. Factors associated with the likelihood of divorce, such as employment or income, may have changed in response to divorce. Thus, interpretation of the findings requires caution. All analyses were conducted using replicate weighting techniques as recommended by the U.S. Census Bureau to generate robust standard errors because the ACS involves a complex sampling design (U.S. Census Bureau, 2009). Given the large sample size of the

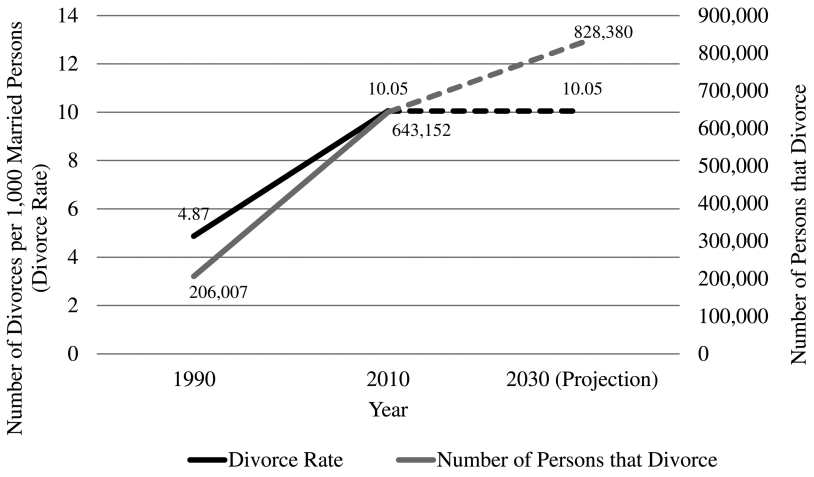

Figure 1. Divorce rate and number of persons that experience divorce, for adults aged 50 years and older.

ACS, we imposed a stringent threshold for statistical significance: a two-tailed $p < .01$ level.

Results

As shown in Figure 1, the divorce rate has doubled since 1990, rising from 4.9 to 10.1 divorced persons per 1,000 married persons. This pattern belies the overall trend in the U.S. divorce rate during this time period, which was essentially flat at 19.0 in 1990 and 17.9 in 2010 (result not shown). The doubling of the rate of divorce among middle-aged and older adults translates into a substantial increase in the number of people aged 50 and older who experience divorce. In 1990, approximately 206,007 people aged 50 and older got divorced, whereas in 2010 about 643,152 got divorced. To contextualize this trend, consider that fewer than 1 in 10 persons who divorced in 1990 was aged 50 and older compared with more than 1 in 4 today (result not shown). Furthermore, assuming the divorce rate remains constant over the next two decades—a conservative assumption based on the recent trend—the number of persons aged 50 and older who would experience divorce in 2030 would rise by one third to more than 828,380 (authors' calculation based on age-specific projected population sizes in 2030 [U.S. Census Bureau, 2004]), reflecting the accelerating growth in the older adult population that will occur over the next 20 years.

This pattern holds for middle-aged (50–64) and older (65 and older) adults as shown in Figure 2. Both groups exhibit approximately a doubling in the divorce rate since 1990. Among the middle aged, the divorce rate rose from 6.9 to 13.1 divorced persons per 1,000 married persons between 1990 and 2010. Similarly, the divorce rate climbed from 1.8 to 4.8 among older adults. The difference in magnitude of the divorce rates for the two age groups means that the number of persons divorcing is much higher among middle-aged than older adults. In 2010, about 529,842 persons aged 50–64 got divorced versus roughly 113,310 persons aged 65 and older. Assuming that the respective divorce rates for middle-aged and older adults remain constant over the next two decades, the numbers of persons whom we estimate would experience divorce in 2030 would climb by roughly 10,000 among the middle-aged and more than 80,000 among older adults.

Table 1 shows the divorce rates for various subgroups both for adults aged 50 and older as well as separately for middle-aged and older adults. There are significant cohort differences in the divorce rates for all of the subgroups examined, with middle-aged adults experiencing higher divorce rates, on average, than their older counterparts. The divorce rates are quite similar for women (10.3 divorced persons per 1,000 married persons) and men (9.8 divorced persons per 1,000 married persons) aged 50 and older. There is some racial and ethnic variation in the risk of divorce among those aged 50 and older, with Whites experiencing the lowest rate of divorce (9.0 divorced persons per 1,000 married persons) and Blacks, the highest (20.5 divorced persons per 1,000 married persons). Hispanics are in the middle (11.3 divorced persons per 1,000 married persons).

The divorce rate also differs by economic resources. Those with a college degree experience a considerably smaller risk of divorce (8.5 divorced persons per 1,000 married persons aged 50 and older) compared with those with lower levels of education (the divorce rate ranges from 9.6–11.5 divorced persons per 1,000 married persons aged 50 and older among those with less than a college degree). The rate of divorce is highest among the unemployed (21.2 divorced persons per 1,000 married persons), followed by those who are employed full time (12.4 divorced persons per 1,000 married persons) or part time (10.0 divorced persons per 1,000 married persons). Older adults who are not in the labor force (presumably because they are retired) have the lowest divorce rate (6.9 per 1,000 married persons). The variation in the divorce rate by personal income

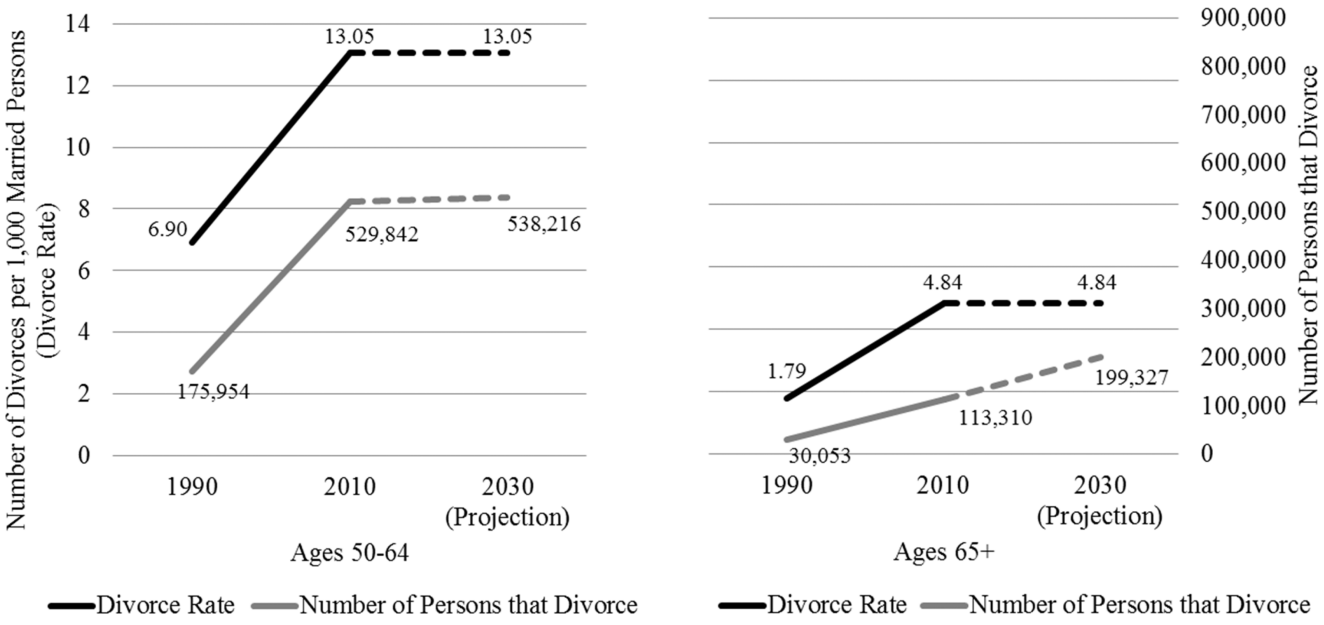

Figure 2. Divorce rate and number of persons that experience divorce, for adults aged 50 through 64 years and 65 years and older.

is small, ranging from a low of 9.1 divorces per 1,000 married persons among those with incomes less than $10,000 to a high of 10.7 divorces per 1,000 married persons among those whose personal income is $25,000–$39,999.

The risk of divorce varies dramatically by both marriage order and marital duration. The rate of divorce among those aged 50 and older is 2.5 times higher for individuals in remarriages (17.2 divorced persons per 1,000 married persons) than first marriages (6.9 per 1,000 married persons). During middle age, the divorce rate is about 2 times greater for remarrieds than first marrieds. During older adulthood, the differential approaches a factor of 4. In terms of marital duration, the divorce rate among individuals aged 50 and older is nearly 10 times greater for those married 0–9 years (28.6 divorced persons per 1,000 married persons) versus those married 40 or more years (3.2 per 1,000 married persons). The rate of divorce declines roughly linearly with rising marital duration.

The characteristics of adults who divorce versus remained married are shown in Table 2. Among those aged 50 and older, the two groups significantly differ across all dimensions except gender. Relative to individuals who remain married, those who divorce are disproportionately non-White (22% and 30%, respectively). They are also less likely to have a college degree—24% of those who divorce have at least a college degree versus 29% among those who remain married. Nearly one third (30%) of those who divorce are not working versus roughly half (44%) among those who remain married. Those who divorce are twice as likely to be unemployed as those who remain married (9% and 4%, respectively). Greater shares of adults remaining married are in either the lower (<$10,000) or higher ($70,000 or more) end of the income distribution compared with those who divorce. The most striking differences between the two groups emerge in their marital biographies. Less than one-half (48%) of those who divorce are in first marriages compared with 70% of those who remain married. That is, a majority of those who divorce are in remarriages, whereas most of those who remain married are in first marriages. Not surprisingly then, marital duration is much lower, on average, among those who divorce (44% have been married fewer than 20 years) than those who remain married (59% have been married at least 30 years).

Compositional differences are similar for both cohorts with one exception. The sole distinctive pattern emerges for gender among the older cohort with those remaining married disproportionately men (55% vs. 50%).

Table 3 shows the odds ratios from the logistic regression models estimating the probability of divorce during the last 12 months for all marrieds aged 50 and older as well as separately for the middle-aged and older cohorts. Among those aged 50 and older, the odds that middle-aged adults divorce are 1.6 times greater than those of older adults. The odds of divorce are 12% higher for women than men. Blacks are more likely than Whites to divorce, and Hispanics and Whites share similar odds of divorce. Those with a college degree are just 0.88 times as likely to divorce as those with a high school degree. Unemployment is associated with roughly 80% greater odds of divorce than is not being in the labor force. Full-time employment is also positively associated with divorce compared with being out of the labor force. Personal income is essentially unrelated to the likelihood of divorce, although those earning $10,000–$24,999 are more likely to divorce than those earning over $70,000. The odds of divorce are 43% higher in remarriages than first marriages. The association between marital duration and divorce is negative. For example, the odds

Table 1. Divorce Rates for Demographic Characteristics, Economic Resources, and Marital Biographies by Age Groups

Age	50+ (1)	50–64 (2)	65+ (3)	(2) vs. (3)
Total	10.05	13.05	4.84	***
Demographic characteristics				
Gender				
Women	10.32	12.90	5.37	***
Men	9.81	13.21	4.42	***
Race and ethnicity				
White	8.96	12.03	4.06	***
Black	20.46	24.87	10.24	***
Hispanic	11.34	12.41	8.67	**
Others	9.47	11.06	5.87	***
Economic resources				
Education				
Less than high school	11.52	16.40	6.50	***
High school graduate	9.64	13.02	4.67	***
Some college	11.38	14.36	4.76	***
Bachelor's degree or more	8.52	10.65	3.91	***
Employment				
Not in labor force	6.93	11.62	4.36	***
Unemployed	21.18	22.36	13.09	***
Worked part time	10.00	12.19	5.36	***
Worked full time	12.36	12.96	6.80	***
Personal income				
<10K	9.09	12.44	4.36	***
10–25K	10.56	15.10	5.73	***
25–40K	10.65	14.09	4.76	***
40–55K	10.38	12.76	4.28	***
55–70K	10.47	12.54	4.28	***
>70K	9.59	11.17	4.08	***
Marital biographies				
Marriage order				
First marriage	6.93	9.45	2.85	***
Higher order marriage	17.17	20.63	10.13	***
Marital duration (years)				
0–9	28.60	30.27	21.53	***
10–19	17.46	18.89	11.21	***
20–29	12.10	12.95	7.72	***
30–39	7.76	8.06	6.09	**
40+	3.19	4.96	2.68	***
Unweighted *N*	757,835	462,812	295,023	

Notes: The divorce rate is the number of divorced persons per 1,000 married persons.

**$p < .01$. ***$p < .001$, Pearson's chi-square test.

of divorce are nearly 5 times larger among those married less than 10 years versus those married at least 40 years. Relative to those married 40 or more years, the odds of divorce are 3.1, 2.4, and 1.7 times greater for those married 10–19, 20–29, and 30–39 years, respectively. Thus, the risk of divorce is lowest for long-term first marrieds.

The results from models estimated separately by cohort are largely similar to those of the full sample. Among middle-aged adults, the same pattern of findings emerge, except the likelihood of divorce does not vary by gender and neither full-time employment nor income is related to the likelihood of divorce. Among older adults, the results do not differ from the full sample, except neither education nor personal income is related to divorce and Hispanics and others are more likely than Whites to divorce.

In supplemental analyses, we investigated gender interactions but found only four (results are not shown but available upon request). First, employment status interacts with gender such that the positive association between full-time employment and divorce is more pronounced among women, which is in line with our assertion that economic factors figure more prominently in women's divorce experience (also, the positive effect of unemployment is larger for women among the middle-aged cohort only). Second, gender interacts with income such that income is positively related to women's odds of divorce but negatively related to men's. This is consistent with our expectation that financial autonomy might encourage divorce among women. Third, women in a higher order marriage are less likely to divorce than men (this is observed among the older adult cohort only). Last, the gap between the risks of divorce for women and men increases as marital duration increases, meaning women are more likely than men to divorce from a longer marriage.

Discussion

The divorce rate among middle-aged and older adults has doubled over the past two decades. This trend is at odds with the overall pattern of divorce for the U.S. population as a whole, which is characterized by stability and perhaps even a slight decline in the rate of divorce (Amato, 2010; Cherlin, 2010). The rise in the rate of divorce among adults aged 50 and over is substantively significant given that half of the married population is aged 50 and older; it should not be dismissed as a mere artifact of a small base rate. The doubling of the divorce rate coupled with the aging of the population translates into a considerable share of today's divorces occurring to middle-aged and older adults. In fact, one in four persons who divorced in 2010 was aged 50 or older. More than 600,000 adults aged 50 and older got divorced in 2010. This is a significant share of the divorcing population, especially compared with 1990, when fewer than 1 in 10 persons who divorced was aged 50 or older.

The divorce rate is much higher among middle-aged versus older adults, which could reflect either cohort or age effects. Importantly though, the divorce rate has increased for both groups, and in fact, the rise has been more pronounced among older adults. Because we only examine two cohorts, we cannot isolate whether the effect is due to cohort membership or aging. Regardless, our projections through 2030 show that even if the divorce rate were to remain constant, there would be growth in the numbers of both middle-aged and older adults who experience divorce.

Our national portrait illustrates how demographic characteristics, economic resources, and the marital biography are related to the risk of divorce among today's middle-aged and older adults. For the most part, these factors operate similarly for both cohorts. The divorce rate is higher among women than men, non-Whites than Whites, and those with a high school compared with a college

Table 2. Percentage Distributions of Characteristics for Persons Who Divorced and Persons Who Remained Married in the Last 12 Months by Age Groups

	50+			50–64			65+		
	Divorced	Married		Divorced	Married		Divorced	Married	
Demographic characteristics									
Gender									**
Women	48.99	47.71		48.86	49.45		49.63	44.72	
Men	51.01	52.29		51.14	50.55		50.37	55.28	
Race and ethnicity			***			***			***
White	69.36	77.90		69.49	75.49		68.77	82.06	
Black	15.16	7.37		15.63	8.11		12.96	6.10	
Hispanic	9.69	8.58		9.19	9.67		12.04	6.70	
Others	5.78	6.15		5.69	6.73		6.24	5.14	
Economic resources									
Education			***			***			***
Less than high school	15.80	13.77		13.85	10.98		24.95	18.56	
High school graduate	28.87	30.13		28.16	28.24		32.20	33.37	
Some college	30.93	27.28		32.66	29.65		22.80	23.20	
Bachelor's degree or more	24.40	28.82		25.33	31.12		20.05	24.87	
Employment			***			***			***
Not in labor force	30.33	44.12		21.89	24.63		69.81	77.64	
Unemployed	8.54	4.01		9.54	5.52		3.83	1.40	
Worked part-time	11.77	11.83		11.84	12.69		11.47	10.36	
Worked full-time	49.36	40.04		56.73	57.16		14.90	10.59	
Personal income			**			***			**
<10K	20.73	22.94		20.17	21.17		23.35	25.98	
10–25K	26.40	25.12		23.60	20.36		39.45	33.31	
25–40K	17.54	16.55		17.78	16.45		16.40	16.71	
40–55K	12.28	11.89		13.18	13.49		8.08	9.14	
55–70K	7.49	7.19		8.17	8.51		4.35	4.93	
>70K	15.56	16.31		17.10	20.02		8.37	9.94	
Marital biographies									
Marriage order			***			***			***
First marriage	47.93	69.74		49.06	68.01		42.65	72.72	
Higher order marriage	52.07	30.26		50.94	31.99		57.35	27.28	
Marital duration (years)			***			***			***
0–9	23.44	8.08		24.36	10.32		19.11	4.23	
10–19	21.02	12.01		22.47	15.44		14.24	6.11	
20–29	24.96	20.69		27.17	27.40		14.60	9.14	
30-39	20.16	26.16		21.56	35.08		13.61	10.81	
40+	10.42	33.06		4.43	11.76		38.44	69.71	
Unweighted *N*	6,772	751,063		5,466	457,346		1,306	293,717	

Note: ** $p < .01$. *** $p < .001$, Pearson's chi-squared test.

degree. The divorce rate is highest among the unemployed. Additionally, the divorce rate is 2.5 times higher for those in remarriages versus first marriages, and it is highest among those with the shortest marriages. These patterns persist in a multivariate analysis predicting the likelihood of divorce among married people aged 50 and older. Older adults are less likely to divorce than middle-aged adults. Blacks are more likely to divorce than either Whites or Hispanics. Education is negatively associated with divorce. Both, the unemployed and full-time employed persons, are more likely to divorce than those who are not in the labor force. The two components of the marital biography—marriage order and marital duration—are both related to the odds of divorce. Higher order marriages and marriages of shorter duration are more likely to end through divorce.

There are some limitations of the study. The design of the ACS does not allow us to establish the temporal order of divorce and its correlates. Particularly for the indicators of economic resources, including employment and income, it is possible that the values on these factors may have changed in response to divorce. For example, a woman may begin working following divorce, altering both her employment status and her personal income level. Thus, the results presented here should be interpreted with caution and not construed as causal. Also, other unmeasured factors, such as marital quality, likely are related to divorce among older adults but are not measured in the ACS. Finally, our focus on the time period of 1990–2010 reflects data constraints; age-specific divorce rate data are not available for prior decades (e.g., 1980).

Although this profile uncovers the rise in divorce among middle-aged and older adults as well as its correlates, it does not explicitly address the important question of why divorce has doubled among adults aged 50 and older. Indeed, the causes underlying the rapid rise in divorce among

Table 3. Odds Ratios and Standard Errors (*SE*) from the Logistic Regressions of the Likelihood of Divorce in the Last 12 Months by Age Groups

	50+			50–64			65+		
	Odds Ratio	*SE*		Odds Ratio	*SE*		Odds Ratio	*SE*	
Demographic characteristics									
Cohort									
50–64	1.601	0.065	***						
65+ (reference group)									
Gender									
Women	1.124	0.039	**	1.065	0.038		1.463	0.111	***
Men (reference group)									
Race and ethnicity									
White (reference group)									
Black	1.825	0.081	***	1.767	0.084	***	2.129	0.228	***
Hispanic	1.045	0.064		0.911	0.064		2.048	0.250	***
Others	1.026	0.075		0.937	0.071		1.646	0.245	**
Economic resources									
Education									
Less than high school	1.314	0.060	***	1.340	0.072	***	1.207	0.108	
High school graduate (reference group)									
Some college	1.047	0.037		1.072	0.044		0.915	0.085	
Bachelor's degree or more	0.877	0.028	***	0.884	0.033	**	0.854	0.083	
Employment									
Not in labor force (reference group)									
Unemployed	1.797	0.106	***	1.690	0.112	***	2.379	0.324	***
Worked part time	1.101	0.053		1.053	0.063		1.226	0.120	
Worked full time	1.173	0.050	**	1.093	0.057		1.582	0.162	***
Personal income									
<10K	1.020	0.064		1.002	0.072		1.050	0.154	
10–25K	1.158	0.063	**	1.141	0.069		1.356	0.181	
25–40K	1.079	0.058		1.095	0.064		1.162	0.159	
40–55K	1.020	0.055		1.032	0.059		1.052	0.175	
55–70K	1.029	0.073		1.038	0.074		1.043	0.204	
>70K (reference group)									
Marital biographies									
Marriage order									
First marriage (reference group)									
Higher order marriage	1.431	0.060	***	1.366	0.063	***	1.959	0.213	***
Marital duration (years)									
0–9	4.848	0.309	***	4.643	0.370	***	4.653	0.620	***
10–19	3.095	0.207	***	3.040	0.236	***	2.422	0.389	***
20–29	2.422	0.147	***	2.375	0.176	***	1.773	0.242	***
30–39	1.679	0.111	***	1.589	0.119	***	1.514	0.195	**
40+ (reference group)									
Constant	0.002	0.000	***	0.004	0.000	***	0.001	0.000	***
Unweighted *N*	757,835			462,812			295,023		
	$F(21, 59) = 133.40$			$F(20, 60) = 99.92$			$F(20, 60) = 70.73$		

Note. ** $p < .01$. *** $p < .001$, *t* test.

middle-aged and older adults are difficult if not impossible to establish using existing data. Nonetheless, our analyses provide indirect evidence of what could be the primary factor in this trend: the shifting marital biographies of middle-aged and older adults. The composition of the middle-aged and older population arguably has not changed sufficiently on other dimensions (e.g., demographic characteristics, economic resources) related to divorce to yield such a dramatic rise in the risk of divorce. But the marital biographies of older adults have altered considerably in recent decades as individuals who came of age during the 1970s and early 1980s when divorce and remarriage were accelerating are now entering middle and later adulthood. Today, individuals aged 50 and older have the most complex marital biographies of the U.S. population (Kreider & Ellis, 2011).

In 1980, just 19% of married persons aged 50 and older were in remarriages versus 30% in 2010 (Ruggles et al., 2010). We rely on 1980 as a baseline rather than 1990 because data on marriage order were not collected in the 1990 decennial census and the 1990 CPS June Supplement that collected information on marital history did not include persons aged 65 and older. This pattern is characteristic of both middle-aged and older adults: the proportions in remarriages rose from 18% to 32% and 20% to 27%, respectively. Our analyses show that the odds of divorce are roughly 40% higher for those in higher order than first marriages, net

of demographic characteristics, economic resources, and marital duration. Moreover, the actual rate at which remarrieds divorced in 2010 is 2.5 times larger than that of first marrieds. Over half of adults aged 50 and older who got divorced in 2010 had been in remarriages compared with less than one third of those who remained married.

The rapid rise in divorce during the second half of life has important implications for individuals, their families, and society at large. There is considerable evidence that marital dissolution through widowhood is detrimental to individual well-being (Carr, 2004; Lee & DeMaris, 2007; Williams, 2004). It is likely that divorce has similar negative consequences, particularly for those who did not want the divorce or who are economically disadvantaged or in poor health. But this is largely speculation (although Uhlenberg et al. [1990] found women who divorced during midlife in the 1980s often suffered financially). It is essential that researchers begin to examine the ramifications of divorce during later life for subsequent well-being.

The consequences of divorce extend beyond the couple to children and extended family members. Parent–adult child relationship dynamics often change following parental marital dissolution. Divorced older adults no longer have a spouse on whom to rely and are likely to place greater demands on their children for social support. And, children may be called on to serve as caregivers in lieu of a spouse. The strain of such intense obligations may weaken intergenerational ties. Indeed, the limited research to date suggests that parent–adult children relationships suffer following parental divorce, as indicated by decreased interaction and relationship quality, especially among divorced fathers and their adult children (Aquilino, 1994; Bulcroft & Bulcroft, 1991; Shapiro, 2003). Adult children are particularly unlikely to provide care to their divorced fathers (Lin, 2008).

The ability of older adults to draw on children for support and care may be constrained in other ways. Some older adults may not have children available nearby to provide care and this situation is likely to be more common in the future with shrinking average family sizes (Hughes & O'Rand, 2004). For this reason, the rise in later life divorce may ultimately place additional burdens on society at large, as divorced individuals will be forced to turn to institutional rather than familial (spousal, filial) sources of support (cf. Lin, 2008). And, if later life divorce erodes the health and well-being of older adults, then their needs will only intensify. Furthermore, a decline in economic well-being following divorce would suggest a greater reliance on public rather than private forms of support, possibly meaning a rise in Medicaid and Supplemental Security Income usage by older adults. Indeed, a recent study indicates that unmarried baby boomers are 4 times as likely to be poor and twice as likely to have disabilities as married boomers (Lin & Brown, 2012). Thus, the rise in later life divorce is likely to have wide-reaching consequences that may require coordinated responses through public health or policy initiatives.

Gerontological research has conceptualized marital dissolution in terms of widowhood, largely ignoring the ramifications of divorce that occurs during middle and older adulthood. Our research demonstrates that this approach is outmoded. Since 1990, the divorce rate has doubled among persons aged 50 and older. One quarter of those who divorced in 2010 were aged 50 and older. Future research should address the predictors and consequences of divorce that occurs during middle and older adulthood. As the U.S. population ages, the number of persons aged 50 and older who experience divorce will continue to climb by one third even if the divorce rate remains unchanged. The rise in divorce among middle-aged and older adults is not only likely to shape the health and well-being of those who experience it directly but also to have ramifications for the well-being of family members (e.g., children and grandchildren) and intensify the demands placed on the broader institutional support systems available to middle-aged and older adults.

Funding

This research was supported in part by the Center for Family and Demographic Research, Bowling Green State University, which has core funding from the Eunice Kennedy Shriver National Institute of Child Health and Human Development (R24HD050959-08).

Acknowledgments

Brown and Lin planned the study. Brown wrote the paper and Lin revised the manuscript. Lin performed all statistical analyses.

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