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Benjamin R. Karney¹, David S. Loughran²,
and Michael S. Pollard²

Abstract

Since military operations began in Afghanistan and Iraq, lengthy deployments have led to concerns about the vulnerability of military marriages. Yet evaluating military marriages requires some benchmark against which marital outcomes in the military may be compared. These analyses drew from personnel records from the entire male population of the active components of the U.S. military between 1998 and 2005, and from the Current Population Surveys from the same years, to compare the likelihood of being married or divorced between service members and civilians matched on age, racial/ethnic composition, employment status, and education. Results indicate that service members are significantly more likely to be married, but are not more likely to be divorced, than civilians with matched characteristics. These patterns have not changed substantially since the current conflicts began.

Keywords

marital transitions, military marriage, military families, divorce, stress, dissolution

¹University of California, Los Angeles, Los Angeles, CA, USA

²RAND Corporation, Santa Monica, CA, USA

Corresponding Author:

Benjamin R. Karney, Department of Psychology, University of California, Los Angeles,
4560 Franz Hall, Los Angeles, CA 90095-1563, USA

Email: Karney@psych.ucla.edu

Since the onset of military operations in Afghanistan and Iraq, the heightened pace of deployments has led to concerns about the vulnerability of military marriages (Karney & Crown, 2007). For the past few years, major media outlets have been sounding the alarm with headlines such as "After War, Love Can Be A Battlefield" (Kaufman, 2008) and "War Takes Toll on Military Marriages" (McIntyre, 2005). The prevailing sentiment is that the marriages of service members are at elevated risk for negative outcomes compared with marriages that have not had to cope with the stress of military service. Service members and their spouses echo these concerns, endorsing the belief that military stress leads to marital distress and an increased risk of divorce for military families (e.g., Newby et al., 2005).

Evaluating the support for these concerns requires, at a minimum, analyses capable of comparing the marital status of military couples to the marital status of couples who have not experienced military service, that is, civilians. Yet comparing military and civilian marriage statistics can be complicated. The military is a highly selected population. Applicants must meet a range of eligibility criteria related to aptitude, educational attainment, health, behavior, and other factors and must also have a desire to take on the duties of military service. Arguably, over time, this selection becomes more pronounced as only the most committed and qualified individuals choose and are selected to reenlist. Thus, military veterans are likely to differ from comparably aged civilians in both observable and unobservable dimensions. For example, military veterans are, on average, more likely to have graduated from high school than are comparably aged civilians (Teachman, Call, & Segal, 1993). It is also possible that, conditional on observed characteristics such as education, military veterans have relatively weak civilian labor market prospects or a relatively strong taste for military service. To the extent that these differences may themselves be associated with marital status, direct comparisons between raw data from military and civilian populations will be misleading.

The goal of the current study was to compare the marital and divorce status of military personnel and civilians in the years immediately before and after the onset of the current conflicts, controlling for differences in age, race/ethnicity, educational attainment, and employment. Although these issues are equally relevant for male and female service members, the current study focuses exclusively on male service members, who comprise approximately 85% of the current active duty force (D. R. Segal & Segal, 2004). By controlling for some of the most significant observable differences across these two populations, these analyses narrow the range of interpretations that can be given to any remaining differences in the marital and divorce status of military personnel and civilians. Nonetheless, we acknowledge at the outset that

marriage and divorce are affected by many more factors than we can control for with available data, and these unobservable characteristics represent alternative possible explanations for any observed differences in the status of military and civilian marriages.

Marriage in the Military: Costs and Benefits

Military life confronts service members and their families with severe demands, including long hours, unpredictable schedules, frequent relocations, and separations from loved ones due to deployment (M. W. Segal, 1989). Yet despite these demands, the military is also a family-friendly institution in many ways. After the creation of the all-volunteer force in 1973, military leaders recognized that service members' marriages, as major determinants of their quality of life, strongly affect their decisions about enlistment and retention (e.g., Rosen & Durand, 1995). Accordingly, by the mid-1980s, every service office of the armed forces had established family support programs and resource centers, and expanding and refining these programs has been an ongoing concern within the military ever since (Rostker, 2006). Today, the majority of service members, both male and female, are married (Karney & Crown, 2007), and military families have guaranteed access to resources such as health care and child care (e.g., Zellman & Gates, 2002), resources that a considerable fraction of young high school graduates lack.

In addition to the benefits offered to all service members, the military reserves a number of substantial benefits and incentives for service members who are married. For example, married service members in the active duty component receive a housing supplement that enables them to reside off base. Their unmarried colleagues frequently must reside on base, with the loss of privacy and constant surveillance that this entails. Married service members receive a cost of living bonus; their unmarried brothers-in-arms receive no such bonus. The spouses of married service members are eligible to receive full health coverage; the romantic partners of the unmarried do not. Should a service member be killed in action, a spouse of that service member would receive survivor benefits, but an unmarried partner would receive nothing. As one analysis concluded, "The real value of compensation for married servicepeople substantially exceeds that for otherwise identical single servicepeople" (Zax & Flueck, 2003, p. 7), providing an incentive to marriage for unmarried service members that comparable unmarried civilians lack. Furthermore, the longer an individual expects to serve, the greater the potential benefits to be accumulated from marrying.

Do these incentives in fact affect the likelihood of being married for service members relative to civilians? All available evidence suggests that they do, even after controlling for observable characteristics that distinguish service members from civilians. For example, Zax and Flueck (2003) have drawn on census data from 1980 to compare the marital status of males who turned 18 years old and enlisted in 1974 (the second year of the all-volunteer force and last year of the war in Vietnam) to age-matched males who did not enlist. The veterans were significantly more likely to be married, and the difference between service members and civilians was largest for 18 year olds (for whom the relative benefits of marriage have more time to accrue) than for older males who were closer to the end of their service. A separate analysis drawing on the Current Population Surveys between 1995 and 1999 found that, even after matching on age, education, and employment status, service members were more likely to be married than civilians (Cadigan, 2000). The association between military service and higher likelihood of being married appears greatest for groups that have the lowest rates of marriage as civilians. For example, whereas Black civilians marry at substantially lower rates than Whites, analyses of data from the 1979 National Longitudinal Survey of Youth (NLSY79) indicate that this gap disappears within the military (Lundquist, 2004; Teachman, 2007; see also Usdansky, London, & Wilmoth, 2009).

It is worth noting that all these studies address data that are at least 10 years old. The recent conflicts in Iraq and Afghanistan offer several reasons to reexamine these comparisons with current data. First, the pace of deployments in these conflicts has been greater than at any time since the birth of the all-volunteer force (Hoge, Auchterlonie, & Milliken, 2006). Thus, current service members face a higher likelihood of experiencing lengthy separations from loved ones and exposure to combat than in past decades. The effects of these added demands on the likelihood of marriage among service members are unknown. Second, service members who are deployed receive additional compensation, including separation pay and hazard pay and the possibility of survivor benefits should the service member be killed (Hosek, Kavanagh, & Miller, 2006). To the extent that these forms of compensation provided by the military encourage marriage among service members, then differences in marital status between service members and matched civilians may be even greater during periods of frequent deployments.

Divorce in the Military: Higher or Lower Than Among Civilians?

The fact that military service may promote entrance into marriage has little bearing on whether it sustains marriages once they are formed. Among civilians,

variables that predict elevated rates of marriage do not always predict successful marriage. A childhood history of depression, for example, is associated with earlier marriages, but also higher risk of marital distress and divorce (Gottlib, Lewinsohn, & Seeley, 1998).

Concerns about a high risk of divorce within the military recognize several potential sources of elevated risk among military couples relative to civilians. First, the military recruits disproportionately from segments of the population already at elevated risk for divorce, that is, younger and non-White (Sweeney & Phillips, 2004). It follows that at any given time the military population as a whole might contain a greater proportion of divorced individuals than the unselected civilian population. Second, as noted earlier, military service is highly stressful for service members and their families, and that stress has risen dramatically during the current conflicts (Hoge *et al.*, 2006). In civilian populations, the experience of stress reliably predicts marital distress and divorce (Karney & Bradbury, 2005), so stress seems likely to lead to negative marital outcomes in military couples as well. Third, when they marry, service members tend to marry at younger ages than their civilian peers (Adler-Baeder, Pittman, & Taylor, 2005). In civilians, younger age at marriage is associated with high risk for divorce (Sweeney & Phillips, 2004). Fourth, to the extent that financial incentives may motivate some military marriages, then those are couples who have fewer intrinsic reasons to remain together when military life proves difficult.

Yet despite these potential sources of elevated risk, there are also forces within the military that support the marriages of service members and may consequently lower the proportion of divorced service members relative to civilians. First, although military service is unquestionably demanding, the military also offers benefits (e.g., child care and health care) designed to ease family life, whereas civilians in comparably stressful jobs may have less generous benefit packages (Rostker, 2006). Second, to the extent that military benefits tied to marital status are lost when military couples divorce, then those benefits represent an additional barrier to divorce that may serve to keep couples together in circumstances where comparable civilian marriages might end.

The exceptional demands of the current conflicts may exacerbate the forces operating in both directions. On one hand, in addition to the normal stresses of military service, the ongoing operations in Iraq and Afghanistan have led to lengthy deployments, in many cases longer than service members and their families expected (Hosek *et al.*, 2006). Service members in these conflicts have been exposed to combat at higher rates than in past conflicts, and many are returning from combat bearing both physical and psychological wounds (Tanielian & Jaycox, 2008). Evidence from prior conflicts

suggests that exposure to combat (Kulka et al., 1990) and the experience of trauma in particular (Gimbel & Booth, 1994) are associated with marital difficulties and divorce in military couples. Such studies suggest that any elevated risk for being divorced among military marriages may be especially high during periods when the pace of deployments is high.

Yet recent data suggest that there may also be unexpected benefits to deployment, even during times of war. For example, since the onset of the current operations in Afghanistan and Iraq, reservists who have been deployed earned significantly more than those who were not deployed (Loughran, Klerman, & Martin, 2006). The financial benefits associated with deployment in a combat zone may alleviate or even outweigh the emotional costs of separation from family members, especially for the large majority of service members who return from deployment without traumatic injury. Indeed, analyses that linked service personnel records from the entire military to deployment data between 2002 and 2005 reveal that, across the active duty and reserve components, service members who had been deployed in the current conflicts were at lower risk for experiencing a subsequent divorce than service members who had not been deployed (Karney & Crown, 2007).

In sum, military service confronts service members with some forces that act to break marriages apart (i.e., stress and separation) and others that act to keep marriages together (i.e., compensation linked to marital status and deployment). The net result may lead to a larger proportion of divorced individuals within the military relative to the proportions among civilians, or a lower proportion, or the detrimental and supportive forces may cancel each other out, leading to similar proportions of divorced individuals within the two groups.

Prior analyses of these issues have not settled the question. In surveys fielded by the Department of Defense, service members and their spouses do report a greater likelihood of being divorced than the general population (e.g., Adler-Baeder et al., 2005). However, such raw comparisons are hard to interpret, because they do not control for the fact that service members are on average younger and tend to marry earlier than members of the general population as well. Other studies have drawn on longitudinal data sets to compare the lifetime incidence of divorce among matched populations that either did or did not serve in the military. Conducting this comparison with data collected from White males during the Vietnam era revealed significantly lower divorce rates among those who served than among those who did not (Call & Teachman, 1991). In contrast, analyses of similar data from after the creation of the all-volunteer force revealed higher divorce rates for military who married young (i.e., less than 20 years old) compared with civilians who marry at

the same age, but no difference in later incidence of divorce among those who married after the age of 20 years (Zax & Flueck, 2003). A more recent analysis of service members between 23 and 25 year olds also found higher divorce rates for those who served 2 or more years, compared with matched civilians (Hogan & Seifert, 2010).

Perhaps the most sophisticated analyses of these issues to date drew on data from the NLSY79 (Lundquist, 2007), a national study that includes a substantial ($N = 1,280$) subsample of young people (aged 17-21 years) who were active-duty enlisted personnel when the study began. This analysis examined early marriage and divorce only, comparing the marital outcomes of this group between 1979 and 1985 with those of the civilian members of the sample, controlling for demographic, socioeconomic, and religious differences between the two groups. Even after these controls were implemented, married service members in this sample were significantly more likely to divorce than their civilian counterparts. In contrast to the earlier results of Call and Teachman (1991), this was especially true for White males. Black service members, however, had slightly lower divorce rates than their White peers (Lundquist, 2006).

In attempting to reconcile the conflicting results of prior studies, it is worth noting that all the prior studies have relied on single data sources, comparing the divorce status of civilians to the divorce status of the service members within that sample. This approach has two significant limitations. First, sample sizes of service members in these data sources typically are quite small. Aside from exceptional periods of history (e.g., World War I, World War II, Korea, Vietnam), less than 1% of the U.S. population actively serves in the military (D. R. Segal & Segal, 2004). Second, most of the available data sources that include significant military subsamples (e.g., 1979 National Longitudinal Study of Youth) are all more than 20 years old and may not reflect the current context of marital transitions in either the military or civilian population. Without more representative and more current data, the net association between contemporary military service and divorce remains an open question.

Overview of the Current Study

To address concerns about the relative vulnerability of military marriages compared with those of civilians, the current study examined marriage and divorce using recent population data from service members and civilians. For the military population, we were given access to the Defense Enrollment Eligibility Reporting System (DEERS) by the Defense Manpower Data

Center. The DEERS data set included service personnel records for the entire military population from 1998 through 2005, a window that includes approximately 4 years prior to and 4 years after the onset of the current conflicts. These records track transitions into and out of marriage for each individual who served in the military during this period. We restricted the military DEERS sample to active duty males and separately identified officer and enlisted personnel. (Officers comprise roughly 15% of the total military population considered here.) Using the DEERS data, we documented annual proportions of currently married and currently divorced individuals for all male service members serving in all branches of the Active component of the military in March during the study window. The subsample we used included approximately 14 million observations.

To track marriage and divorce rates in the civilian population, we drew on the March Current Population Surveys (CPS) for the same years. The CPS offers annual information on large, nationally representative cross-sectional samples of civilians 16 years old and older and includes variables that enabled us to construct comparison groups matched to the individuals in the DEERS data on observable characteristics. To compare the military and civilian populations, we constructed a series of “enlisted-comparable” and “officer-comparable” contemporaneous subpopulations in the CPS data based on age, employment status, and educational attainment, as described below. Comparisons were conducted separately by race/ethnicity. The overall analytical approach makes cross-sectional comparisons between the military and comparable civilian populations during two time periods: before the current conflicts (1998-2001) and after the onset of hostilities (2002-2005).

The premise of these analyses, consistent with prior research, was that the security of the benefits offered by military service improves the marital prospects of service members and promotes the longevity of their marriages relative to comparable civilians. Therefore, we expected that, despite the stress of military service, service members would on average be more likely to be married and less likely to be divorced than matched civilians. We further expected that the compensatory effects of military service on marriage would be most notable for segments of the population who are relatively disadvantaged in the civilian population. Thus, we predicted that differences between military and civilian marriage and divorce status would be greater among younger than older cohorts, greater among non-Whites than Whites (and within non-Whites, greater among Blacks than Hispanics), and greater among the enlisted than among officers. Because the benefits offered to service members (e.g., combat and separation pay) and the stress on service members and their families both increase during wartime, we made no a priori hypotheses about how differences in the marital patterns of service members and

civilians may have changed since the onset of military operations in Iraq and Afghanistan.

Method

Samples

Military sample. The DEERS data include quarterly reports on the entire population of all regular active-duty personnel. We analyzed all available March data on active duty males aged 18 to 41 years from 1998 to 2005. This subsample included an average of roughly 1.3 million observations each year.

Civilian sample. The civilian data were drawn from the (March) Current Population Surveys from 1998 to 2005. Data were restricted to males aged 18 to 41 years who were nonveterans (never served in the military), were currently employed full-time working 35 or more hours per week, and achieved at least a high school degree (roughly 12,000 individuals/year).

Measurement of Marriage and Divorce

In the CPS, individuals can report their current marital status as married, separated, divorced, widowed, or never married. We code an individual as having ever been married if he does not report being “never married.” Individuals are coded as being currently divorced if they report being divorced. In computing the fraction currently divorced, we restrict the sample to ever married individuals.

In the DEERS, each quarterly report contains data on every service member’s current legal status with respect to marriage, coded as married, separated, divorced, widowed, never married, interlocutory, or annulled (the last two categories combined account for only 0.03% of the population). As with the CPS data, individuals are coded as having ever been married if their status is anything other than “never married.” Individuals are coded as being currently divorced if their status is divorced. Changes in marital status are recorded only when service members report changes to their personnel office, but it is in the interest of service members to have their accurate status reflected in their records, as these records determine their benefits and level of pay.

Analysis Strategy

To optimize comparisons between civilians and service members, the civilian sample was stratified into two groups that were analogous to their military

counterparts on observable characteristics related to marriage formation and dissolution. Specifically, enlisted men with a high school diploma or some college were compared with civilian men with a high school diploma or some college education (less than an associate's degree), whereas officers were compared with civilians with a college degree or higher educational credential. Both populations were also divided into separate racial/ethnic groups (White, Black, Hispanic; other racial/ethnic groups were excluded). Finally, comparisons were made between groups composed of relatively narrow age ranges: 18 to 22 years, 23 to 27 years, 28 to 32 years, 33 to 37 years, and 38 to 41 years; within each age group, the civilian (CPS) data were weighted to take on the same age structure as the military (DEERS) data. The resulting military and civilian groups are thus comparable in age, race/ethnicity, educational attainment, and employment status. Standard errors were computed for the difference in cell means between the CPS and DEERS data, accounting for the sampling structure of the CPS. Tests of the significance of the between-group differences were conducted by comparing the standard errors of the difference to the size of the difference estimate.

To examine associations between military service and divorce, the ideal analysis would be to compare the fraction ever divorced in the military and civilian data sets. The CPS, however, only queries respondents about *current* marital status and does not ask about marital history. Thus, the analyses reported here compared the military and civilian samples on the fraction currently divorced at some age. The difference between the fraction currently divorced in these two samples is an unbiased estimate of the difference in the fraction ever divorced only if remarriage following divorce is equally common in military and civilian populations. In fact, some evidence suggests that rates of remarriage after divorce may be higher among service members than among civilians (Adler-Baeder et al., 2005). To the extent that this is true, the difference in the fraction currently divorced between these two populations will underestimate the true difference between them. Given that the likelihood of remarriage increases with time, the degree of bias is likely to be smallest in younger cohorts, who have had less time to remarry, and largest in older cohorts.

Results

Comparing Marital Status in Civilian and Military Populations

Percentage point differences in likelihood of being married among service members and comparable civilians (percent military ever married – percent civilian ever married) are presented in Table 1, broken down by racial/ethnic

Table 1. Percentage Point Differences Between Rates of Service Members and Civilians Ever Married, by Race/Ethnicity, Rank, and Time Period, 1998-2005

Age Range	Enlisted			Officer		
	1998-2001	2002-2005	Change	1998-2001	2002-2005	Change
White						
18-22	6.8*** (0.83)	8.4*** (0.70)	1.6 (1.09)	-3.7 (4.39)	10.3* (4.68)	14.0* (6.42)
23-27	13.4*** (0.88)	12.4*** (0.79)	-1.0 (1.18)	11*** (1.32)	7.3*** (1.25)	-3.7* (1.82)
28-32	10.3*** (0.76)	10.7*** (0.76)	0.4 (1.07)	10.7*** (0.98)	8.6*** (0.97)	-2.1 (1.38)
33-37	9.0*** (0.63)	9.7*** (0.65)	0.7 (0.91)	11.0*** (0.82)	6.4*** (0.74)	-4.6*** (1.10)
38-41	5.0*** (0.60)	6.9*** (0.61)	1.9* (0.86)	6.6*** (0.74)	7.2*** (0.73)	0.6 (1.04)
Black						
18-22	10.4*** (1.80)	12.1*** (1.49)	1.7 (2.34)	12.0* (4.73)	-1.3 (11.6)	-13.3 (12.53)
23-27	22.5*** (2.31)	25.4*** (1.68)	2.9 (2.86)	21.9*** (4.14)	4.1 (3.80)	-17.8** (5.62)
28-32	29.3*** (2.30)	27.5*** (1.81)	-1.8 (2.93)	23.3*** (4.08)	13.7*** (3.70)	-9.6 (5.51)
33-37	22.7*** (2.22)	24.3*** (1.72)	1.6 (2.81)	16.8*** (3.59)	12.2*** (2.76)	-4.6 (4.53)
38-41	17.4*** (2.26)	18.0*** (1.78)	0.6 (2.88)	14.1*** (4.24)	9.3** (3.01)	-4.8 (5.20)
Hispanic						
18-22	13.4*** (2.84)	21.4*** (1.56)	8.0* (3.24)	10.2* (4.52)	5.8 (7.44)	-4.4 (8.71)
23-27	33.9*** (2.97)	27.4*** (2.43)	-6.5 (3.84)	18.5*** (3.29)	17.2*** (2.93)	-1.3 (4.41)
28-32	24.8*** (3.21)	23.9*** (2.46)	-0.9 (4.04)	17.1*** (3.06)	17.9*** (2.32)	0.8 (3.84)
33-37	12.8*** (2.96)	15.6*** (2.29)	2.8 (3.74)	5.8* (2.28)	5.6*** (1.64)	-0.2 (2.81)
38-41	15.7*** (3.25)	11.5*** (2.12)	-4.2 (3.88)	3.5* (1.77)	5.1** (1.80)	1.6 (2.52)

Note: Numbers in parentheses represent standard errors.
p* < .05. *p* < .01. ****p* < .001.

group, age, rank, and time period (i.e., during the 4 years prior to the onset of hostilities in Afghanistan and Iraq and during the 4 years after). Consistent with prior studies of the associations between military service and entering marriage, among enlisted men the differences between service members and civilians in the likelihood of being married (the second and third columns of Table 1) are uniformly significant, positive, and substantial, indicating that enlisted men are more likely to be married than comparable civilian men. This generalization holds true across age ranges, racial/ethnic groups, and time periods (i.e., before and after the onset of the current conflicts).

As expected, likelihood of being married among non-White enlisted men is more strongly associated with military service than the likelihood of being married among Whites. As similar analyses have shown in older data sets (Lundquist, 2004; Teachman, 2007), the effects of military service on marital status are greatest for Black men. Since the onset of the current conflicts, Black enlisted men are 12 percentage points more likely to have married by ages 18 to 22 years than Black civilian men, and more than 27 percentage points more likely to have married by ages 28 to 32 years. Although the effects of military service on marital status attenuates at older ages across all racial/ethnic groups, by ages 38 to 41 years Black enlisted men remain more than 18% more likely to have ever married than comparable Black civilians. The association between military service and being married is also consistently greater for Hispanic enlisted men than White men. At younger ages, Hispanic enlisted men are even more likely to be married than Black enlisted men; at older ages, Hispanic enlisted men are less likely to be married than Black enlisted men.

The results for officers (the fifth and sixth columns of Table 1) are similar to that obtained for enlisted men: officers are significantly more likely to be married than comparable civilians, and this generalization holds true across most age ranges, racial/ethnic groups, and time periods. To note the exceptions: (a) between 1998 and 2001, the likelihood of being married did not differ significantly from comparable civilians for White officers between the ages of 18 and 22 years and (b) between 2002 and 2005, this difference was not significant for Black officers between 18 and 27 years and Hispanic officers between 18 and 22 years. Consistent with predictions, differences between civilian and officer in the likelihood of being married are generally smaller than those observed between civilians and enlisted men. On average, differences in marital status between officers and civilians are greater for non-Whites than for Whites, but these comparisons are not as consistent for officers as for enlisted men.

Have the differences in marital status between service members and civilians changed since the onset of hostilities in Afghanistan and Iraq? The fourth and eighth columns of Table 1 address this question, presenting the change in the military and civilian comparisons from before and after the onset of the current conflicts for each relevant subgroup. Contrary to the view that the increased compensation associated with wartime motivates marriages, for enlisted White males the difference in marital status between service members and comparable civilians has not significantly increased since the onset of the current conflicts, with the exception of males aged 38 to 41 years, among whom the difference in the likelihood of being married between military and civilian populations widened significantly by 1.9%. For enlisted Black males, changes in the gap between proportion of military and civilians married across the two periods were not significant for any age range. For enlisted Hispanic males, the gap between military and civilian marital status widened significantly by 8% over this period for those between 18 and 22 years old, but the changes over time were not significant in older age groups.

For officers, changes in the differences in likelihood of being married were significant more frequently, but the direction of the difference was less consistent. For White officers, the gap between service members and comparable civilians widened significantly in the youngest age group but narrowed significantly in the middle age ranges. For Black officers, the gap narrowed significantly for the 23 to 27 years age range and did not change significantly in the other age ranges. For Hispanic officers there were no significant changes over time in any age range. Overall, looking across age ranges, racial/ethnic groups, and ranks, differences in the gap between service members and comparable civilians in likelihood of being married changed significantly in only 6 of 30 comparisons, suggesting more continuity than change in these differences, despite the drastically higher demands on military marriages in the period after the current conflicts began.

Comparing Divorce Status in Civilian and Military Populations

Percentage point differences between service members and comparable civilians in the likelihood of being divorced (percent military currently divorced – percent civilian currently divorced) are presented in Table 2, again broken down by racial/ethnic group, age, rank, and time period. Consistent with predictions, all the differences estimated for enlisted men (the second and third columns of Table 2) are either nonsignificant or significantly negative, indicating

Table 2. Percentage Point Differences Between Rates of Service Members and Civilians Currently Divorced, by Race/Ethnicity, Rank, and Time Period, 1998-2005

Age Range	Enlisted			Officer		
	1998-2001	2002-2005	Change	1998-2001	2002-2005	Change
White						
18-22	-4.2** (1.56)	-1.9 (1.11)	2.3 (1.91)	1.0** (0.32)	-26.1 (18.63)	-27.1 (18.63)
23-27	-3.3*** (0.80)	-2.1** (0.70)	1.2 (1.06)	-1.2 (0.86)	-0.6 (0.72)	0.6 (1.12)
28-32	-3.2*** (0.62)	-2.3*** (0.58)	0.9 (0.85)	-0.8 (0.51)	-1.3* (0.55)	-0.5 (0.75)
33-37	-7.0*** (0.62)	-5.7*** (0.58)	1.3 (0.85)	-3.2*** (0.66)	-1.2** (0.44)	2.0* (0.79)
38-41	-5.4*** (0.70)	-8.3*** (0.65)	-2.9** (0.96)	-3.6*** (0.58)	-3.4*** (0.57)	0.2 (0.81)
Black						
18-22	0.70 (0.61)	-0.2 (1.33)	-0.9 (1.46)	—	-8.7 (7.26)	—
23-27	-2.6 (2.40)	-3.0 (2.34)	-0.4 (3.35)	-1.0 (3.99)	-3.4 (3.29)	-2.4 (5.18)
28-32	-5.7** (2.08)	-2.7 (1.47)	3.0 (2.55)	-1.9 (2.90)	-1.9 (2.02)	0.0 (3.53)
33-37	-9.6*** (2.34)	-3.1* (1.42)	6.5* (2.74)	-11.3** (3.57)	-1.0 (1.69)	10.3** (3.95)
38-41	-9.5** (2.16)	-3.5* (1.51)	6.0* (2.64)	-7.6* (3.76)	-7.3* (2.93)	0.3 (4.77)
Hispanic						
18-22	-18.7 (11.17)	-5.0 (4.71)	13.7 (12.12)	—	—	—
23-27	1.4 (1.96)	-4.6 (2.61)	-6.0 (3.26)	1.2 (0.87)	2.8*** (0.45)	1.6 (0.98)
28-32	0.5 (1.62)	-4.4* (2.08)	-4.9 (2.64)	-3.4 (1.99)	1.5 (0.84)	4.9* (2.16)
33-37	-3.6 (2.25)	-2.6 (1.63)	1.0 (2.78)	0.7 (1.11)	1.3 (0.99)	0.6 (1.49)
38-41	-3.8 (3.22)	-3.6 (1.90)	0.2 (3.74)	2.0 (1.17)	-0.2 (1.28)	-2.2 (1.73)

Note: Numbers in parentheses represent standard errors.

* $p < .05$. ** $p < .01$. *** $p < .001$.

that enlisted men report being currently divorced at either the same rates or lower rates than civilian men with comparable education, age, race/ethnicity, employment status, and time period, and this generalization holds true across age ranges and racial/ethnic groups.

We predicted that differences between service members and civilians in the likelihood of being divorced would be largest for those segments of the military that have the highest divorce rates in civilian populations, that is, non-Whites and younger age groups. In general, this prediction was not confirmed. Differences were significant most frequently for White enlisted men, who reported being divorced at lower rates than comparable civilians at almost every age group. For Blacks, this same pattern held true, but it was significant mostly at older age groups. For Hispanic enlisted men, the difference was significant only within the 28 to 32 years age range in the period after the current conflicts began. Generally, differences were more likely to be significant at older ages. One possible explanation for this pattern is that the marriages of older service members are less likely to dissolve than the marriages of age-matched civilians, perhaps because time spent in military service provides a source of stability for longer marriages. Alternatively, this pattern is also consistent with the effects of a potentially higher remarriage rate among service members. The latter effect would lead to an underestimate of the number of divorces that occurred and a greater underestimate (and hence a more negative difference between service members and civilians) in the older age groups where remarriages have had more time to occur. Although we could not distinguish between these explanations with the available data, it is worth noting that even at the youngest age ranges, when remarriages are least likely, the difference in divorce between service members and civilians was still consistently negative or nonsignificant across racial/ethnic groups. In other words, even where estimates of current divorce are likely to be the least biased estimates of ever divorced, there is still no evidence in these population data sets of any increased vulnerability of military marriages relative to civilian marriages.

Table 2 presents the analogous information for officers in the fifth and sixth columns, where three noteworthy results can be highlighted. First, with two exceptions (Whites between the ages of 18 and 22 years in the period before the current conflicts began and Hispanics between 23 and 27 years in the period after the current conflicts began), all the differences in divorce status between service members and civilians are nonsignificant or significantly negative. Thus, among officers, 28 of the 30 comparisons conducted fail to show evidence for any heightened vulnerability of military marriages.

Second, similar to the patterns observed in the enlisted men, the differences between officers and civilians with comparable observed characteristics were most likely to be significant in the older age ranges, especially for White and Black officers. Third, among the youngest age ranges (where the rates of current divorce are likely to be the least biased estimates of the rates of ever divorced), evidence for the increased vulnerability of officers' marriages relative to comparable civilian marriages is inconsistent, appearing for White officers only before the current conflicts, for Hispanic officers only after, and for Black officers not at all.

Have differences in divorce status between service members and civilians changed since the onset of the current conflicts? The fourth and eighth columns of Table 2 address this question, presenting the change in the military and civilian comparisons across time for each relevant subgroup. As the table indicates, changes the gap between service members and civilians in their likelihood of being divorced in the years after the current conflict began are generally not significant, with the exception of enlisted White males aged 38 to 41 years, where the gap in divorce status between military and civilian populations widened significantly, and enlisted Black males aged 33 to 41 years, where the gap narrowed significantly. For officers, the gap in divorce between service members and civilians narrowed significantly for Whites and Blacks between 33 and 37 years and for Hispanics between 28 and 32 years. For the other 12 out of 15 comparisons, changes in the difference in current divorce between service members and civilians were not significant. Thus, as was the case with marital status, comparisons between military and civilian divorce status mostly demonstrate continuity over time, despite dramatic changes in military stress across the two periods.

Discussion

Since concerns about the effects of the current conflicts on military marriages emerged in early 2005, the military has released annual statistics on marriage and divorce among service members. But absent any context, these statistics are difficult to interpret. Evaluating whether military service is associated with stronger or weaker marriages requires some benchmark against which marriage and divorce in the military can be compared. In these analyses, that benchmark was the contemporaneous marital status and divorce status of civilians matched on age, race/ethnicity, level of education, and employment status. Comparisons that drew on population data from both groups revealed that, across ranks, age ranges, and racial/ethnic groups, active duty male service members are generally more likely to be married but

no more likely to be divorced than matched civilians. These comparisons held true prior to the onset of the current conflicts, and with few exceptions they remained equally true in the 4 years after the current conflicts began.

The observation that service members were more likely than comparable civilians to be married in the years between 1998 and 2005 replicates similar results obtained from survey data from the 1970s and 1980s (Lundquist, 2004; Teachman, 2007). As was true in the prior analyses, differences in marital status between non-White service members and their civilian counterparts were larger than the differences between White service members and their civilian counterparts, and this pattern was especially clear among the enlisted men. This pattern is consistent with the argument that military service improves the marital prospects of service members. To the extent that this is true, it should follow that differences between service members and matched civilians in the likelihood of being married should be greatest among those segments of the civilian population with especially poor marital prospects (i.e., younger, less educated, non-White), and indeed that seems to be the case. The continuity of this pattern is striking. Not only is the marrying advantage of service members observed across decades, but within these data it mostly stays in place even across the transition from a period of relative peace to a period of greatly heightened demands on the military. The higher likelihood of being married among service members relative to civilians appear to be a relatively stable aspect of military service and not greatly affected by generational changes or fluctuations in demands on the military.

With respect to divorce, these analyses fail to support the idea that military marriages are more vulnerable than civilian ones, or that the relative risk for divorce within military marriages has changed since the onset of the current conflicts in Iraq and Afghanistan. On the contrary, with one exception, service members were either equally likely or significantly less likely to be currently divorced than comparable civilians, and this difference was generally larger within the older age ranges. A possible explanation for this pattern is that time spent in military service enhances the stability of military marriages. If so, we would expect the observed pattern that longer military marriages, more likely in the older age ranges, are especially stable relative to civilian marriages. An alternative explanation is that service members, significantly more likely than civilians to marry, may be more likely to remarry after divorce as well, leading them to exit the pool of the currently divorced quicker than their civilian counterparts. Such an effect could also explain why differences in divorce status between service members and civilians were more likely to be significant among older age ranges—in those groups the service members who had divorced had more time to remarry. Yet we

have noted here that even among the youngest age ranges, where the numbers of the currently divorced are likely to be closest to the numbers of those who had experienced divorce, service members are still no more likely than comparable civilians to be divorced. Even as the stress on military families increased dramatically after 2002, the differences in divorce status between service member and civilian populations remained stable for nearly all groups, suggesting that the source of these differences is a stable aspect of military service as well.

In light of the rising demands on military families since the onset of the current conflicts, why is the likelihood of being divorced within the military not higher than for matched civilians, who presumably face lower levels of stress on average? One possible answer is that the population of service members differs from the civilian population in ways that protect marriage but were not controlled in these analyses. For example, the decision to serve in the military may be associated with specific attitudes (e.g., traditionalism, commitment to institutions) that, in addition to motivating service, might also motivate remaining married even when facing lengthy and frequent deployments. The analyses reported here did not include data on attitudes, and so could not address this possibility directly. Yet prior research on the associations between attitudes and marital outcomes raise doubts about whether differences in attitudes alone could account for the stable and substantial differences between the marital patterns of service members and civilians. Attitudes toward the institution of marriage are generally poor predictors of marital behaviors, and individuals who express the greatest commitment to the institution of marriage are not always the ones most likely to be married or to stay married (Edin & Kefalas, 2005).

Another possibility is that the package of benefits and compensation that the military offers to service members, and to married service members in particular, act as incentives to marrying and barriers to divorcing that comparable civilian marriages lack. Even within the civilian population, individuals who are employed, who have higher education, and who have higher incomes are more likely to be married and less likely to be divorced than those who do not (e.g., Bramlett & Mosher, 2002). A consequence of the fact that the military guarantees these benefits and more to service members is that service members, as a population, resemble the civilians with the highest marriage rates and lowest divorce rates, even after other demographic variables associated with marriage and divorce (i.e., age, education, employment, and race/ethnicity) are controlled. These economic supports may bolster military marriages even in times of stress or act as barriers to divorce to the extent that military couples who divorce would give up some of these benefits. Either

effect would serve to suppress divorce within the military, leading to proportions of divorced individuals that are similar to or even lower than those among comparable civilians, despite the far greater demands on military families on average. Although the pattern of results obtained here is consistent with this perspective, none of these mechanisms were measured in the current study. Until future research directly addresses whether increased compensation and benefits account for marriage and divorce patterns in the military, this explanation must be regarded as tentative.

Strengths and Limitations

Our confidence in these results is enhanced by a number of methodological and analytic strengths of this study. First, in contrast to prior studies of marriage and divorce that suffer from potentially serious selection biases, these analyses addressed data from the entire population of the military and census data that is as close to the entire civilian population as is possible. Second, because civilians and service members were matched on age group, race/ethnicity, education, and employment, these analyses ruled out several major sources of selection into military service that might have accounted for observed differences between service members and civilians. Third, these data addressed roughly equal periods before and after the onset of the current conflicts in Afghanistan and Iraq, offering a unique perspective on the relative stability of differences between military and civilian marriages, despite the upheavals of recent years.

Notwithstanding these strengths, several aspects of these analyses nevertheless limit the conclusions that can be drawn from these results. First, although we controlled for several observable determinants of marital status (e.g., age, race, education, employment), differences between military and civilian marriages could be influenced by other factors not measured in the data we had available. For example, it could be that service members have a high taste for marriage relative to nonservice members, in which case the correlations we observe in the data reflect that difference in personal “taste” rather than something about the military institution itself. Second, because neither of the data sets examined here include data on marital quality, these analyses address only the status of being married or being divorced and not the experience of marital relationships for service members or civilians. To the extent that military marriages are less likely to end in divorce than civilian marriages, they may be perceived as more fulfilling than civilian marriages, or the threat of losing the benefits associated with military service may hold together marriages that may be no more fulfilling, or even less fulfilling, than

the marriages of comparable civilians. Third, as we noted at the outset, these analyses were limited to data from Active male service members and should not be the basis of generalizations to members of the Reserve component or to female service members. Prior analyses of marriage and divorce in the Reserve component suggest that the patterns there may well be similar to those observed in the Active component (Karney & Crown, 2007). Female service members, however, are far more likely than male service members to divorce (Karney & Crown, 2007), suggesting that the constraints on their marriages may be unique from those operating on the marriages of male service members. Fourth, the records examined here offered no data on the marriages of service members after they separate from the military. To the extent that separation implies the end of any benefits that might have acted to promote marriage and prevent divorce, the marriages of former service members may well be higher risk than those of comparable civilians. This should be especially true for those who married at younger ages, as this is the group whose marriage decisions are most likely to have been affected by the availability of benefits. Finally, although the analyses described here addressed data through 2005, the conflicts in Afghanistan and Iraq continue to the present day. As military families continue to endure the stresses associated with lengthy and repeated deployments, the gap between the marital outcomes of service members and civilians may narrow, especially if divorce rates within the military continue to rise.

Conclusions

Overall, these results speak to the resilience of military marriages. Despite the demands of military service and the threat of long separations, service members are nevertheless more likely to be married than matched civilians. Despite the fact that divorce rates have been rising within the military in recent years, service members are still no more likely to be divorced than comparable civilians. That the differences in marriage and divorce status between service members and civilians have remained generally stable during a period when the stress on military couples has increased dramatically suggests that fluctuations in stress may not be the most important factor in determining marital outcomes within the military population. Instead, these transitions may be shaped more powerfully by enduring structural features of military service, such as the values of those who elect to serve or the compensation and benefits the military offers married couples. Future research that identifies sources of resilience in military marriages may offer lessons for enhancing the resilience of civilian marriages as well.

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