



Marital happiness and marital stability: Consequences for psychological well-being[☆]

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ABSTRACT

This study examines the consequences for psychological well-being of marital stability and change over the five-year period between the two waves of the National Survey of Families and Households. We develop and test the following hypotheses: (1) those who divorce or separate experience declines in psychological well-being compared to those who remain married; (2) among those unhappy with their marriage, those who divorce or separate see improvements in psychological well-being, especially if they remarry, compared to those who remain married to the same person; (3) psychological well-being declines in the first year or two following the end of the marriage and then improves to previous levels; (4) women experience greater improvements in psychological well-being from leaving an unhappy marriage than do men. We find strong and consistent support only for the first of these.

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1. Marital happiness and marital stability consequences for psychological well-being

Divorce has detrimental effects on people's emotional well-being. But these detrimental effects of divorce may differ by marital happiness (Marks and Lambert, 1998; Simon, 2002). Studies have asked whether people in unhappy marriages improve their emotional situation upon divorce (Amato and Hohmann-Marriott, 2007; Aseltine and Kessler, 1993; Kalmijn and Monden, 2006; Prigerson et al., 1999; Wheaton, 1990; Williams, 2003), and the findings have been mixed. One explanation for the mixed findings may be that most of these studies do not distinguish between the immediate short-term crisis effect, and the chronic, or long-term effects of divorce (Wheaton, 1990 is the exception). In this study we argue that it is important to distinguish between the long-term and short-term effects because the process of divorce itself is stressful and conflict-ridden, even when desired (Hopper, 2001). Thus, even if people's emotional well-being improves in the long-term, we would expect to observe a short-term emotional crisis for everyone. We expect that the emotional effects of divorce will be related to marital happiness. People who were happily married may be more devastated by the breakup of their union than people who were unhappily married, for whom the dissolution may provide some emotional relief. In this study we compare changes in emotional well-being in the first few years following the end of the marriage, and over the longer-term, and we compare the emotional well-being of adults who remain married to those who separate, divorce, or remarry.

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2. Conceptual framework and hypotheses

2.1. Emotional well-being and divorce

The dissolution of a marriage may increase psychological distress and reduce emotional well-being through a number of mechanisms. First, marital disruption is generally an acrimonious process (Hopper, 1993), marked by high levels of inter-personal conflict (Wallerstein and Blakeslee, 1989; Masheter, 1991, 1997; Tschann et al., 1989). These negative experiences and emotions cause distress and lead to a decline in positive emotions and evaluations (Kitson and Morgan, 1990). Second, marital disruption tends to reduce the economic well-being of former spouses (Peterson, 1996; Smock et al., 1999). The economic problems that often follow divorce may have negative effects on emotional well-being (Aseltine and Kessler, 1993). Third, the disruption and acrimony around the divorce may lead to emotional and behavioral problems for children (Cherlin et al., 1998; Wallerstein et al., 2000), increasing distress for parents. Finally, the end of a marriage signals the failure of an intimate relationship, which may reduce emotional well-being, at least until and unless the person enters a new relationship. Since marriage is a central source of social support (Ross, 1995; Tschann et al., 1989), divorce may destroy or weaken support networks, disrupt ability to deal with stress during a stressful period, and thus increase emotional distress. We hypothesize that those who divorce or separate experience immediate declines in psychological well-being compared to those who remain married.

2.2. Temporary crisis vs. state of chronic strain

Our study attempts to shed light on the question whether divorce represents a temporary crisis or whether divorce is a state of persistent chronic strain. Marital disruption is a stressful life event, even when the marriage was unhappy and divorce was desired. The uncertainty, acrimony, negotiations, residential changes, and financial reversals are often extremely stressful during the course of the divorce or separation. According to the *Crisis* model the effects of divorce are temporary and emotional well-being falls during the divorce process, but later returns to pre-divorce levels. Booth and Amato (1991) find such a pattern, whereby levels of stress increase in the period prior to divorce, then decline to levels comparable to those reported by the married. Their results suggest that the “crisis” period is about two years, after which divorced and married people do not differ in reported levels of stress. Hetherington and Kelly (2002) also find a crisis period of about two years, during which most couples showed some type of emotional problem. However, in their study of divorced couples over 30 years they also found long-term emotional problems in almost a third (30%) of the couples (Hetherington and Kelly, 2002).

Another approach focuses on the *State* of being divorced or separated as a chronic strain. This perspective points to the declines in financial well-being that accompany divorce (Peterson, 1996; Simon, 2002), the strains of single parenthood (McLanahan, 1983), and social isolation. Studies show that divorced people tend to have more chronic stressors in their lives, and they also tend to have less social support with which to cope with these stressors (Johnson and Wu, 2002). According to this perspective, *getting* divorced is stressful, and *being* divorced is stressful, so that divorced people may show relatively persistent deficits in emotional well-being compared to their previous state or to married people. Mastekaasa (1995) finds, in a Norwegian sample, that people who divorced or separated showed a significant increase in psychological distress over both the short-term (up to four years following the divorce) and long-term (from four to eight years following the divorce). Kiecolt-Glaser and colleagues find that the immune function of women who had divorced recently showed deficits compared to otherwise similar married women, but so did the immune function of women who had been divorced for some time (Kiecolt-Glaser et al., 1987). Both these findings provide support for the *State* model.

In our study we test both the *Crisis* and *State* models by comparing changes in emotional well-being in the year or two following the disruption with those disruptions more than two years in the past. We hypothesize that, based on the *Crisis* model, sizeable negative effects on emotional well-being only occur in the period shortly after the marriage ended. The *State* model leads to an alternative hypothesis predicting that diminished emotional well-being would also appear in later years among those who did not remarry.

We acknowledge that there may be a process of selection whereby some people have personal characteristics that predispose them to both divorce and to depression (Amato, 2000). We expect that by accounting for marital happiness prior to marital breakup we can account for at least part of this selection effect.

2.3. Marital happiness and divorce

Studies have asked whether marital disruption has different consequences for emotional well-being among spouses who are happy with their marriage and those who are unhappy with their marriage. Marital unhappiness signals a failure of the marriage to meet the emotional and other needs of the individual (Glenn, 1996), and any loss as a result of the divorce is likely to be smaller than in the case of a happily married person. But unhappy spouses may still see the end of the marriage as a failure and experience distress and disappointment as a result. And declines in economic well-being tend to follow the disruption of *all* marriages, as do declines in social support. This reasoning implies that both those who rated their marriage as happy prior to the disruption and those who rated their marriage as unhappy will show declines in emotional well-being following divorce, but we expect that the negative consequences of marital disruption will be smaller and perhaps more short-term among those who were unhappy with their marriage than among those who were happy with their marriage.

An alternative argument suggests that, in high-conflict or violent marriages and in low-quality marriages, spouses might experience gains in emotional well-being from dissolving the marriage. For these people, divorce may represent an escape from a stressful situation and may lead to an improvement in emotional well-being. Thus, an unhappy spouse might be happier unmarried than in the current marriage. Studies have found that people in poor-quality, conflict-filled, or unhappy marriages show smaller declines in emotional well-being after divorce than those in marriages that they viewed more positively (Wheaton, 1990; Booth and Amato, 1991; Johnson and Wu, 2002; Aseltine and Kessler, 1993; Peterson, 1996; Williams, 2003). But recent findings, using a large sample, suggest that these emotional problems do not end after divorce, and that divorce does not improve well-being, even among those in unhappy and even violent marriages (Kalmijn and Monden, 2006). In our study we ask whether declines in emotional well-being following divorce differ by marital happiness and we distinguish between short and longer-term effects.

2.4. Gender

The consequences of marital disruption may differ by gender. Because divorced women experience greater declines in standard of living and are more likely to have custody of their children than divorced men, this might lead to more distress and subsequently greater declines in well-being among divorced women than divorced men. However, empirical studies examining gender differences in these effects have yielded mixed results. Some studies have found that the transition to divorce was associated with somewhat more negative effects for women than for men (Aseltine and Kessler, 1993; Kalmijn and Monden, 2006; Marks and Lambert, 1998), whereas other studies have found similar levels of changes in emotional well-being around divorce (Amato and Hohmann-Marriott, 2007; Booth and Amato, 1991; Williams, 2003), although, men and women may respond to marital transitions with different types of emotional problems (Simon, 2002; Williams and Dunne-Bryant, 2006). We test the hypothesis that women experience greater declines than men do in emotional well-being following divorce in general, but unhappily married women experience greater improvements in emotional well-being from leaving their marriage than do unhappily married men.

In our study we examine the short and longer-term changes in emotional well-being for those who divorced and those who remained married, given previous marital happiness. Our study is innovative in three respects: it distinguishes between short-term (crisis) effects and longer-term effects of divorce on emotional well-being; it takes into account the effect of marital happiness on emotional well-being after divorce; and, it uses six different measures of emotional well-being so it is more sensitive to gender differences than previous studies. This analytic framework allows us to answer the following questions: Among people who are unhappy with their marriage, do those who divorce tend to show improvements in their emotional well-being compared to those who remain in their (unhappy) marriage? Among people who are unhappy with their marriage, do those who divorce and remarry tend to show improvements in their emotional well-being compared to those who remain in their (unhappy) marriage? Are the negative effects of divorce more short-term for those in unhappy marriages than for those in happier marriages? Do these effects of divorce on emotional well-being differ for men and women?

3. Methods

3.1. Data

The data for these analyses come from the first and second waves of the National Survey of Families and Households (NSFH), conducted in 1987–1988 (Time 1) and in 1992–1993 (Time 2; five years later) of a nationally representative sample of 13,007 adults 19 years old and older. Sampling weights that correct for selection probabilities and nonresponse allow adjustment to match the composition of the U.S. population on age, sex, and race (see Sweet et al., 1988, for more information).

For the analyses presented here, we limit the sample to the 5232 respondents who were married at Time 1 (T1) and reinterviewed at Time 2 (T2). In multivariate analyses, we excluded 241 respondents with missing information on marital happiness at T1 and additional 219 respondents with missing information on demographic control variables. Due to differences in the numbers of cases that have missing information on the outcome variables, the sample sizes in our analytical models vary from 3684 for global happiness to 4517 for alcohol consumption.

3.2. Measures

3.2.1. Marital happiness and marital stability

Marital happiness is measured by a question that asks, “Taking things all together, how would you describe your marriage?” The answers range from 1 (very unhappy) to 7 (very happy). Although more refined measures of marital happiness have been developed (e.g., Amato and Booth, 1995), NSFH wave 1 data include only a single-item measure of marital happiness.¹ We address this limitation later in the paper. Because responses to this question are highly skewed with few responses

¹ The second wave of NSFH includes a single-item marital happiness question as well as questions about satisfaction with specific domains of the marital relationship. We found a high correlation ($r = .71$) between the single-item measure of marital happiness and the summary scale of domain-specific items.

in the lowest two categories, we code those whose responses fall into the first four categories as unhappily married (code 0) and compared them with respondents whose responses fall into the last three categories (code 1).

We categorize marital status transition from *T1* to *T2* as (1) married to the same spouse; (2) divorced and remarried; (3) divorced but not remarried; and (4) separated. In all analyses, those married to the same spouse at *T2* constitute the comparison group. For respondents who experienced a marital disruption between *T1* and *T2*, we further distinguish those whose marriage ended within two years of *T2* interview from those whose marriage ended more than two years before *T2*. Appendix A presents descriptive statistics for all dependent and independent variables for the sample of respondents who were married at *T1*, for those who rated their marriage at *T1* as happy, and for those who rated their marriage at *T1* as unhappy.

We examine six indicators of psychological well-being, including three positive measures, *global happiness*, *self-esteem* (Rosenberg, 1965), and *personal mastery* (Mirowsky and Ross, 2003; Ryff, 1989), and three measures of psychological distress, *depression* (Radloff, 1977), *hostility*, and *alcohol consumption* (days of alcohol drinking times alcohol drinks per day, truncated to range from 0 to 150) (Mirowsky and Ross, 1989, 2003; Horwitz et al., 1996). For multi-item measures, we reverse-coded some of the items so that higher scores correspond to higher levels of the concept we measure, and we use the average scores. Appendix B lists the outcome measures, the items that comprise them, and, for scales, their alpha reliability. The alpha reliability for these scales ranges from .65 to .93.

All these outcomes are measured at *T2*. For three of the outcome measures—*global happiness*, *depression*, and *self-esteem*—*T1* measures are available and are included as controls in respective models for these outcomes. For *personal mastery*, responses to one item measuring personal mastery asked in the *T1* interview are included in the models for this outcome. The *T2* measure of *hostility* was not asked in the first wave of the NSFH, so *T1* measures could not be included. In models for this outcome we include the *T1* depression measure, to hold constant early well-being on one key dimension. The questions about alcohol consumption asked at *T2* were different from the questions at *T1*. Responses to a question asking whether the respondent had alcohol problem at *T1* were used to hold early alcohol problems constant.

3.2.2. Demographic controls

All models include as controls a series of demographic variables that are associated with marital status and psychological well-being (Menaghan and Parcel, 1990; Marks and Lambert, 1998). These include baseline measures of race (coded 1 = African-American, 0 = other), sex (code 1 = female, 0 = male), education (in years), presence of a child age 18 or younger in the household (coded 1 = yes, 0 = no), and respondent's employment status (coded 1 = employed, 0 = not employed). Household income at *T1* is log transformed and cases with missing household income are assigned the mean income, and a binary variable indicating whether household income was missing (coded 1 = missing, 0 = non-missing) is included.² To control for the effect of deterioration of income after marital dissolution on well-being, we include a variable indicating income-to-needs ratio at *T2*. This measure of income-to-needs ratio at *T2* is the logarithm of the ratio of total family income over poverty line at *T2*. To control for marital history, which may be associated with well-being after marital dissolution (Barrett, 2000), we include the number of years in *T1* marriage, age at the start of the *T1* marriage, and whether the dissolved union was a first marriage (coded 1 = first marriage, 0 = otherwise). We also control for domestic violence at *T1* which is coded 1 if either the spouse answered yes to the question whether the arguments between the spouses became physical during the last year.

3.3. Analytic strategy

We estimate all models using ordinary least squares regression (OLS). Data are weighted to adjust for the oversampling of special populations. In order to minimize the probability that observed associations between marital dissolution and psychological well-being reflect the selection of those with poor mental health into marital dissolution, all models compare the *T2* psychological well-being of those who have experienced marital dissolution between *T1* and *T2* to the well-being of those who remain married. The models control for *T1* well-being and a range of demographic variables which are likely to influence either psychological well-being or the likelihood of marital dissolution. We present the results from the lagged dependent variable models to maintain consistency in models across outcomes because three outcomes (personal mastery, hostility and alcohol consumption) cannot be estimated using fixed/change score models because they were not asked in identical ways at *T1*.

Because 1389 respondents who were married and interviewed at *T1* were not interviewed at *T2*, our estimates of the effects of marital transition using only data from those who were interviewed at *T2* might be biased by selective attrition (Berk, 1983). To account for this bias we conducted supplemental analyses using Heckman's two-stage selection model. In these analyses, we first estimated the probability of staying in the final sample at *T2* using *T1* demographic control variables, and then re-estimated our regression models including the predicted probability of staying. These analyses show that the effects of marital status transition, marital happiness and their interactions on psychological well-being in models adjusting for attrition and those without adjusting for attribution are almost identical, and thus only results from the models without the adjustment are presented here.

² Eighteen percent of the respondents were missing on household income at *T1*. Additional analysis shows that, although the missing income flag is significantly associated with several outcome variables, it is not significantly associated with marital transition, thus it does not substantially bias our estimates of the effects of marital transition on the outcome variables.

4. Results

Table 1 shows changes in marital status between T1 and T2. The first column shows marital transitions for all respondents who were married at T1, and the next two columns present marital transitions separately for those who at T1 rated their marriage as happy and for those who at T1 rated their marriages as unhappy. As we might expect, a lower percentage of those unhappy with their marriage than of those happy with their marriage remained married over this five-year period (77% vs. 91%). Note, however, that even among those who rated their marriages at T1 as unhappy, more than three-quarters remained married to the same spouse five years later.

In this study we set out to examine the relationship between marital status transitions between T1 and T2 and psychological well-being at T2. We control for demographic and baseline measures of well-being, and we estimate two models for each outcome. The first model estimates the main effects of marital status transitions and marital happiness for all married people, and the second model adds the interaction terms between marital status transitions and marital happiness to determine whether the effect of marital status transitions differ for those who were happy with their marriage and those who were unhappy with their marriage. We focus on differences in psychological well-being at T2 between those who remained married and those whose marriage dissolved.

4.1. All married people

For all married people (Model I in Table 2) and holding T1 marital happiness, psychological well-being and other demographics constant, we see significantly lower levels of psychological well-being on three measures among those who were divorced but not remarried than among those who remained married: *depressive symptoms*, *hostility*, and *alcohol consumption*. Those who were separated are significantly lower on four psychological well-being measures than those who remain married: *global happiness*, *depressive symptoms*, *personal mastery*, and *alcohol consumption*. Those who divorced and remarried do not significantly differ from those who remained married on any of the psychological well-being measures. Overall, these results suggest that marital dissolution leads to declines in emotional well-being, except among those who divorce and remarry relatively quickly. Even those who remarry do not improve upon their previous levels of well-being.

4.2. Marital happiness and well-being

Next, we compare psychological well-being at T2 for those who rated their marriage at T1 as happy and for those who rated their marriage at T1 as unhappy using models that include interaction terms (Model II in Table 2). As before, we compare those who remained married with those who experienced a marital transition: those who divorced and remarried, those who divorced and did not remarry, and those who separated. We asked whether people who were unhappy with their marriage experience less decline or even improvements in well-being following a marital transition, compared to those who remained married to the same spouse.

For unhappily married people (the first three rows in Model II Table 2), we find no differences between those who experienced any of the marital status transitions and those who remained married to the same person for five of our six measures of well-being. This is the case for: *global happiness*, *depressive symptoms*, *personal mastery*, *self-esteem*, and *hostility*. For one measure, *alcohol consumption*, those who divorced and were not remarried by T2 and those who were separated show worse outcomes compared to those who remained married. In no case do those whose marriage dissolved show better outcomes than those who remained married, regardless of whether they divorced or separated, or whether they remarried.

Tests of interactions between marital status transition and marital happiness indicate that the negative effect of marital disruption on well-being is stronger on three of the six outcomes we measure for happily married spouses than for unhappily married spouses, i.e., *global happiness*, *depression*, and *personal mastery*. The effect of disruption is weaker on one outcome, *alcohol consumption*, for happily married spouses than for unhappily married spouses. Overall, for happily married people, the effects of marital status transition on well-being resemble the patterns we found in the main effect model (Model I), but most of the effects seem to be stronger and two additional effects which were not significant in the main effect model (Model I) become statistically significant for happily married spouses: the effect of divorce on global happiness ($b = .297 - .612 = -.315$, $p < .01$) and the effect of separation on hostility ($b = -.215 + .511 = .296$, $p < .05$). The single exception appears

Table 1
Weighted percentage distribution (unweighted n) of marital status change

Marital status change	All married at T1		Happily married at T1		Unhappily married at T1	
	Unweighted n	Weighted %	Unweighted n	Weighted %	Unweighted n	Weighted %
Remained married	4560	89.1	3,874	90.8	478	77.1
Divorced and remarried	152	2.6	104	2.2	40	5.6
Divorced and not remarried	345	5.5	236	4.5	94	13.1
Separated	175	2.8	132	2.6	33	4.2
N	5232	100	4,346	100	645	100

Notes: 241 cases did not have answers on marital happiness at T1.

Table 2

Weighted regression coefficients of well-being variables on marital status change and marital happiness, controlling for demographics and well-being at T1

	Global happiness		Depressive symptoms		Personal mastery		Self-esteem		Hostility		Alcohol consumption	
	I	II	I	II	I	II	I	II	I	II	I	II
<i>Marital status change</i>												
Remain married (ref.)												
Remarried	.189	.281	-.013	.144	.061	-.118	.068	.104	-.119	-.055	1.724	1.262
Divorced	-.135	.297	.353**	-.026	-.042	.102	-.031	.090	.280**	.018	5.465**	12.887**
Separated	-.764**	-.535	.722**	.553	-.274**	-.111	-.019	.210	.226	-.215	7.834**	11.446**
Happy marriage	.252**	.327**	-.107*	-.151**	.141**	.154**	.038	.065*	-.095	-.139*	-2.694**	-1.644
<i>Happy marriage</i>												
X Remarried		-.109		-.231		.252		-.044		-.099		.920
X Divorced		-.612**		.522**		-.196*		-.164		.357		-10.148**
X Separated		-.262		.192		-.193		-.273		.511		-4.239
Black	.029	.035	.174**	.174**	.073	.073	.107**	.108**	-.014	-.016	-4.841**	-4.776**
Female	-.045	-.047	.186**	.187**	-.108**	-.108**	-.089**	-.090**	.045	.046	-9.083*	-9.119**
Education	-.002	-.002	-.017**	-.018**	.034**	.034**	.021**	.021**	-.002	-.002	.034	.034
Household income at T1 (log)	-.003	-.001	-.053**	-.055**	.043**	.044**	.021	.022	-.027	-.029	.457	.487
Missing income at T1	-.109*	-.109*	.140*	.142**	-.061*	-.061*	-.003	-.003	.114*	.116*	-1.557	-1.601
Income-to-needs ratio at T2	.041*	.040*	-.024	-.023	.023*	.024*	.014	.014	-.001	-.001	1.115*	1.107**
Presence of children <=18	-.127**	-.129**	.011	.013	-.009	-.010	-.003	-.004	.004	.004	-3.208*	-3.233**
Working at T1	-.040	-.039	.002	.001	.016	.018	.035	.035	.038	.038	1.978*	1.983*
Time in T1 marriage (yrs)	.002	.002	-.001	-.001	-.005**	-.005**	-.002**	-.003**	-.010**	-.010**	-.114*	-.117**
Age at start of T1 marriage	.005	.005	-.008**	-.008**	.000	.000	.001	.001	-.012**	-.012**	-.069	-.068
First marriage	.130*	.135*	-.227**	-.228**	.042	.043	.056*	.058*	-.165**	-.168**	-1.026	-.982
Domestic violence absent	.094	.101	-.068	-.075	.063	.067*	.023	.022	-.132*	-.131*	-2.254	-2.201
Global happiness at T1	.220**	.220**										
Depressive symptoms at T1			.306**	.306**					.267**	.268**		
Personal mastery at T1					.166**	.166**						
Self-esteem at T1							.392**	.392**				
Alcohol problem at T1											13.197**	12.626**
Constant	3.805**	3.710**	1.875**	1.941**	2.024**	2.000**	1.881**	1.850**	1.694**	1.750**	18.157**	16.882**
N	3684	3684	4319	4319	4395	4395	4370	4370	4454	4454	4517	4517
R ²	.09	.09	.18	.18	.13	.14	.17	.17	.10	.11	.07	.08

* $p < .05$, two-tailed test.** $p < .01$.

for alcohol consumption for those who were divorced but not remarried, which becomes non-significant for the happily married spouses ($b = 12.877 - 10.148 = 2.739$, $p > .10$).

These results suggest that among those who were unhappy with their marriage, disruption of that marriage does not necessarily lead to declines in emotional well-being. However, our results do not support the hypothesis that disruption of an unhappy marriage leads to improvements in emotional well-being; in no case did those who divorced or separated show higher well-being than those who remained married, and on some measures they show lower well-being.

Consistent with other recent studies (Kalmijn and Monden, 2006), domestic violence does not seem to play an important role in emotional well-being after divorce. Our results show that those in marriages in which they report no domestic violence show reductions in hostility and increases in personal mastery compared to those in marriages with violence (Table 2). We further examined models that included interactions between each marital status transition and violence and found no significant interactions (not shown).

4.3. The crisis vs. state model

Table 3 compares short-term and long-term effects of divorce on our six measures of emotional well-being. To examine whether the effect of marital disruption on psychological well-being decreases over time and whether well-being eventually returns to the level before the marriage ended, we separate those who were divorced and not remarried and those who were separated each into two groups: those whose marriage dissolved within the two years prior to T2 and those whose marriage dissolved more than two years prior to T2. Because few of those who were divorced and remarried dissolved their previous marriage within the past two years, we have insufficient sample size to separate this group by time since disruption. We compare the outcomes for these groups to the outcomes for those who remained married and the results are shown in Table 3. Five interaction terms between being divorced more than two years and marital happiness and three interaction terms between being separated more than two years and marital happiness are significant, suggesting that the duration effect varies by marital happiness.

For those unhappily married at T1 (top five rows in Table 3), we see some support for the Crisis hypothesis. Those who were divorced more than two years and did not remarry have significantly higher levels of global happiness five years later than unhappily married people who remain married. In addition, the coefficients for other outcomes are in the direction of indicating that those who leave an unhappy marriage have fewer depressive symptoms, a greater sense of personal mastery, higher self-esteem, and lower levels of hostility, although these coefficients are not statistically significant probably due to small number of cases. One contradictory finding is that those who divorced more than two years and did not remarry were worse on alcohol consumption than those whose marriage ended recently ($p < .05$), which seems to support the State hypothesis. Those who were separated for more than two years without divorce appear to have lower hostility than those who separated more recently, but they also have higher alcohol consumption than those who separated more recently. Not surprisingly, those who separated recently without divorce score worse on global happiness and depressive symptoms than any other group.

For happily married spouses at T1, the levels of well-being do not seem to improve with time since the marriage dissolved. Compared to those who remained married, the levels of well-being are lower on all outcomes for those who were separated or divorced for more than two years and did not remarry. The effects of marital status transition for happily

Table 3

Weighted regression coefficients of well-being variables on detailed marital status change and marital happiness, controlling for demographics and well-being at T1

	Global happiness	Depressive symptoms	Personal mastery	Self-esteem	Hostility	Alcohol consumption
Marital status change (Ref. = remain married)						
Divorced and remarried	.281	.147	-.116	.104	-.050	1.236
Divorced and separated < 2 years	-.052	.523	.037	-.140	.418	9.137
Divorced and separated 2+ years	.368*	-.142	.120	.145	-.063	13.799**
Not divorced but separated < 2 years	-.932*	1.236**	-.161	.205	.714	1.469
Not divorced but separated 2+ years	.523	.043	.017	.244	-.996*	22.280*
Happy marriage	.330**	-.148**	.156**	.066*	-.133*	-1.658
Happy marriage						
X Divorced and remarried	-.111	-.233	.248	-.046	-.104	.967
X Divorced and separated < 2 years	-.483	-.076	-.227	.056	-.162	-8.610
X Divorced and separated 2+ years	-.623**	.653**	-.190	-.221*	.500*	-9.835*
X Not divorced but separated < 2 years	.037	-.520	-.058	-.219	-.465	4.664
X Not divorced but separated 2+ years	-1.248	.801	-.494*	-.457*	1.196*	-12.241

Notes: Race, gender, education, income, presence of children, employment status, time in T1 marriage, age at start of T1 marriage, and whether T1 marriage is the first marriage, domestic violence at T1 and income-to-needs ratio are controlled in these models. Results on these variables are not shown in the table.

* $p < .05$, two-tailed test.

** $p < .01$.

Table 4

Weighted regression coefficients of well-being variables on marital status change and marital happiness for women and men, controlling for demographics and well-being at T1

	Global happiness		Depressive symptoms		Personal mastery		Self-esteem		Hostility		Alcohol consumption	
	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men
<i>Marital status change</i>												
Remain married (ref.)												
Remarried	.162	.539	.511	-.272	-.174	-.005	.189	.002	.028	-.145	.743	3.070
Divorced	.273	.345	.023	-.126	.106	.132	.030	.204	.202	-.244	8.155**	22.548**
Separated	-.119	-1.534*	.294	.897*	-.049	-.173	.303	.100	-.247	-.113	1.790	29.909*
Happy marriage	.499**	.187	-.234**	-.059	.214**	.085	.071	.065	-.220*	-.049	-.470	-4.125
<i>Happy marriage</i>												
X Remarried	.291	-.653	-.577	.180	.334*	.070	-.049	-.025	-.163	-.032	-2.390	2.168
X Divorced	-.634*	-.627*	.704**	.416	-.278*	-.167	-.183	-.211	.518*	.292	-5.112	-20.019*
X Separated	-.674	.666	.487	-.167	-.255	-.139	-.411*	-.087	.517	.455	5.598	-22.221

Notes: Race, gender, education, income, presence of children, employment status, time in T1 marriage, age at start of T1 marriage, and whether T1 marriage is the first marriage, domestic violence at T1, and income-to-needs ratio at T2 are controlled in these models. Results on these variables are not shown in the table.

* $p < .05$, two-tailed test.

** $p < .01$.

married spouses are derived by adding the coefficients in the first five rows and the corresponding coefficients in the last five rows. The effects are statistically significant for depressive symptoms ($b = -.142 + .653 = .511$, $p < .01$) and hostility ($b = -.063 + .500 = .437$, $p < .01$).

4.4. Gender, marital disruption, and well-being

Finally, in Table 4 we ask whether the effect of divorce on emotional well-being by marital happiness differs for men and women. To test for differences in the effect of marital status transition for women and men, we examine the effects of marital status transition, marital happiness, and the interaction terms between marital status transition and marital happiness on emotional well-being, separately for men and women. For unhappily married people, marital separation without divorce seems to have stronger negative effects on men's well-being than on women's well-being; it reduces men's global happiness, it increases men's depressive symptoms and it substantially increases men's alcohol consumption (the third row for Men in Table 4). However, only the effect on alcohol consumption differs significantly different between women and men (not shown). The level of alcohol consumption among those who were divorced but not remarried is also significantly higher for men than for women (not shown).

The lower panel of Table 4 shows the interaction terms between marital happiness and marital dissolution. Four interactions are significant for women, showing stronger negative effects of marital disruption on well-being for happily married women than for unhappily married women: global happiness, depressive symptoms, personal mastery, and hostility. Surprisingly, divorce seems to have less impact on alcohol consumption for happily married men than for unhappily married men, and among all the interaction terms, only the interaction between marital dissolution (either divorced or not) and marital happiness is significantly different between men and women (not shown).

4.5. Alternative specifications

We conducted a number of additional analyses to assess the robustness of these findings. First, we re-estimated all models using two alternative measures of marital quality: thinking that the marriage was in trouble, and marital conflict. The results were similar to results presented here. We re-estimated all models using alternative cut-off points (3 and 5, rather than 4) to create the indicator of marital unhappiness and found our conclusions robust to these alternative specifications. Prior research indicates that fixed effect/change score models are preferable to regressing an outcome at T2 on T1 and other variables (Allison, 1990; Johnson, 2005), but T1 measures of many of our outcomes are not available. In supplementary analyses, we estimated fixed effect/change score regression models for the three outcomes for which T1 measures are available: global happiness, depressive symptoms and self-esteem. We found the results were comparable to the lagged dependent variable models presented here (see Appendix C).

We also assessed the impact of missing values on the findings. Additional analyses show that partial nonresponse on marital happiness and on control variables is not significantly associated with marital transition with the exception of income-to-needs ratio at T2. Since those who were divorced or separated are more likely to be missing on income-to-needs ratio at T2, we re-estimated all models after using multiple imputation method (Little and Rubin, 1987) to impute missing values for the 93 cases missing on this variable. The results are not substantially different from those presented here.

5. Conclusions

In this study we examined the consequences of marital dissolution on psychological well-being over the five-year period between the two waves of the National Survey of Families and Households. We asked whether the consequences of marital disruption depend on how the spouse viewed the marriage prior to disruption, and we distinguished between short-term and long-term effects. More specifically, we asked whether the end of a happy marriage brings more long-term distress than the end of an unhappy marriage. We also asked whether people who remarry resume their previous level of well-being. Finally we asked whether men and women show different responses to dissolution of an unhappy marriage.

Similar to other studies, we found general support for the hypothesis that emotional well-being tends to decline following marital disruption, across a range of dimensions of well-being (Menaghan and Lieberman, 1986; Marks and Lambert, 1998; Barrett, 2000; Johnson and Wu, 2002; Simon, 2002; Kalmijn and Monden, 2006). Among those who rated their marriage as unhappy, we see no differences in emotional well-being, on most measures, between those whose marriage disrupted and those who remained married. These results support the hypothesis that among those who were unhappy with their marriage, disruption of that marriage does not lead to declines in emotional well-being, compared to those who remained married (Hawkins and Booth, 2005). However, our results do not support the hypothesis that disruption of a marriage rated as unhappy, even among those who experienced violence in their marriage, leads to improvements in emotional well-being. In no case did those who divorced or separated show *higher* well-being than those who remained married, and on some measures they show *lower* well-being.

We would expect the largest improvements in well-being, should they appear, among those who ended a marriage that they thought was unhappy and entered another. However, on *none* of the dimensions of well-being that we examined do we see improvements in emotional well-being for those who ended one marriage and formed another, compared to those who remained married. Clearly, if one of the goals of ending a marriage with which one is unhappy is to improve one's emotional well-being, this goal is not typically reached.

We also distinguished between short-term ('Crisis') effects and longer-term ('State') effects of marital disruption on well-being. The *Crisis* model leads to the prediction that any negative effects of disruption on emotional well-being arise from the strain and conflict of the divorce process and diminish and disappear over time. Our results offer mixed support for the *Crisis* model; we see no clear pattern of improvements in emotional well-being for those who were divorced or separated for more than two years, compared to those who were divorced for a shorter time, either among those who at the first observation rated their marriage as happy or among those who rated it as unhappy. We found that among happily married spouses, levels of well-being are lower on most outcomes for those whose marriage ended, regardless of how long they had been divorced, than for those who remained married. Among spouses unhappy with their marriage, those who were divorced for more than two years have higher levels of global happiness, but are more likely to show problems with alcohol, and are not significantly different on the other outcomes than those who remained married. Note, however, that the interval between the two waves of the NSFH, about five years, is relatively short. As a result, we observe a modest number of individuals who divorce and remarry in this interval. Since a small proportion of married persons rated their marriage as unhappy, we are hampered in our efforts to distinguish the consequences of marital disruption in the short-term versus the long-term for those who were unhappily married. Some of the statistically insignificant effects of marital disruption for the unhappily married might be due to small sample sizes and lack of statistical power. Nonetheless, our failure to find consistent differences between the short- and longer-term in the emotional well-being of those whose marriage ended offers some—albeit modest—support for the *State* model.

We also tested the hypotheses that women are more likely than men to show declines in psychological well-being following divorce, and that unhappily married women experience greater improvements in psychological well-being following divorce than unhappily married men. We found little support for either idea. Among those who rated their marriage as unhappy when first interviewed, men who divorced in fact show higher levels of alcohol consumption than women. Additional analyses of the gender differences for happily married spouses show that women who divorced and did not remarry have higher levels of depression and hostility than men with the same experience, and women who divorced and remarried show higher levels of global happiness than men who do the same. No gender differences appear for the other outcomes. This finding of similar consequences of marital disruption for men's and women's psychological well-being is consistent with other studies (Waite and Gallagher, 2000; Simon, 2002; Booth and Amato, 1991; Kalmijn and Monden, 2006; Williams, 2003), suggesting that marital instability affects men and women's emotional well-being in similar ways.

Any study of the "consequences" of marital disruption faces a number of challenges to any causal argument. First and most obvious, couples that divorce are not randomly selected; they have different characteristics and their marriages have different characteristics than those of couples who remain married. Many of these characteristics are subtle and difficult to measure, such as patterns of interaction, or response to criticism and conflict (Gottman, 1993). These may affect people's chances of divorce as well as their responses to it.

Also, we know relatively little about ratings of marital happiness. For example, highly negative ratings might often reflect a local crisis in the marriage, such as an emotionally heated disagreement, rather than an established pattern of dissatisfaction. The relative instability of ratings of marital unhappiness over a five year period make us suspect that this is so. While people who rated their marriage as unhappy are more likely to divorce or separate in the next five years than are people who rated their marriage as happy, more than three-quarters of both the unhappy and happy remain married. The findings that

most divorces happen to people who rated their marriage as happy earlier, and that most people who rated their marriage as unhappy stay married, suggest that we need to know more about what people are thinking when they describe the happiness of their marriage.

Moreover, divorce marks the endpoint of a process of disengagement and withdrawal between spouses, which often involves increased conflict and stress (Gottman, 1994). Some people who rated their marriage as happy at the first observation had not begun this process or failed to recognize the signs. They may have rated their marriage much more negatively in the months immediately preceding the disruption. However, Amato and Booth (1997) find that only thirty percent of the divorces observed in their sample ended marriages that were characterized as “high conflict,” the rest ended marriages that at an earlier point seemed to be of at least adequate quality.

Untangling the meaning of marital happiness and unhappiness is challenging. But, if, as Glenn (1996) argues, the success of a marriage is judged by the extent to which it provides happiness, satisfaction, and positive feelings to the people in it, doing so is fundamental to our understanding of marriage, divorce, and perhaps the rise of alternative types of unions.

Appendix A. Weighted descriptive statistics for analysis variables

Variables	All married at T1			Happily married at T1			Unhappily married at T1		
	Mean	SD	n	Mean	SD	n	Mean	SD	n
<i>Demographics</i>									
Black	.07		5232	.06		4346	.09** ^a		645
Female	.49		5232	.49		4346	.54*		645
Education	13.07	(3.06)	5217	13.11	(3.06)	4334	12.87	(2.95)	644
Household income at T1 (log)	10.42	(.94)	5232	10.43	(.93)	4346	10.42	(.92)	645
Missing income	.18		5232	.18		4346	.20		645
Income-to-needs ratio at T2 (log)	1.23	(1.23)	5132	1.24	(1.22)	4275	1.15	(1.31)	623
Presence of children <=18 at T1	.56		5232	.54		4346	.64**		645
Employment status at T1	.70		5232	.69		4346	.74**		645
Time in T1 marriage (years)	18.62	(13.93)	5219	18.90	(14.20)	4338	16.89**	(12.35)	640
Age at start of T1 marriage	25.03	(7.86)	5218	24.95	(7.80)	4337	25.49	(8.19)	640
First marriage	.81		5232	.81		4346	.76**		645
Domestic violence absent at T1	.91		5113	.92		4267	.83**		623
<i>Marital status change</i>									
Remain married	.89		5232	.91		4346	.77**		645
Divorced and remarried	.03		5232	.02		4346	.06**		645
Divorced and separated <2 years	.01		5232	.01		4346	.03**		645
Divorced and separated 2+ years	.04		5232	.03		4346	.10**		645
Not divorced but separated <2 years	.02		5232	.02		4346	.02		645
Not divorced but separated 2+ years	.01		5232	.01		4346	.02		645
<i>Psychological well-being</i>									
Global happiness at T1	5.60	(1.28)	4616	5.77	(1.17)	3921	4.38**	(1.35)	564
Global happiness at T2	5.45	(1.29)	4431	5.54	(1.23)	3695	4.93**	(1.40)	552
Depression at T1	.99	(1.23)	4991	.90	(1.16)	4173	1.48**	(1.47)	612
Depression at T2	.99	(1.19)	4906	.94	(1.14)	4088	1.31**	(1.39)	601
Personal mastery at T1	3.70	(.92)	4961	3.76	(.89)	4153	3.36**	(.98)	611
Personal mastery at T2	3.64	(.67)	5004	3.66	(.65)	4162	3.46**	(.71)	616
Self-esteem at T1	4.14	(.56)	4892	4.18	(.54)	4095	3.92**	(.62)	608
Self-esteem at T2	4.08	(.64)	5039	4.09	(.62)	4187	3.97**	(.71)	627
Hostility at T2	.93	(1.28)	5068	.88	(1.24)	4219	1.22**	(1.47)	623
Alcohol problem at T1	.01		5232	.01		4346	.03**		645
Alcohol consumption at T2	10.89	(22.97)	4949	10.58	(22.52)	4113	13.14*	(25.23)	610

^a Whether those who were happy with their marriage are significantly different from those who were not happy with their marriage at Time 1.

* $p < .05$, two-tailed test.

** $p < .01$.

Appendix B. Items measuring psychological well-being

I. Self-esteem scale (rated on a 5-point scale: strongly disagree to strongly agree) ($\alpha = .66$)

On the whole, I am satisfied with myself.

I am able to do things as well as other people.

I feel that I'm a person of worth, at least on an equal plan with others.

II. Personal mastery scale (rated on a 5-point scale: strongly disagree to strongly agree) ($\alpha = .65$)

Please indicate how much you agree or disagree with the following statements:

I can do just about anything I really set my mind to. Sometimes I feel that I'm being pushed around in life.^a

Appendix B (continued)

There is really no way I can solve some the problems I have.^a

I have little control over things that happen to me.^a

I have always felt pretty sure my life would work out the way I wanted it to.

III. Center for Epidemiological Studies depression scale (CES-D) ($\alpha = .93$)

On how many days during the past week did you...

Feel you could not shake of the blues even with help from your family and friends?

Feel bothered by things that usually don't bother you?

Feel lonely?

Feel sad?

Feel depressed?

Have trouble keeping your mind on what you were doing?

Not feel like eating, your appetite was poor?

Feel everything you did was an effort?

Feel fearful?

Sleep restlessly?

Talk less than usual?

Feel you could not "get going"?

IV. Hostility scale ($\alpha = .86$)

On how many days during the past week did you...

Feel irritable, or likely to fight or argue?

Feel like telling someone off?

Feel angry or hostile for several hours at a time?

V. Global happiness (rated on a 7-point scale: very unhappy to very happy)

Taking things all together, how would you say things are these days?

VI. Alcohol consumption

During the past 30 days, on about how many different days did you have one or more alcoholic drinks?

During the past 30 days, about how many alcoholic drinks did you USUALLY have in a DAY on the days that you drank?

^a Item reverse-coded.

Appendix C. Weighted regression coefficients of change in global happiness, depressive symptoms and self-esteem on marital status change and marital happiness, controlling for demographics

	Global happiness		Depressive symptoms		Self-esteem	
	I	II	I	II	I	II
<i>Marital status change</i>						
Remain married (ref.)						
Remarried	.365*	.562	-.047	-.058	.097	.158
Divorced	-.070	.383	.269**	-.153	-.042	.089
Separated	-.720**	-.144	.614**	.096	.024	.330*
Happy marriage	-.775**	-.679**	.273**	.202**	-.098**	-.066
<i>Happy marriage</i>						
X Remarried		-.248		-.001		-.078
X Divorced		-.637*		.576**		-.178
X Separated		-.663		.594		-.365*
Black	.021	.029	.117	.114	.121**	.123**
Female	-.137*	-.139**	.065	.066	-.094**	-.095**
Education	-.006	-.006	.013	.013	.008*	.007*
Household income at T1 (log)	-.025	-.022	-.003	-.005	.012	.013
Missing income at T1	-.004	-.004	.127*	.130*	.006	.006
Income-to-needs ratio at T2	.027	.026	.008	.008	.013	.013
Presence of children <=18	-.110	-.112	.005	.005	.004	.004
Working at T1	-.070	-.071	.138**	.138**	.020	.019
Time in T1 marriage (yrs)	-.001	-.001	.005*	.005*	-.002*	-.002*
Age at start of T1 marriage	-.001	-.001	.003	.003	.000	.000
First marriage	.077	.084	-.097	-.100	.048	.051
Domestic violence absent	-.094	-.091	.135	.134	-.022	-.024
Constant	1.116**	1.000**	-.780**	-.692*	-.189	-.223
N	3684	3684	4319	4319	4370	4370
R ²	.04	.04	.02	.02	.02	.02

* $p < .05$, two-tailed test.

** $p < .01$.

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