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THREE ESSAYS ON REMARRIAGE

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ABSTRACT

Following the footsteps of Jessie Bernard (1956), this dissertation intends to provide a panoramic view of remarriage in contemporary US society. It consists of three parts: a socio-demographic profile, the internal dynamics and couple interaction patterns in remarriage, and remarried dyads' connectedness to their immediate social environment. The first study used two nationally representative datasets to cover a wider range of ages up to 52 and updated the proportion of formerly married individuals entering into a remarriage, the ratio of remarriages among all existing marriages, the wait time to remarriage, and the ratio of remarriages ending in divorce. The first part of analytical results assesses the relative importance of attained status, ascribed status, and life course variables in affecting the pace of entry into remarriage. More interesting is the second part of the analysis: few of the variables traditionally associated with the dissolution of a first marriage played any role in divorce for the second time. In addition, remarriages were no more fragile than first marriages in that they were no more likely to end in divorce. Even if a second marriage dissolved, it took individuals a significantly longer time to exit from the remarriage than the first time around. The second essay explores the marital happiness and couple interaction patterns in remarriage, using remarried women's own first marriage as the benchmark for comparison. Contrary to findings from extant literature, fixed-effects results suggest that women enjoyed significantly higher marital happiness in remarriage than in their first marriage, and they reported significantly more frequent positive interactions and significantly less frequent conflict in remarriage than they experienced in the first marriage. The third study compares the network configuration of remarried older adults to that of their continuously married counterparts and traces changes in their discussion networks over time. Remarried older adults had smaller networks, which consisted of more friends than kin. In addition, remarried older adults talked to their associates significantly less frequently, were emotionally less close to them, and the density of their network was lower than continuously

married older adults. Similarly, a spouse was less integrated to remarried older adults' network, thereby generating fewer spouse-between ties and more spouse-independent ones. With respect to network change, since remarried older adults have more fragmented personal networks, they also had a significantly higher turnover of friends (peripheral alters). On the other hand, they were less likely to lose consanguines as discussion partners. Characteristics of alters lost and gained (except for density) by remarried older adults did not differ from those by first married adults, indicating that remarried older adults replaced associates lost with those having similar emotional closeness and contact frequency so that the overall structural characteristics of their networks could be preserved. Yet, those rotated out or in were less connected to other associates in the first place, resulting in lower overall density after these changes.

CHAPTER 1

INTRODUCTION

For as long as there has been marriage, remarriage has been vital part of this social institution. In the past, when adult mortality was high, societies developed customs of levirate and sororate marriages and other forms of remarriage as a response to the death of a spouse. Widows and widowers needed economic support, as well as help with children and housework, and remarriage provided much longed-for companionship as well. More importantly, remarriage sustained bereaved individuals' engagement with this social institution so that social support and control inherent in all marriages could remain relevant in domestic spheres. Despite remarriage's prevalence in societies and the vast sociological literature on marriage since the inception of the discipline, systematic examination of remarriage had to wait until Jessie Bernard's seminal work in 1956.¹ Even so, the number of studies of remarriage before 1980 are scarce (Cherlin 1978),² and the *Journal of Marriage and the Family's* decadal reviews in 1970 of the family literature published in the 1960s did not even feature an article on remarriage (Price-Bonham and Balswick 1980). As the number of divorces increased dramatically between 1964 and 1980 and divorce replaced death as the leading cause of marital disruption in 1973–74 (Glick 1980), the number of individuals eligible for remarriage also grew drastically, and remarriage after divorce started to be perceived as a social problem.³ Consequently, there has been

¹ After a search of Sociological Abstracts, I find no books on remarriage before Bernard's. In Komarovsky & Waller's half-century review (1945) for the *American Journal of Sociology* on the progress of family sociology, remarriage was mentioned only once. In addition, a JSTOR search on major sociological journals (*American Journal of Sociology*, *American Sociological Review*, *Social Forces*, and *Marriage and Family Living*, the predecessor of the *Journal of Marriage and the Family*) and *Population Studies* between 1930 and 1956 yielded about 17 articles with meaningful discussions on remarriage in the United States, excluding studies scattered elsewhere (e.g., Landis 1950). Most of these focus on the demographic characteristics (e.g., age) or are tagged in studies of entry into marriage or marital instability. As a result, the annual average of the number of remarriage studies is less than one.

² A similar search performed on the aforementioned journals plus *Demography* between 1957 and 1970 turned up about 14 papers on remarriage.

³ It should be noted, however, that divorced individuals have long been more likely to remarry than their bereaved counterparts, and this pattern can be traced as far back as 1950–53, if not earlier (Carter, Glick, and Lewis, 1955).

an exponential growth in sociological studies on remarriage and the stepfamily (Coleman and Ganong 1990), and the decade of 1990 alone witnessed a threefold increase in the literature (Coleman, Ganong, and Fine 2000).

Jessie Bernard's groundbreaking study covers a wide range of topics, including demographic patterns, motivation, opportunity, eligibility of remarriage, courtship, marital solidarity, competition and conflicts, and marital success and instability. Many of these subjects have fallen out of purview of family sociology, including couple cohesiveness, mate selection processes, detailed discussions on the motivation and opportunity of remarriage, psychological processes of dyadic relations, and the use of psychoanalytic perspective in sociology. On the other hand, the remaining issues continue to shape the direction of remarriage research to this day. Over time, other themes have been added to the repertoire of remarriage research, such as its effects on well-being, power relations and decision-making processes, couple interaction patterns, older adults and remarriage, and the role played by cohabitation in remarriage (Coleman and Ganong 1990; Coleman, Ganong, and Fine 2000; Sweeney 2010).

With respect to data and methods, in the early decades of remarriage research, with a few exceptions (e.g., Glick 1949; Udry 1966) most studies involved non-random samples (e.g., Bernard 1956 [1971]), community samples (e.g., Kephart and Monahan 1952), or data based on a single state (e.g., Hollingshead 1952; Monahan 1952). In due course, scholars began to use large-scale cross-sectional datasets such as the Census or the June Supplement of the Current Population Survey (CPS), to provide a demographic depiction of remarriage (e.g., Glick 1980; Bumpass, Sweet, and Castro Martin 1990). On the other hand, after the cessation of both Vital Statistics and the June CPS, which last collected information on marriage and divorce in 1995–96, family sociologists gradually turned to specialized datasets such as the National Survey of Families and Households (e.g., Curran, McLanahan, and Knab 2003). This development also runs parallel to increasingly sophisticated

statistical techniques once computational tools became more accessible and powerful. Before 1980, most studies could get by with cross tables and did not venture much further than group comparisons based on t-tests. Afterwards, scholars progressed from simpler regressions based on cross-sectional data to those using longitudinal data, event history models (e.g., de Jong Gierveld 2004), multilevel models (e.g., Noël-Miller 2013), or growth curve analysis (e.g., Umberson, Williams, Powers, Chen, and Campbell 2005).

This dissertation seeks to present an overview of remarriage in the contemporary United States society by exploring three aspects: socio-demographic patterns, internal dynamics, and connectedness to the immediate social environment. Following the time-honored tradition of studies on remarriage, it starts with a socio-demographic profile in the US in 2010 and addresses the questions of what proportions of formerly married individuals remarried, what their socio-demographic characteristics were, and how fast people remarried. Since there are fewer datasets available to study remarriages now than 20 years ago (Sweeney 2010), I relied on the National Survey of Family Growth and the National Longitudinal Survey of Youth 1979 (NLSY79) for the tasks at hand. Nevertheless, it is essential to move beyond mere descriptive statistics and employ analytical tools to examine factors affecting the pace of remarriage. To this end, I used event history technique to investigate whether variables earlier in an individual's life course would exert much influence on the entry into remarriage, since such information was regarded to have a diminishing effect in determining outcomes in midlife due to the presence of other stronger intervening factors, which are closer in time to the life circumstances in one's middle years. Moreover, with the rise of cohabitation in the United States after the 1980s and its great popularity among formerly married people, I additionally employed competing-risk models to incorporate cohabitation in the formation of remarriage. Chapter 2 also examines the dissolution of a second marriage, a phenomenon less studied and with fewer known correlates (Teachman 1986).

Marital happiness is a perennial topic in remarriage research, and studies in the past tend to adopt a deficit-comparison approach, namely one that contrasts the marital quality of remarriage with that of first marriage. Rooted implicitly in nuclear family ideology and influenced primarily by clinical literature, this approach often unwittingly problematizes remarriage and privileges first marriage (Coleman and Ganong 1990) with empirical support coming largely from cross-sectional data, or a “between-individual” design. Chapter 3 addresses the limitations of this previous literature. By taking a normative-adaptive approach with a “within-individual” design to compare a woman’s marital happiness across marriages using the NLSY79, I sought to shift the focus on the strengths of remarriage, including better communication patterns in the form of more sharing of life and reduced frequency of conflicts. Specifically, I will examine three aspects of positive interactions: the frequency of telling each other about the day, laughing together, and calm discussion. I will also investigate ten areas where couples argue: housework, money, children, showing affection, spending free time, religion, drinking, other women, and each other’s relatives. While this essay breaks no new theoretical ground, it does resort to Kiecolt’s model of self-change (1994) in trying to avoid the commonly leveled charge of “being atheoretical” against research on marital happiness or quality (Coleman and Ganong 1990).

Having delineated the internal dynamics of remarriage, I set out to characterize the social connectedness of older remarried couples and examine how embedded they are to their social milieu. While scholars have revived interest in older adults’ social relations and have studied the changes in social networks as a result of first marriage or in the aftermath of a divorce or spousal death, those after remarriage among older adults have received much more limited attention over the years. In this essay, I used the first two waves of the National Social Life, Health, and Aging Project to compare the network configurations of remarried and continuously married older adults and to illustrate network changes associated with marital status. Specifically, I look at two major groups of a

person's social contacts: consanguines and friends, and the comings and goings in one's social circle over time as a result of aging and marital disruption. In addition, to address the criticism that the issue of selection has been ignored in much of the research on remarriage and stepfamily (Sweeney 2010), I employed a two-stage procedure to correct for sample attrition (a form of selection). While this essay might be regarded as yet another study taking the "deficit-comparison" approach, findings will paint a more complicated picture of remarried older adults' social relations.

Taken together, these three studies seek to provide a fairly comprehensive portrait of remarriage in the contemporary United States. By providing more recent information on the socio-demographics of remarriage, the pace of its formation and dissolution and relevant covariates, its quality and how couples interact and communicate, and its connectedness to the immediate outside world, this dissertation hopes to maintain the tradition of research on remarriage launched by Jessie Bernard 60 years ago.

CHAPTER 2

NO SECOND ACTS IN AMERICAN LIVES?

A DEMOGRAPHIC PROFILE OF REMARRIAGE IN THE U.S.

Introduction

Over the past half century, Americans have experienced unprecedented changes in family scenarios: age at first marriage has risen and surpassed even the previous apex of century-long trends, cohabitation has become the modal path to first marriage, and divorces show no sign of abatement from the high plateau reached in the late 1970s. As a result, about half of all first marriages are expected to end in divorce or separation (Raley and Bumpass 2003). Set against the background of extraordinary stability in family life in the 1950s and early 1960s (Cherlin 2010; Furstenberg and Spanier 1987), these changes sparked extensive debates on whether American families in general and marriage in particular are in long-term, irrevocable decline. These debates, however, often overlook the importance of remarriage in society. While a high level of first divorce and separation suggests the vulnerability of first marriages, a remarriage reinstates conjugal life in the private spheres, integrates individuals to society at large through the fabric of kinship systems, and helps maintain the relevance of marriage as a social institution in individuals' lives.

Despite its significance, remarriage has received much less attention than other issues in family sociology, perhaps because it is generally considered a mere repeat of the first marriage, which itself is a prominent social marker of full-fledged adulthood. Moreover, the National Center for Health Statistics discontinued collecting marriage and divorce data in 1995 for its Vital Statistics, accompanied by the almost simultaneous cessation of the June Supplement of the Current Population Survey by the Bureau of Census (Kennedy and Ruggles 2014). Since then, scholars have fewer sources of large scale datasets on the demographics of marriage and divorce to work with,

resulting in fewer portraits of remarriage in recent years. Most studies on the demographics of remarriage (e.g., Bramlett and Mosher 2002) are based on data collected in the mid-1990s (Sweeney 2010), making it difficult to assess the current state of remarriage in the US.

The first purpose of this study is to provide a timely profile of remarriage in the US by using multiple datasets. With interviews conducted between 2006 and 2010, these datasets provide a much needed update on the state of remarriage in the US today. Moreover, since a single dataset is often confined by the upper limit on age, contains a certain birth cohort, or is sampled infrequently, studies using only one dataset tend to paint a rather incomplete portrait of remarriage. Engaging multiple datasets, on the other hand, makes it possible to characterize the remarriage experience of many birth cohorts over a wider range of age thereby delivering a panorama that is more representative of remarriage experience in the US.

On the other hand, this study seeks to go beyond a mere provision of a static portrait of remarriage. Since remarriage typically occurs in early midlife, it is governed by processes different from those leading to first marriage. Far removed from an age-stratified environment such as the education system and the more heterogeneous workplace, individuals tend to meet their remarriage spouse through mechanisms wherein ascribed status such as demographics plays a more limited role (De Graaf and Kalmijn 2003) and attained status such as education, employment, and income exert much greater influences. These processes are further complicated by one's position along the course of life, which is shaped by decisions made and actions taken previously, such as the cause of previous marital disruption and fertility history. Closer to an individual's exposure to risk of remarriage, these factors are likely to be more strongly associated with its entry. The second research question therefore concerns whether ascribed status variables affect the pace of entry into remarriage and whether their influences, if any, are comparable to those of life course variables.

Finally, as remarriage comprises a fairly substantial proportion of all marriages and sustains the relevance of this social institution in an individual's life, it is essential for family sociologists to understand the state of remarriage. Previous literature has found remarriage to be more fragile than first marriages, resulting in a seemingly endless cycle of “marry-go-round” (Cherlin 2010), which hardly bespeaks of marriage's lasting involvement in adulthood. Nevertheless, earlier studies are largely based on comparisons between remarried and first-married individuals, overlooking heterogeneity between these two groups. The third purpose of this study is to address the question of whether remarriages are more likely to divorce than first marriages and whether remarriages dissolve more quickly than first marriages do for the same individuals. Meanwhile, I will examine factors related to the disruption of remarriages.

Literature Review and Conceptual Framework

Demographics of Remarriage

Remarriage, or conjugal succession, has always been part of marriage as a social institution as long as there has been marriage. In the past when mortality was high (due to diseases, accidents, or war in the case of men, and for women largely because of childbirth), both men and women needed another spouse to preserve domestic stability. For widowed men, they may have already had minor children to care for. In addition, at a time when household production still met the majority of individual demands such as food or clothing, a new wife would help perform these tasks. For a bereaved woman living at a time when there were scant opportunities for gainful employment, a new husband handsomely saved her from imminent financial ruin and served as a father figure to discipline her children. Sentiments and social norms in favor of nuptiality continue to this day—close to 90% of the US population marries (Goldstein and Kenney 2001)—so it is natural that an overwhelming majority of maritally-disrupted individuals would eventually remarry. As a result, more than 83% of divorced men and 75% of divorced women born between 1900 and 1924 have

remarried (US Census Bureau 1976), and remarriages constituted 31.37% of all new marriages in 1970 (National Center for Health Statistics 1974; Mott and Moore 1983). However, as divorce overtook death as the leading cause of marital disruption between 1973 and 1974 (Glick 1980), the nature of remarriage has become increasingly discretionary. Even though the divorce rate continued its sharp climb between 1965 and 1980, the refined remarriage rate almost halved over the same period, from a peak of 166 remarriages per 1,000 divorced and widowed women under age 55 in 1966–68 (Glick and Lin 1986) to 87 in 1985 (Bumpass, Sweet, and Castro Martin 1990; also see Clarke 1995; Wilson and Clarke 1992). Since the trend of declining remarriage rates has not reversed its course, the proportion of individuals having ever remarried after divorce dropped to two-thirds for both men and women (Glick and Lin 1986) in 1980 and further to 55% for men and 44% for women in 2001 (Kreider 2005). On the other hand, the ratio of remarriages among all marriages has fluctuated over time, probably due to the relative importance of declining remarriage rates (in the numerator) and delayed entry into first marriages (part of the denominator). In 1970, remarriages constituted 31.2% of all new marriages, then increased to 46.3% in 1990 (Clarke 1995) before falling back to 37.86% in 2001 (Kreider 2005). While the proportion of remarriages among new marriages varied substantially, the length of interval between the first divorce and the second marriage remained quite stable. The median time between first and second marriages ranges from 3.2 years in 1975 (US Census Bureau 1976) to 2.8 years in 1980 (Glick and Lin 1986) to 3.3 years for men and 3.5 for women in 2001 (Kreider 2005). On the other hand, median age at second marriage has also oscillated wildly, depending on the trends of median age at first marriage as well as the prevalence of divorce. For those born 1900–04, the Great Depression substantially delayed their first marriage, and divorce was a social stigma. Thus, the median age for men and women was 44.1 and 40.6 respectively (US Census 1976). Subsequently, median age at remarriage dropped sharply such that it became 33.6 and 30.0 in 1974, before bouncing back to 37.4 and 34.9 in 1990 (Clarke 1995) and 35.1

and 32.7 in 2001 (Kreider 2005). With respect to the demographics of a second divorce, there has been little change in median age at second divorce over time: it was 41.3 for men and 37.5 for women in 1975 (US Census Bureau 1976) and 42.2 for men and 38.4 for women in 2001 (Kreider 2005). On the other hand, contrary to what one might expect from rising divorce, the median length of second marriages that ended in divorce actually increased from 5.0 years for men and 5.5 for women in 1975 to 9.2 years for men and 8.1 years for women in 2001.

Remarriage, however, is not the only option after divorce, and a substantial proportion of formerly married individuals choose to cohabit first before taking the plunge. Since a cohabiting union is less costly to dissolve than a marriage, it could be incorporated as part of the courtship process for the formerly married to test the quality of a match (e.g., Furstenberg and Spanier 1987). In 1995, 53% of women had entered a post-marital cohabitation within five years of separation, and the ratio grew to 70% within 10 years (Bramlett and Mosher 2002).¹ The proportion of cohabitation after a divorce or separation is much higher in other countries. For instance, in Norway in 2002, 98% cohabited after marital disruption (slightly more than one-third of these eventually remarried), and only 2% remarried indirectly (Poortman and Lyngstad 2007). Similarly, in the Netherlands, 70% of men and 50% of women cohabited after marital disruption, and between one-third and one-half of these unions were eventually converted to remarriage (De Graaf and Kalmijn 2003). Estimates based on Canadian data are much lower than those from the aforementioned European countries: only 54% of men and 42% of women re-partnered within five years of union dissolution, of which cohabitation constituted the overwhelming majority (more than 83% for both men and women) (Wu and Schimmele 2005).

¹ These ratios include individuals who eventually remarried or converted their cohabitations into formal marriages.

Entry into Remarriage

While the formation of first marriage and remarriage both depend on an individual's marriage market position, the underlying processes wherein individuals meet their spouses are likely quite distinct. Since first marriages are usually contracted not long after people complete education and enter the labor market, individuals tend to meet their first spouse in age-stratified settings such as a school or a fairly homogenous environment like church (De Graaf and Kalmijn 2003; Laumann, Gagnon, Michael, and Michaels 1994). As these contexts of meeting potential spouses are temporally close to an individual's family of origin, we can reasonably expect that several factors wield greater power on the pace of entry into a first marriage. These include the ascribed status such as religious affiliation in which one has been raised, family structure (e.g., parental marital status), and certain attained status (such as the level of schooling) as well as individual attitudes and personality traits that become fixed early in life. This is especially so when these factors reflect an individual's position in the marriage market. On the other hand, remarriage generally occurs after early midlife when people have long ventured into much more heterogeneous environments such as the workplace (Neugarten 1969), and individuals tend to look outside existing social networks for his or her remarriage spouse (De Graaf and Kalmijn 2003; Mahay and Laumann 2004). Consequently, certain attained status factors, such as income and employment, can reasonably be anticipated to come to the foreground as stronger determinants in remarriage rather than the aforementioned ascribed status variables, which may have gradually faded into the background in shaping one's midlife outcomes.

A case in point is income. To reduce uncertainties in their earning ability, males typically wait a few more years before entering into a first marriage compared to women (Oppenheimer 1988). In midlife, however, individuals' potential for socioeconomic attainment has largely been revealed if not fully realized, and income represents what people bring to the table as part of the "marital bargain"

as well as the level of economic well-being that can be expected after marriage. While few studies have included income, poverty as an indicator of economic well-being reflects the potential—or the lack thereof—for a stable domestic life where one does not have to worry constantly about bills. Consequently, poverty has been found to be negatively related to remarriage (Bahr 1979; De Graaf and Kalmijn 2003). Another important attained status variable is one's labor market status. Employment not only brings in a steady stream of income, but the workplace also serves to facilitate the meeting of a large pool of people outside of nightlife venues (Kalmijn and Flap 2001; Mahay and Laumann 2004). As a result, full-time employment is associated with quicker formation of remarriage (De Graaf and Kalmijn 2003; de Jong Gierveld 2004).

However, not all background variables are relegated to the backburner in changing the pace of remarriage. When the marriage market is stratified by these traits and positive assortative mating according to these characteristics is sufficiently strong, this background information could still have a powerful impact on the prospects of remarriage. A case in point is race and ethnicity: racial and ethnic minorities are less likely to remarry than whites for different reasons. African Americans tend to be disadvantaged socioeconomically, which delays their entry into first marriage and predisposes them to divorce, and they remain separated without resorting to divorce for a longer time. Moreover, despite the increase in interracial marriages between African Americans and whites over the past three decades, homogamy with respect to race and ethnicity remains strong (Qian and Lichter 2011), hindering the former's entry into remarriage (Bramlett and Mosher 2001; Bumpass, Sweet, and Castro Martin 1990; Smith, Zick, and Duncan 1990; Smock 1990; Sweeney 2002; Teachman and Heckert 1985; Wilson and Clarke 1992). Hispanics, on the other hand, tend to cohabit after marital disruption and are less inclined to remarry due to Catholic religious beliefs (Bramlett and Mosher 2001, 2002; Sweeney 2002).

Basic demographic variables may still have great bearing on the pace of remarriage if they are intimately linked to phases of the life course, such as gender and age. While both men and women are equally likely to enter into a first marriage, women face more obstacles. First, women tend to retain custody after divorce, and raising children diverts time and energy that may otherwise be spent in pursuit of another union. Second, as women age, they face an increasingly unfavorable sex ratio so there are fewer available choices (Cornell 1989). In addition, given men's preferences to marry down in age and women's tendencies towards age hypergamy, women in the remarriage market are at an increasingly disadvantaged position (England and McClintock 2009). Consequently, women are less likely to remarry than men (De Graaf and Kalmijn 2003; de Jong Gierveld 2004; Shafer and James 2013; Sweeney 2002; White 1979). Age itself may have an ambiguous effect on remarriage. On the one hand, older age, more life experience, and presumably greater maturity may be valued traits sought in the marriage market (Lehmiller and Agnew 2008; Oppenheimer 1988), as emotional and social maturity are conducive to the long-term viability of a marriage (Morgan and Rindfuss 1985). On the other hand, older adults—especially women—may face a much thinner market than when they were young, and their dating skills may have become rusty, thereby hindering their ability to score successfully in the marriage market. Previous findings from the literature generally suggest a negative relationship between age and entry into remarriage (Chiswick and Lehrer 1990; De Graaf and Kalmijn 2003; Teachman and Heckert 1985; Vespa 2012). Based on the discussions above, I propose the following hypotheses:

Hypothesis 1a: Due to social processes specific to the remarriage market, factors associated with attained status, such as income and employment, tend to be more strongly associated with entry into remarriage than background variables such as demographic information and family structure.

Hypothesis 1b: When the marriage market is highly segregated by certain ascribed status variables, such as race and ethnicity, and positive assortative mating according to these traits is strong, such ascribed status may still exert great influence in the formation of remarriage, even after accounting for attained status variables such as income and employment.

Hypothesis 1c: Demographic information, such as gender and age, will be significantly associated with entry into remarriage if closely linked to the phase of an individual's life course such as gender and age, which in turn affects one's marriage market position.

In addition to demographics, family background, and socioeconomic status, the pace of remarriage is also subject to the influence of other life course factors. As each phase of life course is closely linked, consequences of previous decisions often return to shape the contexts in which people make subsequent decisions, especially in realms that are related. When individuals enter the remarriage market, they have accumulated considerable experience in conjugal union and even childbearing and rearing. This not only shapes their understanding of their life circumstances but also influences attitudes towards the prospect of remarriage. Specifically, two such life course variables—marital history and fertility history—likely impinge upon individuals' marriage market positions, alter their perception of marriage as a social institution, or even hinder a successful pursuit of another marriage. Several dimensions of marital history likely exert strong impact on the entry into remarriage: age at first marriage and first divorce, and cause of previous marital disruption—divorce or death. For age at first marriage, the earlier an individual enters the first marriage, the greater the proportion of his or her adulthood is spent in conjugal union, and he or she may experience more difficulty when adjusting to single life. Consequently, a person who married earlier may be more likely to remarry than otherwise (Smith, Zick, and Duncan 1990; Sweeney 1997 and 2002). In addition, since children growing up in a non-intact family tend to enter marriage quickly,

those earlier entries into first marriage likely have absorbed some effect of family structure while growing up. For age at first divorce, the later a person separates or divorces, all things equal, the less time he or she will have to search for and date a potential spouse, slowing down the pace of remarriage. Moreover, an older age at separation or divorce implies a person will be older when he or she re-enters the marriage market, thereby occupying an inferior position, especially for women. As a result, age at first divorce has consistently been found to be associated with delayed remarriage (Bumpass, Sweet, and Castro Martin 1990; Dewilde and Uunk; Glick and Lin 1986; Koo, Suchindran, and Griffith 1984; Smock 1990; Sweeney 1997 and 2002; Teachman and Heckert 1985; Xu, Hudspeth, Bartkowski 2006). With respect to cause of previous marital disruption, divorced individuals used to be regarded as being weakly attached to the notion of lifelong marriage thus remarrying more quickly than their widowed counterparts. Some individuals may also have someone to remarry in mind before they divorce. Furthermore, bereaved individuals tend to be older or in late midlife when they become widowed, which likely circumscribes their prospects of remarriage because there are fewer unmarried individuals in the same age range. In addition, complicated financial and living arrangements tend to make older adults opt for cohabitation instead of remarriage (Brown, Bulanda, and Lee 2012). Studies based on older datasets generally report that divorced individuals enter remarriage more quickly than widowed ones (James and Shafer 2012; Wilson and Clarke 1992; Wu and Schimmele 2005).

With respect to prior fertility, children from a previous marriage or cohabiting union are capital specific to that relationship (Becker, Landes, and Michael 1977) and present continuing albeit unpleasant entanglements with a former spouse or partner, introducing complications to a potential marriage. Young children at home place many demands on a parent to care for them, making it more difficult to find time and energy for dating. Even non-resident children may require child support and divert non-custodial parents' financial resources, keeping them from establishing a new

relationship. Indeed, individuals (particularly women) with children from a previous marriage are significantly less likely to remarry (Bumpass, Sweet, and Castro Martin 1990; Chiswick and Lehrer 1990; De Graaf and Kalmijn 2003; Goldscheider and Sassler 2006; Koo, Suchindran, and Griffiths 1984; Smith, Zick, and Duncan 1990; Smock 1990; Teachman and Heckert 1985), and this finding is among the most robust empirical regularities in the literature of remarriage. Based on these discussions, I propose the following hypothesis:

Hypothesis 2: Life course factors relevant to the domestic sphere and one's position in the marriage market, such as marital and fertility history, are likely to have a significant effect on the formation of remarriage. For marital history, younger age at first marriage is associated with earlier remarriage, whereas older age at first divorce is related to later remarriage. Compared to widows and widowers, the divorced are more likely to remarry. Individuals with children from previous relationships are less likely to remarry than those without.

Exit from Remarriage

While most divorced people still remarry, the continuing relevance of marriage as a social institution in the lives of individuals hinges in no small measure on the stability of remarriage. If remarriages are more likely or quicker to dissolve than first marriages, as suggested in previous literature (Bramlett and Mosher 2001; DeMaris 2000; Heaton and Blake 1999; Kreider 2005; Lehrer 2008; McCarthy 1978; Paik 2011; Teachman 2011; Whitton, Stanley, Markman, and Johnson 2013), then individuals may actually be worse off in choosing to enter a remarriage because they are again exposed to the trauma of divorce and associated complications in living arrangements, financial matters, and social relations. Repeated living in crisis mode may put more strains on physical and mental health as opposed to simply staying out of the drama. Constantly riding the “marry-go-round” hardly

bespeaks of the strength of marriage as a social institution in regulating individuals' private sphere; it merely reveals a strong desire, despite difficulties, to be in an intimate union.

Previous literature suggests several rationales for why remarriages tend to be more fragile than first marriages. First, remarried individuals may find it arduous to integrate their new spouse into existing networks (Furstenberg and Spanier 1984; Booth and Edwards 1992) not only because ties broken in midlife are difficult to mend but also because children from previous marriages can introduce further complications in social relations (White and Booth 1985; but see MacDonald and DeMaris 1995 for contrary evidence). As a result, the buffer from social networks against divorce in remarriage may not be as strong as that in a first marriage. Second, remarried persons have been characterized as possessing personality traits or engaging in behaviors that are not conducive to the long-term viability of marriage (Booth and Edwards 1992). In other words, divorced and remarried individuals may be intrinsically different from those who remain in a first marriage. Third, the experience of divorce has been thought to have socialized people to regard marriage as less than permanent and thereby be less committed in another marriage (Amato and Booth 1991; Whitton, Stanley, Markman, and Johnson 2013). While these notions may have some validity, those earlier studies have some limitations. First, to the extent that many individuals would rather remain in a "holy deadlock" than file for a divorce either because of their religious beliefs or concerns over their children's well-being, it is inappropriate to compare the marital instability of the remarried to that of the continuously married as these two groups differ fundamentally in how they see marital problems should be solved. It is quite plausible that there would be no difference in dissolution risks by marriage order after controlling for selection (Poortman and Lyngstad 2007). Second, a number of these studies use perceived instability (Booth and Edwards 1992; Bulanda and Brown 2007) or marital conflict (MacDonald and DeMaris 1995; Whitton, Stanley, Markman, and Johnson 2013) as the outcome variables. Even though marital conflict is a good indicator of couple interactions and

divorce proneness is a better predictor of divorce than perceived barriers, these variables, after all, are not divorce itself, and other factors such as marital happiness may well be more crucial in determining the longevity of a marriage (White and Booth 1991). More importantly, this line of reasoning appears to condemn divorced individuals from ever having a successful and happy marriage again, and it does not sit well with the fact that most divorced individuals in the US still remarry. In fact, some studies either found no difference in perceived instability (Furstenberg and Spanier 1984) or in marital conflict (MacDonald and DeMaris 1995) between remarriages and first marriages or even reported that double remarriages are more stable than marriages where both spouses are first married (Aguirre and Parr 1982; Clarke and Wilson 1994; Poortman and Lyngstad 2007).

Conceptually, it is quite probable that remarriages are just as stable, if not more, as first marriages when we compare different marriages of the same person. First and foremost, individuals can and do learn from their past mistakes and perform better in mate selection in remarriage. Divorce is a major life crisis in that it not only destroys the common realities constructed by a couple but also calls into question an individual's basic understanding of the world and the ability to attain a happy and stable conjugal union, which in turn threatens identity performance. To align self-perception with reality, individuals learn from past experiences and make appropriate adjustments (Kiecolt 1994). Second, as people age, they find themselves faced with an increasingly thinner marriage market as most of their age peers remain married, and age heterogeneous marriages are more costly to maintain. In other words, options outside marriage become ever scarcer over time, forcing individuals to focus on what is at hand (Wrosch and Heckhausen 1999). I therefore propose the following hypothesis:

Hypothesis 3: Compared to a first marriage, a remarriage is not more likely to end in divorce. In addition, compared to one's own first marriage, a remarriage is not quicker to dissolve.

With respect to a second divorce, if basic demographics unrelated to the stratification of the marriage market or the phase of life course wield less influence over the entry into remarriage, these variables can reasonably be expected to have little bearing on the dissolution of remarriage. On the other hand, socioeconomic status—especially income and labor force participation—is immediately connected to the economic well-being of a family, which in turn likely affects the quality of a match. Life course factors may also determine marital quality from early on, especially prior fertility. According to the incomplete institutionalization hypothesis (Cherlin 1978), the presence of stepchildren at home makes family life far more complicated because of the ongoing involvement with a former spouse. Further, the institution of marriage has not yet developed to deal with these complexities, thereby destabilizing a stepfamily. Overall, the literature is rather reticent with respect to factors related to the dissolution of remarriage beyond marital history and children from previous relationships. Most notable is the absence of any role played by socioeconomic status (Aguirre and Parr 1982; Teachman 2008) in a second divorce. I therefore present the following hypothesis:

Hypothesis 4: Similar to entry into remarriage, socioeconomic status (such as income and labor force participation) and life course factors (such as prior fertility) have far more impact on the dissolution of remarriage than basic demographic information.

Data

To address the limitations of previous studies and capture remarriage experience over a wide range of ages, I used two nationally representative datasets. The National Survey of Family Growth (NSFG) was launched as a fertility survey in 1973 and has been designed and administered by the National Center for Health Statistics (NCHS) under the US Department of Health and Human

Services to collect information on family formation, growth, and dissolution (Lepkowski, Mosher, Davis, Groves, and Van Hoewyk 2010). The 2006–2010 NSFG was conducted by the Institute for Social Research at the University of Michigan. It adopts a continuous design and has interviewed a national probability sample of 12,279 women and 10,403 men aged 15–44 living in households in the US between July 1, 2006 and June 30, 2010, making the NSFG an appropriate source to provide the most recent information on the state of remarriage in the US. In addition to information on basic demographics, socioeconomic status, and fertility history, the NSFG collects fairly extensive data on respondents' marital and cohabitation history, and I used the summary measures (recode) of these variables created by the NCHS. To tap underlying attitudes towards marriage and divorce, I also included an interviewee's religious affiliation while growing up. For economic well-being, I only controlled for poverty and near poverty status, since income is coded in categories and lacks the precision desired. Despite its continuous design, the NSFG is still cross-sectional in nature, and important information on socioeconomic status (such as poverty status) is inevitably measured after events of marital history occurred, invoking the possibility of reverse causality. Consequently, estimates pertaining to them should be interpreted with caution. To account for design effects of a stratified cluster sample as well as oversampling of teenagers (20%) and racial and ethnic minorities (20% each for African Americans and Hispanics), I applied the stratum and primary sampling unit (PSU) variables, along with sampling weights, supplied by the NCHS in both descriptive statistics and analytical results.

While the NSFG has a large sample size and is relatively easy to work with, it has several serious limitations. First, since its main purpose is fertility and related behaviors, the upper limit on age is 44, making it less suitable to study the formation and dissolution of remarriages, as 57% of both the male and female samples are under 31, which is the median age at second marriage. As a result, there are far fewer remarriages than the large sample size suggests. Second, its cross-sectional

nature precludes the use of time-varying covariates and makes it difficult to place certain crucial factors (e.g., income, labor market activities, and the presence of children in the households of male respondents) at the beginning of each episode. To complement the limitations of NSFG on the upper end of age range and its lack of detailed information on socioeconomic status, I used the National Longitudinal Survey of Youth 1979 (NLSY79). The NLSY79 is a longitudinal dataset administered by the Bureau of Labor Statistics (BLS) and later the Center for Human Resource Research (CHRR) at the Ohio State University. Starting from 1979, 12,686 youths aged 14–21 have been interviewed each year, and after 1994, biennially. As a result, NLSY79 respondents were between 45 and 52 years of age in 2010.² The NLSY79 also oversampled racial and ethnic minorities, economically disadvantaged white respondents, and contained a military subsample (although the last two were dropped from the interviews in 1991 and 1985, respectively). Since the stratum and PSU variables are only available in the geocode data, I only used sampling weights to account for oversampling of racial and ethnic minorities.

The BLS collected basic socio-demographic information at the baseline interview as well as household composition, marital history, and socioeconomic status at each wave of data collection. Among standard socio-demographics, I controlled for race, education (measured in 1992), and religious affiliation at the baseline interview. For marital history, I used the start and end (divorce or separation) dates of marriages created by the CHRR from the 2008 interview and calculated additional dates of marital changes beyond the third one. I further updated these dates based on information from the 2010 interview and used only those who were last interviewed in that year. As cohabitation is an integral component of formerly married individuals' intimate union experience, it is crucial to include cohabitation in the picture. Cohabitation history in NLSY79, however, is a bit

² I decided against adding a third dataset to account for the upper end of age range as older adults' remarriages will include a substantial proportion of those preceded by spousal death, which likely has a different effect on remarriage than divorce.

trickier to deal with. While the CHRR retrospectively created variables indicating whether there is an opposite-sex cohabiting partner in the household for all interview years, the NLSY79 did not begin to record the start date of a cohabiting union until 1990, and no dissolution dates were documented for cohabiting unions not converted into marriage, making it impossible to use NLSY79 to investigate its transition to remarriage as the control group is incomplete. Moreover, not until the 2002 interview did all cohabitations in marital gaps start to be chronicled in detail. As a result, short-term cohabitations before 2002 are completely left out of the picture. Even among cohabitations of longer duration, those that have not been converted to marriage or have not lasted until after 1990 are also missing. To use cohabitation as a competing event to remarriage, my calculation of cohabitation history includes the beginning date of the first post-marital cohabitation if it is not eventually converted into marriage, as well as the start date of a premarital cohabitation. I excluded all stand-alone cohabitation preceding remarriage because the focus of this study is remarriage rather than cohabitation, which only serves as a substitute of the former.

I used the household roster from each interview to construct indicators of the presence of biological children at home, as they are marriage-specific capital and may delay remarriage because of the demands to care for them, and a potential spouse may prefer fewer complications in a new marriage. Since not all respondents retain child custody after a divorce, I generated another variable indicating whether the dissolved marriage produced any biological child. Even if an individual does not have biological children at home, they may still command time and resources that could otherwise be used to build another marriage. I additionally generated the presence of stepchildren in the household and calculated age at first birth, the latter of which may reflect a respondent's attitudes towards sexual behavior and fertility.

For socioeconomic status, I used logged total net family income at each interview and family poverty status created by the CHRR and adjusted by family size. In addition, I generated an indicator

of whether a respondent lived under 150% of the federal poverty line based on the family poverty level variable from the 1979 and 1987–2010 interviews. In years when such information is not readily available, I calculated a near-poverty threshold based on poverty income guideline tables from 1980–86 supplied by the NLS.³ As workplace provides ample opportunities for formerly married individuals to meet potential marriage interests, I included respondents' labor market activities by generating a "full time employment" indicator of whether a respondent worked more than 1,680 hours per year (35 hours/week for 48 weeks), and anyone working fewer than 1,680 hours but more than 0 hour per annum is counted as having worked part time in that year.⁴ Admittedly, the majority of respondents were not in the labor force in earlier rounds of interviews, but these individuals were also less likely to have divorced and entered the marriage market for a second time.

A respondent's attitudes towards women's role in family and society may reflect underlying orientation towards family formation and dissolution. A divorced person with a more traditional worldview may be more inclined to remarry and less inclined to divorce again. The NLSY79 inquired about respondents' attitudes towards women's role on four occasions (1979, 1982, 1987, and 2004), asking whether they agree with the following statements: a woman's place is in the home; a wife with family has no time for outside employment; women's employment leads to juvenile delinquency; traditional division of labor by gender is a better arrangement; women are happier if they stay home and take care of children; men should share housework; inflation necessitates that both spouses work outside the home; and, employment makes women feel more useful. I performed factor analyses for each wave and found these eight items could be summarized in two factors, with the first one representing the first six statements, which I would call "traditional gender role attitude"

³ See <https://www.nlsinfo.org/content/cohorts/nlsy79/other-documentation/codebook-supplement/nlsy79-appendix-2-total-net-family-3#povguide>

⁴ Labor market activities as well as total net family income variables are actually lagged one year to avoid simultaneity.

($\alpha=0.81$ for 1982), and the second one combining the last two statements, which I would call “female employment due to financial needs” ($\alpha=0.34$ for 1982). The first factor variable thus constructed reflects a person’s orientation towards division of household labor by gender: the more he or she thinks a woman’s place is in the family, the higher his or her first factor score. On the other hand, the second factor taps an individual’s attitudes towards women seeking formal employment due to economic need. The higher a respondent scores on this factor, the more he or she believes that women’s contributions to household finances are indispensable.

To further control for potential selection bias due to heterogeneity in non-cognitive traits, I used several measures of them collected from various years. Specifically, I controlled for sociability, risk preference, mastery, and self-esteem as these are likely related to marital happiness and patterns of dyadic interactions. With respect to sociability, in 1985 the NLSY79 asked respondents to rate themselves from extremely shy to extremely outgoing at age six and as an adult. More outgoing individuals may be able to initiate a new relationship than their more introverted peers and hence are more likely to enter another marriage. I used the adult measure since it was closer to outcome measures. Mastery is how individuals see themselves as capable of solving problems that may affect their life in important ways. People with a greater sense of mastery and higher self-esteem are likely to be more effective in embarking on a new marriage or dealing with the vicissitudes of conjugal life. The NLSY79 collected Pearlin mastery scores from 1992 and Rosenberg self-esteem scores from 1980, 1987, and 2006. For the latter, I used the 1980 measure to avoid reverse causality. The NLSY79 also administered the Rotter Internal-External Locus of Control Scale at baseline interview, measuring whether respondents believed they had control over their lives through motivation or self-determination. Admittedly, these measures are not ideal controls for selection on non-cognitive traits since they do not tap dimensions immediately related to conjugal life and most are measured

only once and rather distant from event occurrence. Yet, these variables are still informative of an individual's overall self-perception.

Method

I utilized event history technique to analyze both the entry into and exit from remarriage for three reasons. First and foremost, as my research questions concern the pace of entry into and exit from remarriages, they demand an analytical tool that can effectively tackle the temporal dimension of these processes, and an event history technique is designed for such tasks. Further, since no specification can be comprehensive in accounting for all relevant information, as long as these missing or unmeasured variables can be subsumed by time, the event history model will be a reasonable approximation of how individuals actually behave. Second, because not all divorced individuals remarry and not all remarried people would eventually experience another divorce, a substantial proportion of the samples will be right censored, and event history analysis is well-suited to handle right censoring. Finally, as these processes are subject to the influence of changing circumstances in life, it is necessary to incorporate time-varying covariates, and event history modeling is appropriate for such regressors.

Among event history models, I chose the generalized gamma regressions to analyze both entry into and exit from remarriages instead of the more conventional Cox proportional hazards model. Preliminary results showed that in regressions of the formation of remarriage that involved time-varying socioeconomic status such as labor force participation and poverty, the proportional-hazards assumption was violated, suggesting that the Cox models did not adequately parameterize the underlying data-generating processes. Further, in regressions of exit from remarriages, the proportional-hazards assumption was consistently violated in all specifications, making Cox models inappropriate to use. Consequently, I opted for parametric models, which would fully exploit information in the data, and specifically, the generalized gamma distribution. While slightly more

complex than other parametric models since it has three parameters, generalized gamma is also more general than other parametric models, such as lognormal, Weibull, and exponential, which are special cases of generalized gamma. Should parameter estimates resemble any of these special cases, I could always go back and re-estimate under a more appropriate setting. Further, since the generalized gamma model belongs to accelerated failure-time metrics, the interpretation of results is slightly different from that obtained through the more conventional Cox models, and I will present exponentiated coefficients known as time ratios. Specifically, for one unit increase in covariate x_i , the expected time to failure will be multiplied by $\exp(\beta_i)$, where β_i is the coefficient estimate of x_i . In other words, if the coefficient estimate is positive, the associated time ratio $\exp(\beta_i)$ will be greater than one, meaning that failure time for individuals with one more unit of x_i is $\exp(\beta_i)$ times the failure time for individuals without that additional unit of x_i . On the other hand, if the coefficient estimate is negative, individuals with those characteristics will have shorter time to failure.

Results

Descriptive statistics

Table 2.1 presents descriptive statistics from both the 2006–2010 NSFG and NLSY79 respondents who have remained in the sample all the way through 2010. The NLSY79 is evenly divided along gender lines, and the NSFG sample is somewhat evenly distributed in the three age groups. The female sample of the NSFG has about 13% African Americans and almost 17% Latinas, and the male sample has slightly fewer African Americans and slightly more Latinos. In NLSY79, however, there are far more whites (77.41%) and far fewer Latinos (6.82%), reflecting the growth of Latino immigrants in the past few decades. With respect to educational attainment, since 13–14% of the NSFG sample is aged 18 and below, respondents without a high school diploma are over-represented (the proportion of individuals without a high school diploma drops by 10 percentage points for those older than 20). On the other hand, for NSFG respondents older than 25, between

55% and 60% have at least some college education, far more than in the NLSY79, reflecting some progress in education attainment over time. About one-third of both female and male samples of the NSFG were raised Catholic, and slightly less than one-quarter of them were raised Evangelical Protestants. These proportions are roughly the same in the NLSY79.

Table 2.1: Sample Descriptive Statistics – Socio-Demographics

	2006-2010 NSFG Female	2006-2010 NSFG Male	NLSY79
Age Groups			
15-24	33.75%	34.14%	
25-34	31.94%	32.17%	
35-44	34.31%	33.69%	
Race			
White	60.54%	60.01%	77.88%
African American	13.69%	11.82%	14.36%
Latin	16.96%	19.07%	6.63%
Others	8.82%	0.91%	1.14%
Education			
No HS	23.98%	28.97%	11.23%
HS	23.81%	24.15%	43.28%
Some College	27.73%	26.31%	22.55%
BA+	24.48%	20.58%	22.93%
Religious Affiliation			
No Religion	9.36%	10.47%	11.37%
Mainline Protestant	13.77%	12.59%	25.02%
Evangelical Protestant	23.92%	22.41%	21.56%
Other Protestant	10.11%	10.76%	-
Catholics	33.05%	34.62%	29.30%
Others	9.79%	9.15%	12.75%
Economic Well-Being			
Poverty	22.77%	16.92%	
Near Poverty	12.46%	10.11%	

Table 2.2 shows descriptive results of marital history. Due to the youthfulness of the NSFG, a very substantial part of both male and female samples have never been married (54.78% and 46.72%, respectively), and only a small fraction of them are ever remarried (6.14% and 7.24%, respectively). On the other hand, more than one-quarter of men and close to one-third of women in NLSY79 have married twice or more. Again, since the NSFG consists mostly of young adults, even if they are married, most of them were still in their first marriage, and less than one-third have either separated or filed for divorce. To the contrary, more than half of women and slightly less than half of men of the NLSY79 have already separated or divorced, and more women have been widowed than men due to differential mortality. After the first marital disruption or separation, more than 50% of the NSFG respondents and 60% of NLSY79 respondents have remarried. Since the NSFG is a young sample, these respondents still have plenty of time to catch up in the proportion of remarriage among the divorced. Results from the NLSY79 are slightly higher than the overall estimates reported in Kreider (2005) but are still in line with those of comparable ages as reported in Bramlett and Mosher (2001). The bottom panel of Table 2.2 shows that median age at first marital disruption for NSFG men and women is 28.92 and 26.5, respectively, which is consistent with the youthfulness of the sample, and those who have divorced or separated would have done so at a much younger age than the rest of the population. The NLSY79 tells a different story: as this entire sample has now entered the late middle years (45–52 years of age), most of them would have already divorced if their marriages were unsatisfactory, and median age at first disruption is 32.33 for men and 30.83 for women, consistent with earlier findings.

Table 2.2: Sample Descriptive Statistics - Marital History

	2006-2010		NLSY79	NLSY79
	NSFG Female	NSFG Male	Female	Male
Number of Marriages				
0	46.72%	54.78%	9.51%	14.36%
1	46.04%	39.08%	59.48%	59.09%
2	5.98%	5.25%	23.70%	21.43%
3+	1.26%	0.89%	7.31%	5.12%
First Marriage Outcomes				
Continuous	68.28%	72.43%	44.63%	51.73%
Divorced/Separated	30.48%	27.31%	52.29%	46.95%
Widowed	1.24%	0.26%	3.08%	1.32%
After First Disruption:				
Unmarried/unpartnered	26.44%	44.41%	27.18%	24.43%
Cohabiting	22.62%	-	10.93%	11.34%
Remarried	50.93%	55.59%	61.89%	64.22%
Remarriage as % all marriages	12.26%	12.88%	34.15%	30.07%
Median Waiting Time (Years)	4.83	4.17	3.00	2.92
Second Marriage Outcomes				
Continuous	59.25%	67.25%	52.28%	58.30%
Divorced/Separated	39.21%	31.83%	45.17%	40.78%
Widowed	1.55%	0.91%	2.55%	0.91%
Second Marriage Median Duration (Years)	3.17	2.08	5.42	6.08
Median Age at:				
First Divorce/Separation	26.50	28.92	30.83	32.33
Second Marriage	29.25	31.42	32.83	35.00
Second Divorce	32.67	33.67	38.00	39.63

Among divorced or separated NSFG women, 22.62% have entered a cohabiting union without remarriage,⁵ and just about 10% of the NLSY79 respondents have cohabited without remarriage,⁶ reflecting a growing popularity of cohabitation among more recent cohorts even after a first marital disruption. Similarly, remarriages constitute only about 12% of all marriages of the NSFG respondents, whereas they comprised 30.07% and 34.15% of all marriages of the NLSY79 male and female interviewees, respectively. For those who remarried, the median length of interval between first divorce and second marriage is 4.17 years for men and 4.83 years for women in NSFG, which are considerably longer than those (below 3.5) reported in Kreider (2005). The median waiting time for remarriage among divorced NLSY79 respondents is about 3 years for both men and women, consistent with the literature since the mid-1970s. Upon entering the second marriage, the median age is 35 for men and 32.83 for women in NLSY79, but only 31.42 for men and 29.25 for women in NSFG.

The outlook of a second marriage appears to be bright, at least among NLSY79 respondents. While about half of their first marriages ended in divorce or separation, only 40.78% of men's and 45.17% of women's second marriages ended in this way. Because sufficient time has passed since the beginning of remarriage, the difference in these ratios is meaningful and cannot be attributed to the notion that remarriages tend to be shorter in duration so that not enough of them have gone through attrition. Even though the remarried population of the NSFG samples are likely more selective of individuals entering first marriage earlier and exiting it more quickly than others, the portrait is only less sanguine, with about 40% men and 30% women already divorced or separated. The same pattern applies to median duration of second marriages ending in divorce or separation in

⁵ I did not calculate this number for the NSFG male sample as their cohabitation history is incomplete.

⁶ If respondents who entered a premarital cohabitation before the second marriage are counted as entering a cohabitation, then 32.83% of those who experienced a first divorce have cohabited, regardless of whether they have remarried or not. Further, the proportion of cohabitation among second unions will be 44.31%, slightly lower than the estimates obtained by Bramlett and Mosher (2002) using Cycle 5 of the NSFG, but much lower than estimates from Canada (Wu and Schimmele 2005), the Netherlands (De Graaf and Kalmijn 2003), and Norway (Poortman and Lyngstad 2007).

the NLSY79: 6.08 years for men and 5.42 years for women, considerably longer than 5.04 and 4.92 years for these men and women in their own first marriage (results not shown but available upon request). These descriptive statistics suggest that remarried individuals are neither more likely to divorce nor more quickly to divorce once they sense trouble in a marriage, as opposed to earlier findings (e.g. Heaton and Blake 1999; Whitton, Stanley, Markman, and Johnson 2013). Results from previous literature are likely an artifact arising from comparison of the remarried with a vastly different group of people, namely the continuously married. Again, the median duration of second marriages ending in divorce or separation in the NSFG samples is much shorter. At second divorce or separation, the median age is 39.63 for men and 38.00 for women in the NLSY79 and 33.67 for men and 32.67 for women in the NSFG.

Regression Results

Entry into Remarriage

Table 2.3 presents results from generalized gamma regressions of entry into second marriage using the NSFG female sample.⁷ In the first column, age has no bearing on remarriage, whereas African American women's time to remarriage is 78% more than white women. While education is positively associated with quicker remarriage after divorce, the difference is insignificant. Evangelical Protestants, on the other hand, remarried significantly faster than their mainline counterparts, consistent with findings from the literature (Bramlett and Mosher 2002; Glass and Levchak 2014). Column 2 shows that women living in intact families at age 14 have a wait time to remarriage that is 18% shorter than otherwise, and the result is marginally significant. Neither a respondent whose mother gave birth as a teenager nor maternal education is significantly associated with the pace of

⁷ Results based on the male sample of 2006–2010 NSFG are similar to but much weaker than those of women due to a much smaller sample size because there are far fewer men than women who have ever married in any given age range. Consequently, these results are not reported but available upon request.

remarriage. Column 3 controls for poverty and near poverty as proxies of socioeconomic status.⁸ being poor is related to a significant delay in remarriage by 52%, if at all, whereas near poverty has no such effect. Column 4 incorporates marital history: although age at first marriage is unrelated to remarriage, later age at first divorce significantly postpones remarriage, likely due to the upper limit on age in the data. The later a woman divorces, the less time she has to search for a new spouse. On the other hand, widows are not significantly slower to remarry, contrary to findings using older data, likely because of the youthfulness of the sample and the rarity of bereavement in this age range. Note that the coefficient estimate of African Americans was reduced after controlling for poverty status and marital history suggesting that part of their slow entry into remarriage operates through these pathways. This is also the case with Type II Protestants, albeit with smaller change in effect size. The addition of having biological children from the previous relationship in column 5 changed no results from the earlier regressions, and these children appeared not to have impeded remarriage, at least among 2006–2010 NSFG female respondents. An insignificant coefficient estimate of the shape parameter (κ) casts doubts on the validity of the generalized gamma distribution and suggests the data could be better fitted with a lognormal distribution. I then fitted the regressions accordingly and conducted likelihood ratio tests for each model to compare these two.⁹ The last two rows of Table 3 present these test results. The chi-square statistics are all highly significant, suggesting the validity of the generalized gamma distribution, and the lognormal distribution is not more parsimonious than the former.

⁸ Since there is only one measurement of income, and in some cases it was measured after remarriage, the interpretation of these two variables should be regarded with caution, despite some stability of an individual's income trajectory.

⁹ Since survey data setting is not supported when performing likelihood ratio test, I only estimated using weighted data without using information on stratum and primary sampling unit. Results from regressions accounting for sample design and those from merely weighted data do not differ substantially, particularly among significant coefficient estimates.

Results of competing risk models where cohabitation is treated as an alternative to remarriage mirror those of generalized gamma ones, with some exceptions.¹⁰ The most noticeable substantive difference is that the subhazard ratio of age is significantly different from one in all specifications, meaning that older NSFG female respondents remarried significantly more quickly than younger ones. This result probably originates from the fact that older respondents are more likely to have married, divorced, passed through the “rite” of cohabitation, and moved into remarriage.¹¹ The remainder of the results is the same as in the generalized gamma regressions: African American women were significantly less likely to remarry than whites (and the effect is not eliminated after controlling for poverty status), and evangelical Protestants remarried significantly more quickly than mainline Protestants, as did those living in an intact family at age 14. Older age at first divorce significantly delayed remarriage, as did living in poverty.

**Table 2.3: Generalized Gamma Regression Results for Entry into Remarriage
2006-2010 NSFG Female – Part A**

	Model 1	Model 2	Model 3	Model 4	Model 5
Number of Observations	1641	1627	1627	1627	1627
	Time Ratio (Robust Standard Error)				
Age	0.99 (0.01)	0.99 (0.01)	1.00 (0.01)	0.98 (0.01)	0.98 (0.01)
African American	1.78** (0.31)	1.78** (0.31)	1.72** (0.31)	1.61* (0.30)	1.61* (0.31)
Hispanic	0.89 (0.15)	0.90 (0.16)	0.87 (0.15)	0.87 (0.15)	0.87 (0.15)

¹⁰ See Table A2.3 in appendix A. Being semiparametric, competing risk models are similar to Cox proportional hazard ones, and the interpretation of subhazard ratios resembles hazard ratios and is different from that of time ratios. A subhazard ratio greater than one means respondents with that trait are more likely to enter remarriage, and a subhazard ratio less than one (such as African American) suggests these people are less likely to remarry.

¹¹ Despite the seeming popularity of cohabitation in the US., it remains a layover in one’s transition to marriage rather than a destination in and of itself even among the formerly married. The duration of cohabitation, either premarital or post-marital, is still short.

**Table 2.3: Generalized Gamma Regression Results for Entry into Remarriage
2006-2010 NSFG Female (continued)**

	Model 1	Model 2	Model 3	Model 4	Model 5
No High School	1.05 (0.17)	1.04 (0.17)	0.96 (0.15)	1.00 (0.15)	1.00 (0.15)
Some College	0.98 (0.13)	0.97 (0.13)	0.99 (0.14)	1.01 (0.14)	1.02 (0.14)
BA or more	0.89 (0.14)	0.84 (0.13)	0.90 (0.15)	0.84 (0.15)	0.84 (0.15)
No Religious Affiliation	1.10 (0.26)	1.13 (0.27)	1.10 (0.27)	1.16 (0.28)	1.15 (0.28)
Type II Protestant	0.65** (0.11)	0.67* (0.11)	0.69* (0.10)	0.72* (0.11)	0.72* (0.11)
Catholic	1.00 (0.17)	1.05 (0.18)	1.06 (0.18)	1.08 (0.18)	1.08 (0.18)
Intact Family @ 14		0.83† (0.09)	0.82† (0.08)	0.79* (0.09)	0.80* (0.09)
Mother Gave Birth in Teens		0.87 (0.11)	0.87 (0.10)	0.86 (0.10)	0.86 (0.10)
Maternal Edu: No HS		1.09 (0.16)	1.10 (0.17)	1.08 (0.17)	1.08 (0.17)
Maternal Edu: Some College		1.07 (0.19)	1.09 (0.19)	1.09 (0.19)	1.08 (0.19)
Maternal Edu: BA or more		1.32 (0.27)	1.33 (0.27)	1.28 (0.25)	1.28 (0.25)
Poor			1.54** (0.20)	1.55** (0.22)	1.54** (0.22)
Near Poor			0.98 (0.15)	0.96 (0.16)	0.96 (0.16)
Cause of Previous Marital Disruption				1.01 (0.15)	1.01 (0.15)
Age at 1st Marriage				1.00 (0.02)	1.00 (0.02)
Age at 1st Divorce				1.05*** (0.01)	1.04** (0.01)
Children from Prev. Relationship					1.05 (0.11)

**Table 2.3: Generalized Gamma Regression Results for Entry into Remarriage
2006-2010 NSFG Female (continued)**

	Model 1	Model 2	Model 3	Model 4	Model 5
/ln_sig	0.20*** (0.05)	0.17** (0.06)	0.13* (0.06)	0.16** (0.06)	0.16** (0.06)
/kappa	0.03 (0.16)	0.12 (0.17)	0.22 (0.17)	0.17 (0.17)	0.16 (0.17)
sigma	1.22 (0.07)	1.18 (0.07)	1.14 (0.07)	1.18 (0.07)	1.18 (0.07)
LR chi2(1)	3.27E+07	3.27E+07	3.27E+07	3.27E+07	3.27E+07
Prob>chi2	0.00	0.00	0.00	0.00	0.00

***: p<0.001; **: p<0.01; *: p<0.05; †: p<0.10

Table 2.4 presents results of generalized gamma regressions of the entry into second marriage among NLSY79 respondents.¹² Column 1 includes only basic socio-demographics, and results are somewhat different from those based on the NSFG female sample. Consistent with the literature (De Graaf and Kalmijn 2003; de Jong Gierveld 2004; England and McClintock 2009; Shafer and James 2013; Sweeney 2002; White 1979), it takes significantly more time for women to enter into a remarriage, and their wait time is 1.14 times that of men. Age, as in NSFG, has no bearing on remarriage. Racial and ethnic minorities are significantly less likely to remarry than their white counterparts. African Americans in particular have to wait almost twice as much time (87%) to remarry as do white individuals. With respect to religious affiliation measured in 1979, Catholics on average take 40% more time to remarry than mainline Protestants. Individuals living in the South at age 14, on the other hand, enter into remarriage significantly more quickly than others, and these two results contradict hypothesis 1a. While family background (living in intact family at age 14 and

¹² Results of entry into the third marriage are similar to those of the second marriage. Please see Table A2.4 in appendix A.

mother giving birth as a teenager)¹³ is unrelated to remarriage, their inclusion in column 2 did increase the coefficient estimate of Hispanics to 1.34, making it highly significant. Racial and ethnic minorities therefore are significantly less likely to remarry or take significantly more time to do so, consistent with hypothesis 1b. Column 3 controls for non-cognitive traits and attitudes towards women's role in family and society:¹⁴ among all traits, only sociability as an adult is significant, and the more outgoing a person is as an adult, the more likely or the shorter the wait time is to remarry.¹⁵ Unsurprisingly, respondents with a more traditional view on the division of household labor by gender are significantly more likely to enter remarriage, while those placing greater importance on women's contribution to household finances also tend to remarry more quickly.¹⁶

Each of the following four specifications includes some time-varying covariates: socioeconomic status, labor market activities, and the presence of biological children at home.¹⁷ Accounting for economic well-being and labor market activities, column 4 changed little from column 3 (except for those reporting no religious affiliation), and poverty and near-poverty status are both insignificant.¹⁸ On the other hand, labor force participation is strongly associated with entry into remarriage, particularly full-time employment (32% shorter wait time), affirming the notion that workplace facilitates the meeting of a potential spouse (De Graaf and Kalmijn 2003; Kalmijn and

¹³ I did not include maternal education in NLSY79 regressions, as these variables were never significant but reduced sample size by several hundred.

¹⁴ The drastic reduction in sample size, i.e., the number of subjects, is due to two reasons: First, a large number of respondents did not provide information on their parents, reflected in the change between columns 1 and 2. Second, many of these non-cognitive traits were not measured at baseline but instead at a later time (e.g., sociability in 1985 and Rosenberg self-esteem scale in 1987), and attrition has already set in to reduce the sample size further.

¹⁵ Neither Pearlin mastery scale nor the degree of risk aversion or time preference is significant in any regression, separately or jointly, and hence is not included in the final report.

¹⁶ Interpretation of this coefficient estimate should be more cautious, as Cronbach's alpha of this variable is low.

¹⁷ A drop in the number of cases between columns 3 and 6 by more than 600 occurs for several reasons. First, a large number of respondents remarried very rapidly after marital disruption so that the beginning and end of the waiting period to remarriage do not saddle an interview date. As a result, there is no way to attach time-varying covariates to these respondents. Second, many respondents tended to disappear from interviews around the time of marital change (either separation, divorce, or entry into another marriage), making their waiting period "invisible" from the perspective of time-varying covariates. Further drop in the number of cases reflects missing data on total net family income, poverty status, and employment.

¹⁸ I also experimented with logged household income at each wave. Since it has never been significant, I removed it from the analyses of entry into remarriage.

Flap 2001; Mahay and Laumann 2004) among middle-aged individuals and lending support to hypothesis 1a. Column 5 additionally incorporated marital history and age at first birth.¹⁹ Individuals who entered first marriage later or those who divorced later also take more time to remarry, if they remarry at all. This result is remarkable because, with a median age at second marriage in NLSY79 being approximately 31, these individuals had between 14 and 21 years to search for another spouse and enter remarriage by the 2010 interview (aged 45 to 52), and the case of insufficient time is no longer applicable as in NSFG. Moreover, once marital history was held constant, respondents with a college degree or more remarried significantly more quickly, suggesting the effect of education operates partially through later marriage (and hence later divorce), consistent with the literature (Bumpass, Sweet, and Castro Martin 1990; Chiswick and Lehrer 1990; de Jong Gierveld 2004; Sweeney 2002) This is likely due to the rising significance of education homogamy (Qian and Preston 1993; Schwartz and Mare 2005) and the growing importance of complementarity in household production (Lam 1988). Religious affiliation also became significant after controlling for marital history. Age at first birth became marginally significant, indicating that having a first child later delayed entry into remarriage, and this applies for both men and women. The inclusion of marital and fertility history also effectively eliminated the significance of gender role attitudes, as these variables are significantly and negatively correlated with gender role attitudes, and to a lesser extent, women's contributions to household finances. Column 6 controlled for the presence of biological children at home and whether a respondent had children from a previous relationship, since men may not retain child custody after divorce.²⁰ Results indicate that having any child from a previous relationship significantly prolonged the wait time to remarriage, whereas having biological

¹⁹ I did not include duration of first marriage, as it led to collinearity when both ages at first marriage and divorce were present.

²⁰ Since a non-marital birth may precipitate entry into remarriage, I also experimented with lagged presence of biological children in the household. Coefficient estimates of the lagged variable are not significant and hence not reported.

children in the household has no bearing on the pace of remarriage,²¹ contradicting findings from earlier studies. It appears that the mere existence of children from a previous marriage alone is sufficient to significantly delay remarriage. The next three rows of Table 2.4 following substantive coefficient estimates report estimated parameters of the generalized gamma distribution. As in NSFG regressions, estimated kappa is always insignificant across models, again suggesting the data may well follow a lognormal distribution. I therefore used lognormal models to refit the data and performed a series of likelihood ratio tests, since lognormal models are fully nested within gamma ones. The last row shows that, across specifications, the generalized gamma model actually performed better than the lognormal one due to highly significant chi-square statistics.²²

As a non-trivial proportion of formerly married respondents opted for cohabitation as their second co-residential relationship (about 10%) or lived with their spouse before remarriage,²³ I used competing risk models to treat stand-alone cohabiting union as an alternative to remarriage. These can hence be removed from the control group, namely those who have not remarried by censoring date. Results of competing risk models largely resemble those from generalized gamma regressions except that the coefficient estimates of women in competing risk models are never significant.²⁴ All the other subhazard ratios are consistent with time ratios reported in Table 2.4.

Taken together, these results provide mixed support for the aforementioned hypotheses. Hypothesis 1a suggests that because of their temporal proximity to the remarriage processes, attained status variables such as socioeconomic status and labor market activities should dwarf ascribed status variables such as religious affiliation, family background, non-cognitive traits, and attitudes in determining the pace of remarriage. While full-time employment significantly shortens

²¹ Biological children at home remain insignificant even if it entered regression singly.

²² Tests based on the Akaike Information Criterion lead to the same conclusion.

²³ Premarital cohabitation tends to resolve quickly into marriage in the U.S., even in the second marriage. Among NLSY79 respondents, 55.11% of cohabitation is converted into formal marriage within 12 months and more than three quarters within 24 months.

²⁴ See Table A2.4 in appendix A for full results.

wait time to remarriage, part-time work does not. On the other hand, household economic well-being, proxied either by poverty status or by total net family income, is unrelated to remarriage, as are most non-cognitive traits, gender role attitudes, and family background. Even though the coefficient estimate of full-time work is substantial, it pales in comparison to those of religious affiliation, particularly in the last two columns. Consequently, only part of hypothesis 1a is validated, and attained status variables did not relegate ascribed status to the back burner in entry into remarriage. Education (especially having a college degree or more) and religious affiliation remain powerful covariates.

Table 2.4: Generalized Gamma Regression Results of Entry into Remarriage 2006–2010 NSFG Female – Part B

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
N						
Observations	14217	12052	11074	9396	7812	7812
N Subjects	3165	2707	2492	2169	1849	1849
	Time Ratio (Robust Standard Error)					
Female	1.12† (0.07)	1.13† (0.08)	1.10 (0.08)	1.07 (0.09)	1.30** (0.12)	1.35** (0.14)
Age	1.02 (0.01)	1.00 (0.02)	1.00 (0.02)	1.00 (0.02)	0.99 (0.02)	1.00 (0.02)
African American	1.87*** (0.16)	2.01*** (0.20)	2.00*** (0.20)	2.03*** (0.22)	1.70*** (0.21)	1.62*** (0.19)
Hispanic	1.19† (0.12)	1.34** (0.14)	1.32** (0.14)	1.32* (0.15)	1.45** (0.17)	1.44** (0.17)
No High School	1.15 (0.13)	1.03 (0.13)	1.06 (0.14)	1.04 (0.15)	1.01 (0.16)	0.98 (0.15)
Some College	0.93 (0.08)	0.96 (0.08)	1.02 (0.09)	1.00 (0.09)	0.94 (0.10)	0.97 (0.10)
BA or more	1.01 (0.10)	0.94 (0.10)	1.02 (0.11)	0.99 (0.11)	0.72** (0.09)	0.78† (0.10)
No Religious Affiliation	1.17 (0.13)	1.22† (0.14)	1.15 (0.14)	1.28* (0.16)	1.39* (0.18)	1.38* (0.18)
Type II Protestant	1.11 (0.13)	1.15 (0.14)	1.16 (0.15)	1.22 (0.16)	1.31* (0.18)	1.29† (0.17)

**Table 2.4: Generalized Gamma Regression Results of Entry into Remarriage
2006–2010 NSFG Female – Part B (continued)**

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Catholic	1.39** (0.16)	1.37** (0.17)	1.39** (0.17)	1.53** (0.20)	1.54** (0.21)	1.51** (0.21)
South @ 14	0.84*** (0.04)	0.83** (0.05)	0.83** (0.05)	0.84* (0.06)	0.91 (0.06)	0.92 (0.06)
Intact Family @ 14		1.03 (0.09)	1.09 (0.09)	1.12 (0.10)	1.10 (0.11)	1.11 (0.11)
Mother Gave Birth in Teens		0.89 (0.09)	0.91 (0.09)	0.90 (0.10)	0.87 (0.10)	0.87 (0.10)
Sociability as Adult, 1985			0.87** (0.04)	0.88* (0.05)	0.90† (0.05)	0.90† (0.05)
Rotter Locus of Control in 1979			1.02 (0.02)	1.02 (0.02)	1.01 (0.02)	1.01 (0.02)
Rosenberg Self-Esteem in 1987			0.99 (0.01)	0.99 (0.01)	0.99 (0.01)	0.99 (0.01)
Gender Role Attitude, 1982			0.85* (0.07)	0.82* (0.07)	0.94 (0.09)	0.93 (0.09)
Women Work Fin. Needs, 1982			0.88* (0.06)	0.86* (0.06)	0.93 (0.07)	0.94 (0.07)
Poverty				0.95 (0.12)	1.09 (0.14)	1.02 (0.13)

**Table 2.4: Generalized Gamma Regression Results of Entry into Remarriage
2006–2010 NSFG Female – Part B (continued)**

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Near Poverty				0.80 (0.11)	0.99 (0.14)	0.95 (0.13)
Full-Time Employment				0.68** (0.10)	0.73* (0.11)	0.76† (0.12)
Part-Time Employment				0.84 (0.12)	1.05 (0.16)	1.08 (0.17)
Cause of Prev. Mar. Disruption					0.99 (0.09)	1.02 (0.09)
Age at 1st Marriage					1.04** (0.01)	1.05*** (0.01)
Age at 1st Divorce					1.05*** (0.01)	1.04*** (0.01)
Age at 1st Birth					1.00† (0.00)	1.00* (0.00)
Children from First Marriage						1.85*** (0.23)
Biological Child @ Household						0.91 (0.10)
/ln_sig	0.35*** (0.03)	0.34*** (0.03)	0.33*** (0.03)	0.31*** (0.03)	0.27*** (0.03)	0.25*** (0.03)

Hypothesis 1b posits that, if the marriage market is highly segregated by certain ascribed status variables such as race and ethnicity and positive assortative mating by these traits is strong, then we should expect to observe highly significant coefficient estimates of these variables in entry into remarriage. Results from Tables 3 and 4 confirm this: African Americans are significantly less likely to remarry than whites in both NSFG and NLSY79, and Hispanics remarry significantly more slowly than do whites in NLSY79. Hypothesis 1c contends that if demographic information, such as age and gender, shapes an individual's marriage market position by placing them along different positions in the life course, these variables should be significantly associated with remarriage. However, only the part pertaining to gender holds true. Age, on the other hand, has never been significantly related to remarriage in both datasets, thereby lending only partial support to hypothesis 1c.

Findings from Tables 2.3 and 2.4 largely support hypothesis 2, as marital and fertility histories are in the same domain as entry into remarriage. Consistent with the literature, respondents who entered into or exited from first marriage later are less likely to enter remarriage quickly, as are those who gave first birth later and who had children from a previous relationship, because there is much less time available to search for another spouse and remarry. In addition, for men and women in NLSY79 (but not NSFG), having a biological child from a previous relationship is far more important in the pace to remarry than the presence of his or her child in the household. On the other hand, contrary to earlier findings, the cause of previous marital disruption (i.e., widowhood vis-à-vis divorce) is unrelated to entry into remarriage, perhaps because marriage in contemporary society among prime-age adults is far less likely to end in the death of a spouse than just a couple of decades ago. This non-finding is not an artifact of the small number of bereaved respondents in

both datasets. Rather, it reflects a pattern seen in descriptive statistics.²⁵ Consequently, hypothesis 2 receives only partial support.

Exit from Remarriage

Table 2.5 presents event history results comparing marital duration among NSFG female respondents who have experienced both first and second divorce.²⁶ Since there are only 312 women with two divorces or separations (in the second marriage) in NSFG (and hence a total of 614 observations if design effects are not accounted for), results here should be interpreted with caution. The first column shows that, on average, the duration of a remarriage to divorce is 37% more than that of a first marriage, even among those who entered first marriage early and exited from it rather quickly. Column 2 includes standard socio-demographic controls. Older respondents ended their marriage significantly more slowly than younger ones, presumably because of their greater maturity. Latinas divorced significantly more slowly than others, and women without a high school diploma are significantly quicker to file for a second divorce than otherwise, consistent with the well-documented disadvantage associated with less education. Older age at first marriage is related to a significantly faster second divorce because the analytical sample is limited to respondents with two divorces and because of the age cap in NSFG: there is much less time available to squeeze in two marriages. Economic well-being is unrelated to marital duration.

²⁵ The average duration between the end of a first marriage and the beginning of a second marriage is 41 months for divorced NSFG women and 39 months for widowed ones. Among NLSY79 respondents, the average length of wait time is 49 months for divorced individuals and 51 months for widowed ones. These differences are too small to be significant.

²⁶ By definition, remarried women have experienced a first divorce (fewer than 5% were widowed). As many of them have not yet had a second divorce and probably never will, it is necessary to limit the analytical sample to those who have gone through two divorces for the comparison to be meaningful.

Table 2.5 Generalized Gamma Regression Results of Exit from Remarriage vs. First Marriage 2006-2010 NSFG Female – Part A

	Model 1	Model 2	Model 3	Model 4	Model 5
Number of Observations	614	614	606	606	606
	Time Ratio (Robust Standard Error)				
Remarriage	1.37* (0.17)	1.54*** (0.13)	1.56*** (0.13)	1.55*** (0.13)	2.89*** (0.33)
Age		1.06*** (0.01)	1.06*** (0.01)	1.06*** (0.01)	1.03*** (0.01)
African American		0.86 (0.09)	0.88 (0.09)	0.87 (0.09)	1.00 (0.07)
Hispanic		1.36* (0.17)	1.36* (0.16)	1.31* (0.13)	0.99 (0.06)
No High School		0.85* (0.07)	0.87 (0.08)	0.88 (0.08)	0.91 (0.07)
Some College		1.04 (0.08)	1.06 (0.09)	1.07 (0.09)	1.08 (0.07)
BA or more		0.94 (0.08)	0.95 (0.07)	0.98 (0.08)	1.11 (0.08)
No Religious Affiliation		0.80 (0.15)	0.80 (0.17)	0.81 (0.16)	0.98 (0.15)
Type II Protestant		1.15 (0.12)	1.13 (0.14)	1.13 (0.14)	1.11 (0.12)
Catholic		1.00 (0.12)	0.99 (0.13)	0.98 (0.13)	1.04 (0.11)
Foreign Born		0.97 (0.07)	0.95 (0.07)	0.97 (0.06)	1.09 (0.06)
Intact Family @ 14			1.16† (0.09)	1.15† (0.09)	1.08 (0.05)
Mother Gave Birth in Teens			1.04 (0.06)	1.06 (0.06)	1.04 (0.04)
Maternal Edu: No HS			1.02 (0.07)	1.02 (0.07)	1.04 (0.06)
Maternal Edu: Some College			1.04 (0.18)	1.00 (0.16)	1.01 (0.12)

**Table 2.5: Generalized Gamma Regression Results of Exit from
Remarriage vs. First Marriage
2006-2010 NSFG Female – Part A (continued)**

	<u>Model 1</u>	<u>Model 2</u>	<u>Model 3</u>	<u>Model 4</u>	<u>Model 5</u>
Maternal Edu: BA or more			1.03 (0.08)	1.02 (0.08)	1.14 (0.09)
Poor				0.97 (0.07)	1.04 (0.07)
Near Poor				1.15† (0.09)	1.11 (0.08)
Age at 1st Marriage					0.86*** (0.01)
Age at 1st Divorce					1.12*** (0.02)
Age at 2nd Marriage					1.00 (0.01)
/ln_sig	-0.19* (0.07)	-0.35** (0.11)	-0.36** (0.12)	-0.36** (0.12)	-0.60*** (0.11)
/kappa	1.20*** (0.19)	1.45*** (0.39)	1.47** (0.47)	1.47** (0.45)	1.11** (0.38)
sigma	0.83 (0.06)	0.71 (0.08)	0.70 (0.08)	0.70 (0.08)	0.55 (0.06)

***: $p < 0.001$; **: $p < 0.01$; *: $p < 0.05$; †: $p < 0.10$

Table 2.6 shows time ratio results of the generalized gamma regression comparing the failure time of first and second marriages among NLSY79 respondents. Again, the nature of this research question drastically shrank the sample size to less than a thousand. The first column shows that in the absence of any control, NLSY79 respondents took significantly more time to dissolve their second marriage than their first one. Column 2 adds basic demographic controls, and the estimate of remarriage remains highly significant, while the second marriages of older individuals and Hispanics take significantly more time to dissolve. Contrary to the formation of remarriage, education, religious affiliation, family background, and gender role attitudes have no influence on the relative

pace to divorce between marriages, and this holds true for all specifications. Holding socioeconomic status constant in column 4 led to some unexpected results: while higher income delayed divorce and being poor precipitated divorce is quite natural, both full-time and part-time employment is significantly associated with shorter duration of second marriage, which is rather counterintuitive. Marital and fertility history again are highly significantly associated with the failure time of second marriage vis-à-vis the first one: a later first divorce may signal a respondent's commitment to marriage and hence also a later second divorce.²⁷ Coefficient estimate of age at first marriage again has a rather mechanical interpretation: the older a person is when entering the first marriage, the less time there is available to end both marriages. On the other hand, higher age at second marriage perhaps is indicative of a certain degree of maturity such that the failure time of a second marriage is significantly longer. The presence of biological children also significantly slowed down the pace to a second divorce, whereas stepchildren are unrelated.

Taken together, results from Tables 2.5 and 2.6 indicate that among individuals dissolving their second marriage, the failure time of second marriage is significantly longer than that of the first marriage, validating hypothesis 3 and contradicting most findings of earlier studies (e.g., Booth and Edwards 1992; Bulanda and Brown 2007; Furstenberg and Spanier 1984; MacDonald and DeMaris 1995; Whitton, Stanley, Markman, and Johnson 2013).

²⁷ Unlike the case of NSFG, there is no age cap for NLSY79 respondents, and they have plenty of time to enter into and exit from a second marriage.

Table 2.6:
Generalized Gamma Regression Results of Exit from Remarriage vs. First Marriage
2006-2010 NSFG Female – Part B

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
N observations	8427	8419	8192	6818	6185	6185
N subjects	849	848	819	808	723	723
	Time Ratio (Robust Standard Error)					
Remarriage	1.58*** (0.08)	1.62*** (0.07)	1.62*** (0.07)	1.59*** (0.08)	2.83*** (0.14)	2.75*** (0.12)
Female		1.00 (0.04)	1.00 (0.04)	0.94 (0.04)	0.95† (0.03)	0.89*** (0.03)
49 Age		1.03*** (0.01)	1.03*** (0.01)	1.03*** (0.01)	1.01† (0.01)	1.01 (0.01)
African American		0.98 (0.05)	0.99 (0.05)	1.06 (0.06)	1.01 (0.03)	1.01 (0.03)
Hispanic		1.18** (0.06)	1.16** (0.06)	1.19** (0.07)	1.10* (0.04)	1.05 (0.04)
No High School		1.11† (0.07)	1.10 (0.07)	1.14† (0.08)	0.99 (0.04)	0.98 (0.04)
Some College		1.02 (0.05)	1.03 (0.05)	0.97 (0.05)	1.03 (0.04)	1.05 (0.04)
BA or more		1.02 (0.06)	1.03 (0.07)	0.95 (0.06)	0.99 (0.04)	1.04 (0.04)
No Religious Affiliation		0.98 (0.06)	1.00 (0.06)	0.98 (0.06)	1.02 (0.04)	0.99 (0.04)
Type II Protestant		1.00 (0.06)	1.01 (0.06)	0.97 (0.07)	0.99 (0.04)	0.97 (0.04)

Table 2.6:
Generalized Gamma Regression Results of Exit from Remarriage vs. First Marriage
2006-2010 NSFG Female – Part B (continued)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Catholic		0.93 (0.06)	0.95 (0.06)	0.90 (0.06)	0.98 (0.04)	0.97 (0.04)
Foreign Born		1.07 (0.09)	1.04 (0.09)	1.03 (0.10)	1.09 (0.07)	1.04 (0.07)
Intact Family @ 14		0.99 (0.04)	0.99 (0.04)	0.99 (0.04)	0.99 (0.03)	0.97 (0.03)
Gender Role Attitude			1.02 (0.04)	1.01 (0.05)	0.98 (0.03)	0.98 (0.03)
Women Work Financial Needs			0.96 (0.03)	0.96 (0.03)	0.99 (0.02)	0.98 (0.02)
Total Net Family Income				1.03† (0.02)	1.02† (0.01)	1.00 (0.01)
Poverty				0.82* (0.08)	0.88* (0.05)	0.84** (0.05)
Near Poverty				0.91 (0.07)	0.97 (0.05)	0.92 (0.05)
Full-Time Employment				0.74** (0.07)	0.82*** (0.05)	0.85** (0.05)
Part-Time Employment				0.85* (0.07)	0.92 (0.05)	0.93 (0.05)
Age at 1st Marriage					0.91*** (0.01)	0.92*** (0.01)
Age at 1st Divorce					1.09*** (0.01)	1.08*** (0.01)
Age at 2nd Marriage					1.01* (0.00)	1.01* (0.00)
Age at First Birth					1.00** (0.00)	1.00** (0.00)

Table 2.6:
Generalized Gamma Regression Results of Exit from Remarriage vs. First Marriage
2006-2010 NSFG Female – Part B (continued)

	Model 1	Model 2	Model 3	Model 4	Model 5	
Biological Children @ Home					1.35*** (0.05)	
Stepchildren @ Home					1.05 (0.07)	
/ln_sig	-0.39*** (0.04)	-0.43*** (0.04)	-0.43*** (0.04)	-0.43*** (0.04)	-0.85*** (0.04)	-0.88*** (0.04)
/kappa	1.00*** (0.11)	1.11*** (0.13)	1.09*** (0.13)	1.08*** (0.13)	0.94*** (0.14)	0.79*** (0.13)
sigma	0.68 (0.02)	0.65 (0.02)	0.65 (0.02)	0.65 (0.02)	0.43 (0.02)	0.42 (0.02)

While the previous two tables focus on the comparison of marital duration by marriage order, the following analyses expanded the sample to examine the failure time of second marriage by including those whose second marriage was still intact at the time of interview. Table 2.7 presents time ratio results from the generalized gamma regression of exit from the second marriage using the female sample of NSFG. Contrary to entry to remarriage (Table 2.3), this time there are much fewer significant coefficient estimates, such as race, education, religious affiliation, or family background, due perhaps to fewer remarriages in the data or the fact that these women were further into midlife so that socio-demographics measured distant in time hardly mattered in current decisions. In the first two models, women with a college degree or more have a failure time twice that of those with a high school diploma, but effect sizes were greatly reduced once poverty status is accounted for. On the other hand, marital duration of those without religious affiliation while growing up is half of mainline Protestants. Interestingly, foreign-born women on average took twice as much time to end their second marriage than their native-born counterparts, and this estimate is highly significant across specifications. We shall see this peculiar pattern repeat itself in the NLSY79 sample. Being poor or near poor is related to significantly quicker dissolution of a second marriage—more than twice as fast since the time ratios are below 50%, whereas neither marital nor fertility history is significant.

Table 2.7:
Generalized Gamma Regression Results of Exit from Remarriage vs. First Marriage
2006-2010 NSFG Female – Part A

	Model 1	Model 2	Model 3	Model 4	Model 5
N Observations	738	732	732	732	732
	Time Ratio (Robust Standard Error)				
Age	1.00 (0.02)	1.00 (0.02)	0.99 (0.02)	0.99 (0.02)	0.99 (0.02)
African American	0.77 (0.34)	0.77 (0.36)	0.84 (0.24)	0.71 (0.17)	0.71 (0.17)
Hispanic	0.68 (0.32)	0.65 (0.32)	0.60* (0.15)	0.58* (0.15)	0.58* (0.15)
No High School	0.75 (0.21)	0.74 (0.21)	1.11 (0.23)	1.12 (0.24)	1.13 (0.25)
Some College	1.00 (0.22)	1.08 (0.25)	0.89 (0.15)	0.89 (0.15)	0.90 (0.15)
BA or more	2.06* (0.70)	2.58* (0.97)	1.37 (0.41)	1.31 (0.39)	1.34 (0.39)
No Religious Affiliation	0.48 (0.23)	0.43† (0.19)	0.57† (0.19)	0.49† (0.18)	0.49* (0.17)
Type II Protestant	1.06 (0.34)	0.97 (0.33)	1.13 (0.22)	1.09 (0.21)	1.08 (0.21)
Catholic	1.25 (0.51)	1.14 (0.49)	1.35 (0.31)	1.23 (0.32)	1.24 (0.34)
Foreign Born	2.32* (0.91)	2.19† (0.89)	2.47** (0.78)	2.47** (0.77)	2.52** (0.80)
Intact Family @ 14		1.19 (0.30)	1.28 (0.21)	1.26 (0.21)	1.26 (0.21)
Mother Gave Birth in Teens		1.03 (0.18)	1.03 (0.14)	0.96 (0.14)	0.96 (0.14)
Maternal Edu: No HS		1.09 (0.29)	0.90 (0.13)	0.87 (0.13)	0.86 (0.13)
Maternal Edu: Some College		0.73 (0.30)	0.87 (0.25)	0.85 (0.24)	0.86 (0.27)
Maternal Edu: BA or more		0.55† (0.17)	0.72 (0.17)	0.68† (0.15)	0.67† (0.15)
Poor			0.40*** (0.09)	0.41*** (0.09)	0.41*** (0.09)

Table 2.7:
Generalized Gamma Regression Results of Exit from Remarriage vs. First Marriage
2006-2010 NSFG Female – Part A (continued)

	Model 1	Model 2	Model 3	Model 4	Model 5
Near Poor			0.53** (0.11)	0.50** (0.10)	0.51** (0.10)
Cause of Previous Mar. Disruption				1.56 (0.48)	1.54 (0.50)
Age at 1st Marriage				1.04 (0.04)	1.04 (0.04)
Age at 1st Divorce				0.96 (0.03)	0.96 (0.02)
Age at 2nd Marriage				1.01 (0.03)	1.01 (0.03)
Children from Prev. Relationship					1.07 (0.26)
/ln_sig	0.24 (0.40)	0.26 (0.40)	-0.83** (0.26)	-0.71** (0.27)	-0.67** (0.24)
/kappa	0.75 (0.70)	0.70 (0.72)	3.08*** (0.82)	2.74*** (0.70)	2.60*** (0.67)
sigma	1.27 (0.51)	1.30 (0.52)	0.44 (0.11)	0.49 (0.13)	0.51 (0.13)

***: $p < 0.001$; **: $p < 0.01$; *: $p < 0.05$; †: $p < 0.10$

Table 2.8 presents time ratio results of exit from the second marriage using NLSY79. Column 1 only included socio-demographic controls, and women's time to divorce or separation is significantly less than that of men, amounting to 80% of the latter. This pattern persists through all models. Age, on the other hand, is significantly associated with delayed re-divorce, but the effect was eliminated after controlling for marital and fertility history. Similar to NSFG, time to a second divorce for college graduates is 1.62 times than that of high school graduates, but the difference is

much attenuated once marital and fertility history was held constant. Being foreign-born, however, is significantly associated with a substantial “advantage” with respect to a second divorce, and more traditional gender role attitudes are related to significantly shorter remarriages, consistent with Glass and Levchak (2014). Poverty and near poverty are significantly associated with a faster second divorce, albeit only marginally. Contrary to entry into remarriage (Table 2.4), various signposts along marital history are unrelated to a second divorce. Nonetheless, the presence of biological and stepchildren both significantly impeded disruption of a second marriage in model 5, even though the effect size of biological children is much larger. That the time ratio for stepchildren at home is significantly greater than one provides yet another piece of evidence against the incomplete institutionalization hypothesis (Cherlin 1978). Beyond these, most variables bear no significant relationship with the failure time of second marriage, including socio-demographics, education, religious affiliation, non-cognitive traits, labor market activities, and even marital history, especially in the full model. Across all five specifications based on NLSY79, the estimated parameters of the generalized gamma distribution σ and κ are both highly significant, suggesting that the generalized gamma fits the data better than any special case distribution (such as Weibull, lognormal, or exponential distributions), and the same applies to the last three regressions using the NSFG female sample.

Table 2.8:
Generalized Gamma Regression Results of Exit from Remarriage
2006-2010 NSFG Female – Part B

	Model 1	Model 2	Model 3	Model 4	Model 5
N observations	11734	10857	9412	8446	8446
N subjects	2011	1850	1757	1554	1554
	Time Ratio (Robust Standard Error)				
Female	0.84* (0.07)	0.83* (0.08)	0.80* (0.08)	0.85 (0.09)	0.75* (0.08)
Age	1.04* (0.02)	1.04† (0.02)	1.04† (0.02)	1.03 (0.02)	1.03 (0.02)
African American	0.88 (0.10)	0.86 (0.10)	1.00 (0.12)	0.96 (0.13)	0.95 (0.12)
Hispanic	0.88 (0.11)	0.89 (0.12)	0.91 (0.13)	0.90 (0.14)	0.91 (0.13)
No High School	0.77* (0.10)	0.81 (0.11)	0.79 (0.12)	0.80 (0.13)	0.83 (0.13)
Some College	1.19 (0.13)	1.12 (0.13)	1.13 (0.14)	1.15 (0.17)	1.18 (0.16)
BA or more	1.62** (0.24)	1.59** (0.24)	1.49* (0.24)	1.32 (0.24)	1.32 (0.23)
No Religious Affiliation	1.37* (0.19)	1.31† (0.19)	1.24 (0.20)	1.19 (0.21)	1.16 (0.19)
Type II Protestant	1.00 (0.14)	0.97 (0.15)	0.88 (0.15)	0.89 (0.16)	0.91 (0.16)
Catholic	1.23 (0.18)	1.18 (0.18)	1.06 (0.17)	1.03 (0.19)	1.04 (0.18)
Foreign Born	1.67* (0.36)	1.74* (0.40)	1.85* (0.46)	2.17** (0.56)	2.05** (0.49)
Intact Family @ 14	1.16 (0.11)	1.12 (0.11)	1.04 (0.11)	1.03 (0.12)	1.03 (0.11)
Sociability as Adult		0.97 (0.07)	0.97 (0.07)	0.93 (0.07)	0.94 (0.07)
Rotter Locus of Control in 1979		1.01 (0.02)	1.01 (0.02)	1.01 (0.02)	1.00 (0.02)
Rosenberg Self-Esteem in 1987		1.00 (0.01)	1.00 (0.01)	1.00 (0.02)	1.00 (0.01)

Table 2.8:
Generalized Gamma Regression Results of Exit from Remarriage
2006-2010 NSFG Female – Part B (continued)

	Model 1	Model 2	Model 3	Model 4	Model 5
Gender Role Attitude		0.82*	0.79*	0.76*	0.76*
		(0.08)	(0.09)	(0.09)	(0.09)
Women Work Fin. Needs		0.92	0.90	0.93	0.95
		(0.07)	(0.08)	(0.08)	(0.08)
Poverty			0.70†	0.70†	0.72†
			(0.14)	(0.15)	(0.14)
Near Poverty			0.72†	0.75	0.70†
			(0.13)	(0.15)	(0.13)
Full-Time Employment			0.85	0.95	0.91
			(0.21)	(0.25)	(0.21)
Part-Time Employment			1.02	1.11	1.01
			(0.24)	(0.29)	(0.23)
Age at 1st Marriage				1.00	0.99
				(0.02)	(0.02)
Age at 1st Divorce				1.03†	1.02
				(0.02)	(0.01)
Age at 2nd Marriage				1.01	1.01
				(0.01)	(0.01)
Age at First Birth				1.00*	1.00
				(0.00)	(0.00)
Biological Children @ Home					1.79***
					(0.20)
Stepchildren @ Home					1.40*
					(0.22)
/ln_sig	0.41***	0.42***	0.43***	0.44***	0.37***
	(0.04)	(0.04)	(0.05)	(0.05)	(0.05)
/kappa	-0.59**	-0.74***	-0.71*	-0.74*	-0.67*
	(0.19)	(0.20)	(0.29)	(0.30)	(0.30)
sigma	1.51	1.53	1.53	1.55	1.45
	(0.06)	(0.06)	(0.08)	(0.08)	(0.08)

Combined, results from Tables 2.7 and 2.8 suggest that few factors associated with first divorce in the literature can be linked to a second divorce, and those related to perceived quality of match—and hence entry into remarriage—do not necessarily reflect the realized quality of match, which in turn affects the viability of a remarriage. Moreover, the insignificant estimates of labor market activities, marital and fertility histories, along with a weak relationship between economic well-being and re-divorce suggests that hypothesis 4 is only partially supported by the absence of any significant estimate of ascribed status variable.

Interactions with Gender

Since women occupy a more disadvantaged position in the remarriage market than men, the relationship between various covariates and entry into or exit from remarriage likely differs by gender, especially those pertaining to race and ethnicity, education attainment, economic well-being, employment status, and children. I therefore generated a series of interactions of the aforementioned variables with gender and entered them by group in the final models of NLSY79 regressions.²⁸ With respect to entry into remarriage, interaction between African American and female is highly significant (1.85), whereas no such effect exists between Hispanic and female, indicating that African American women are in a particularly unfavorable situation compared to others. Once these interaction terms are held constant, the significance of African American has been eliminated, while that of Hispanic remained. Interaction with age is of marginal significance at 1.06 ($p=0.079$), suggesting that older women have a longer wait time to remarriage. Interactions of gender with education attainment are insignificant, and the same applies to employment status (full-time and part-time work). Interaction with poverty status reveals a rather interesting story: the estimate is highly significant at 0.58, a wait time about 42% shorter than the reference group (non-poor men). On the other hand, as the coefficient estimate of female is still 1.42 ($p<0.01$), the total

²⁸ Interaction results are not shown but available upon request.

effect of women in poverty is only slightly below 1. Interaction of women with having children from previous marriage suggests that wait time for these women to remarry is 1.53 times that of the baseline (men without children), albeit with marginal significance ($p=0.053$). The total effect of women with children, however, is a whopping 2.75 (1.53 plus a main effect of 1.22). With respect to exit from remarriage, only the interaction with having a college degree or more achieved marginal significance at 0.55 ($p=0.053$), indicating that women with more education are more likely to divorce from a second marriage. All other interaction terms are insignificant.

Alternative Model Selection

In regressions of entry into remarriage, I have shown the generalized gamma to fit the NLSY79 data better than lognormal distribution despite an insignificant kappa parameter. In models of exit from second marriages, both estimated parameters of the generalized gamma distribution are highly significant, ruling out the possibility of other distributions to be nested therein. However, generalized gamma distribution is not the only viable option in parametric event history modeling, and it is possible that other distributions, such as loglogistic and Gompertz, may fit the data better. In particular, loglogistic density is characterized by an initial spike when the shape parameter is less than one, and this may be appropriate in modeling exit from remarriage. Consequently, I refitted all models using loglogistic and Gompertz as underlying distributions. Since these two are not nested in generalized gamma, I used the Akaike Information Criterion (AIC) as the benchmark for model selection.²⁹ Table 2.9 shows that with respect to entry into remarriage, the generalized gamma model consistently performed better than either the loglogistic or Gompertz models in that it always has a substantially smaller value of AIC. Table 2.10 tells the same story: in modeling exit from the second marriage, generalized gamma distribution is always preferable to loglogistic or Gompertz as the associated AIC is always substantially smaller.

²⁹ Results based on the Bayesian Information Criterion lead to the same conclusion.

Table 2.9: Model Selection Statistics for Entry into Remarriage, NLSY79

Model 1						
Model	Obs	ll(null)	ll(model)	df	AIC	BIC
Generalized gamma	14217	-1.78E+09	-1.76E+09	15	3.52E+09	3.52E+09
Loglogistic	14217	-4.72E+09	-4.70E+09	14	9.39E+09	9.39E+09
Gompertz	14217	-4.73E+09	-4.71E+09	14	9.41E+09	9.41E+09
Model 2						
Model	Obs	ll(null)	ll(model)	df	AIC	BIC
Generalized gamma	12052	-1.53E+09	-1.51E+09	17	3.02E+09	3.02E+09
Loglogistic	12052	-4.06E+09	-4.04E+09	16	8.07E+09	8.07E+09
Gompertz	12052	-4.07E+09	-4.05E+09	16	8.09E+09	8.09E+09
Model 3						
Model	Obs	ll(null)	ll(model)	df	AIC	BIC
Generalized gamma	11074	-1.43E+09	-1.40E+09	22	2.81E+09	2.81E+09
Loglogistic	11074	-3.79E+09	-3.76E+09	21	7.52E+09	7.52E+09
Gompertz	11074	-3.80E+09	-3.77E+09	21	7.54E+09	7.54E+09
Model 4						
Model	Obs	ll(null)	ll(model)	df	AIC	BIC
Generalized gamma	9396	-1.25E+09	-1.22E+09	26	2.45E+09	2.45E+09
Loglogistic	9396	-3.37E+09	-3.34E+09	25	6.69E+09	6.69E+09
Gompertz	9396	-3.38E+09	-3.35E+09	25	6.70E+09	6.70E+09

Table 2.9: Model Selection Statistics for Entry into Remarriage, NLSY79 (continued)

Model 5						
Model	Obs	ll(null)	ll(model)	df	AIC	BIC
Generalized gamma	7812	-1.04E+09	-9.86E+08	29	1.97E+09	1.97E+09
Loglogistic	7812	-2.83E+09	-2.77E+09	28	5.54E+09	5.54E+09
Gompertz	7812	-2.84E+09	-2.78E+09	28	5.55E+09	5.55E+09
Model 6						
Model	Obs	ll(null)	ll(model)	df	AIC	BIC
Generalized gamma	7812	-1.04E+09	-9.79E+08	31	1.96E+09	1.96E+09
Loglogistic	7812	-2.83E+09	-2.76E+09	30	5.53E+09	5.53E+09
Gompertz	7812	-2.84E+09	-2.77E+09	30	5.54E+09	5.54E+09

Table 2.10: Model Selection Statistics for Exit from Remarriage, NLSY79

Model 1						
Model	Obs	ll(null)	ll(model)	df	AIC	BIC
Generalized gamma	11734	-8.98E+08	-8.81E+08	16	1.76E+09	1.76E+09
Loglogistic	11734	-2.34E+09	-2.32E+09	15	4.65E+09	4.65E+09
Gompertz	11734	-2.35E+09	-2.34E+09	15	4.67E+09	4.67E+09
Model 2						
Model	Obs	ll(null)	ll(model)	df	AIC	BIC
Generalized gamma	10857	-8.28E+08	-8.12E+08	21	1.62E+09	1.62E+09
Loglogistic	10857	-2.34E+09	-2.14E+09	20	4.28E+09	4.28E+09
Gompertz	10857	-2.17E+09	-2.15E+09	20	4.31E+09	4.31E+09
Model 3						
Model	Obs	ll(null)	ll(model)	df	AIC	BIC
Generalized gamma	9412	-7.12E+08	-6.95E+08	25	1.39E+09	1.39E+09
Loglogistic	9412	-2.16E+09	-1.82E+09	24	3.64E+09	3.64E+09
Gompertz	9412	-1.85E+09	-2.32E+09	24	3.66E+09	3.66E+09
Model 4						
Model	Obs	ll(null)	ll(model)	df	AIC	BIC
Generalized gamma	8446	-6.32E+08	-6.13E+08	29	1.23E+09	1.23E+09
Loglogistic	8446	-1.84E+09	-1.62E+09	28	3.24E+09	3.24E+09
Gompertz	8446	-1.65E+09	-1.83E+09	28	3.26E+09	3.26E+09

Table 2.10: Model Selection Statistics for Exit from Remarriage, NLSY79 (continued)

Model 5						
Model	Obs	ll(null)	ll(model)	df	AIC	BIC
Generalized gamma	8446	-6.32E+08	-6.03E+08	31	1.21E+09	1.21E+09
Loglogistic	8446	-1.64E+09	-1.62E+09	30	3.22E+09	3.22E+09
Gompertz	8446	-1.65E+09	-1.63E+09	30	3.24E+09	3.24E+09

Limitations

One basic assumption of event history analysis is that individuals do not anticipate the occurrence of an event, leading to reverse causality. In the context of marriage and divorce, it is important that these respondents do not already have someone in mind at the beginning of a risk period to marry. The presence of a marriage interest is likely to shorten the wait time to marriage or the duration of a current marriage, thereby contaminating the results. For entry to remarriage in the NLSY79, about 16% of divorced individuals remarried within 12 months of marital disruption, suggesting these respondents may have ended their marriages and entered the risk period with someone special in mind. I removed these cases and re-estimated wait time to remarriage, and the results are largely the same.

An important limitation of this study concerns post-marital cohabitation. As cohabitation is a crucial part of a formerly married individual's life experience, it is essential to incorporate cohabitation in the formation of an intimate relationship. Nevertheless, since the NLSY79 does not begin to document cohabitation in great detail until the respondents reached midlife, this study is necessarily limited in its scope to deal with cohabitation, especially its conversion to remarriage or dissolution. While the female sample of the NSFG contains fairly comprehensive information on cohabitation, the age cap at 45 means that the majority of the sample have yet to enter a first marriage, let alone divorce and form a post-marital cohabitation. A more fruitful undertaking would be to employ a more recent dataset where a sufficient proportion of respondents have already experienced a first divorce. In addition, to properly understand the dissolution of a remarriage, it would be desirable to include marital quality and couple interactions in the analyses. On the other hand, since the NLSY79 only asks women these questions and not all women have a divorce and a remarriage, the sample size would be too small for an effective analysis.

Discussion and Conclusion

Based on the 2006–2010 NSFG and NLSY79, this study sought to provide a statistical portrait of the demographics of remarriage in the US as it examines factors associated with the formation and dissolution of remarriage. Descriptive statistics—such as slightly declining ratios of divorced individuals entering into remarriage, remarriages among all marriages, a stable median waiting time between marriages, and median age at remarriage—are all in line with their respective long-term trends. Taken together, these results suggest that remarriage still remains popular in contemporary US society and sustains the relevance of marriage as a social institution in divorced individuals’ domestic spheres. Analytical findings indicate that entry into remarriage is shaped by the stratification of the marriage market and a person’s position therein, perceived economic well-being in marital life, and the pathway he or she has taken in terms of intimate relationships and fertility. Moreover, ascribed status variables matter no less than attained status and life-course ones in processes resembling those of the formation of first marriage. On the other hand, results on the exit of remarriage suggest that remarriages are no more likely to end in divorce than first marriages, and individuals going through two divorces do not dissolve their second marriages more quickly than their first ones. These new findings address the puzzle posed by the continuing popularity of remarriage in US society and its supposed fragility as portrayed by previous empirical studies. However, few factors associated with the dissolution of first marriage in the literature are significantly related to exit from a remarriage, suggesting that marital environment in midlife is sufficiently heterogeneous so that much of what matters earlier in life is no longer important in determining the outcome of a marriage.

Scott Fitzgerald once remarked that “there are no second acts in American lives.” This statement has been widely used to imply that there is no resurgence from the ashes in US society, or

that Americans generally do not care for the inevitable complications of a second act. These different interpretations notwithstanding, remarriage is indeed a second act in one's domestic life, both literally and figuratively. In a straightforward sense, remarriage takes up what has been left behind in a person's conjugal life, picking up various threads in life. Metaphorically, remarriage is also a second act in life: it symbolizes a successful recovery from the trauma associated with conflict and marital disruption, and a reinvigoration of life, albeit often accompanied by complications due to children from earlier relationships. This paper shows that there are indeed second acts in American lives; even in the aftermath of a major crisis in life such as a divorce, the majority of Americans still are able to pick themselves up and move on—to remarry—for another chance at marital happiness. The propensity to remarry does not seem to have diminished very much by birth cohorts. Moreover, the prospect of remarriage appears to be more hopeful than previously thought: not only are remarriages no more likely to end in divorce than first marriages, but people also take more time to dissolve a remarriage if things come to that. It is because of these that I may conclude there are indeed second acts in American conjugal lives.

CHAPTER 3

“NEW LOVE, NEW LIFE” –

MARITAL QUALITY AND DYADIC INTERACTIONS IN REMARRIAGE

Introduction

Human development is characterized by substantial continuities and marked by occasional but significant discontinuities. From childhood to young adulthood, one's social life is much stratified by age and progresses according to the biological clock. Although the entries into both the labor market and first marriage may appear to launch individuals into a stable trajectory henceforth, much personal growth and development occurs in the long span between young adulthood and old age, as reflected in the substantial heterogeneity in life outcomes among the elderly (Neugarten 1969, 1973). Specifically, divorce and subsequent remarriage allows individuals an opportunity to reposition themselves in life and change their trajectories. Although highly stressful, the experiences of divorce may very well accord substantial benefits over the long run, as individuals successfully cope with this crisis and gain a strong sense of control and mastery over their lives while learning to improve the prospects of their future marriages through selecting a more compatible spouse, developing better interaction skills, and consequently, enjoying greater marital happiness.

On the other hand, previous literature on the marital quality and internal dynamics of remarriages tends to characterize remarriage as a mediocre substitute for a first marriage, as scholars reason that divorced individuals have been socialized by conjugal experiences to carry over the communication patterns and conflict management styles that derailed the previous marriage. They also hypothesize that remarried individuals possess personality traits that are detrimental to the long-term viability of marriage. Consequently, remarried couples brave strong headwinds when they set

sail for another voyage, and their marital quality is potentially compromised from the beginning. Additionally they often face the unique challenge of the presence of stepchildren in the home and the enduring involvement with the estranged former spouse. However, this view and associated findings are at odds with the persisting popularity of remarriage in US society. Taking a more forgiving view of the potential for self-change in midlife, this study addresses two questions regarding the marital quality of remarriage. First, how does the marital quality of remarriage compare to that of the first marriage? If remarried couples on average enjoy greater marital happiness than themselves in first marriages and even the continuously married, it would provide some justification for remarriage despite alarming studies from the past. Second, how do remarried couples construct their common realities through everyday life interactions and manage the inevitable conflict that arises in all marriages? If remarried couples have more frequent positive and less frequent negative marital experiences overall, this study would provide family sociologists with a more comprehensive view of how remarriages function and help social scientists in general to better understand adult development and individual self-change after a critical event.

Conceptual Framework

Until the emergence of the life course paradigm, social scientists generally thought the trajectory of adult development as largely determined by early life events. However, conceptual advances and empirical evidence since the 1960s increasingly demonstrated that no stage assumes primacy in developmental outcomes and growth and development continues throughout adult life (Cohler and Boxer 1984). Once individuals move from childhood through early adulthood, where development is still largely normative and age-graded, subsequent changes in midlife gradually become non-normative in nature (Chiriboga 1989; Gergen 1977). These unscheduled and unexpected events not only heighten people's sensitivity to their position in society (Neugarten and Datan 1996 [1974]) but also elicit major reorientation and reassessment of the self, especially when experiences are related to

major social structures such as work or family (Becker 1964; Cohler and Boxer 1984). Beginning in midlife, people turn increasingly to inward orientation (Neugarten 1973), and reflection characterizes the mental life of middle-aged persons. While taking stock, they structure and restructure their life experiences through introspection, and attain greater maturity, have a better grasp of realities, enhanced control over impulses, and a more complete sense of self (Diehl 1999; Ganong and Coleman 1994; Neugarten and Datan 1996 [1974]). In other words, in adapting to both the major critical events and minor vicissitudes of everyday life, middle-aged individuals turn inward, reflect upon their self-concept, and make changes accordingly to improve their future well-being.

While the theoretical framework laid down by life course researchers such as Neugarten, Cohler, and others establishes a solid foundation for us to better understand the social organization of life and challenges the stability template that people rarely change after early adulthood, their work does not provide specific guidelines as to how people change midway through life. In this respect, Kiecolt (1994) furnishes an explicit model of self-change. She argues that chronic strains or life events likely engender negative reflected appraisal (Burke 1991), hinder identity performance, and invoke unfavorable social comparison, which in turn begets psychological distress. However, psychological distress alone may not be sufficient for people to change their behavior and identity, and certain conditioning factors should provide a context conducive for such changes: stressors are highly relevant to one's identity and their causes attributable to one's actions. Individuals also have to believe that self-change is possible and its benefits outweigh costs, and they must have access to structural and social support. Moreover, a critical event may serve as a catalyst for individuals to arrive at the epiphany that their standing among others, self-perceived competence, and comparison with others have reached a nadir. This not only threatens their identity as competent social beings, but it is also attributable to their behavior, self, and identity. As a result, individuals likely feel instigated by the critical event to align their self and behaviors with standards expected by others as

well as themselves. Kiecolt suggests that individuals are more likely to change aspects of self that are highly relevant to their identities and improve their reflected appraisal, self-perceived competence, and social comparisons.

Divorce is an all-encompassing life-changing event. On the one hand, it provides relief to distressed couples as a mechanism to dissolve marriages with insurmountable problems, and it is significantly associated with a reduction in suicide and spousal homicide as a desperate way out of a troubled marriage (Stevenson and Wolfers 2006). Nonetheless, divorce is still highly stressful and even traumatic for many, not only because of the disintegration of common realities between spouses, but also because of a sense of loss from the unfulfilled promises of an unsuccessful endeavor. The wear and tear from conflict and lack of affection puts couples constantly on high alert and may gradually ground their spirits into dust. First and foremost, as marriage accords individuals with various roles and embeds them into extensive personal networks, divorce strips them of these significant and often meaningful roles, leaving many feeling bewildered and some shell-shocked (Catron and Chiriboga 1991). This aspect of the divorce experience alone may well be sufficient for individuals to take a hard look at their self-concept (Fenn, Chiriboga, and Catron 1991). Second, divorce as a critical event disrupts an individual's long-established personal and social environment and likely requires them to reconcile rifts between the personal-psychological and cultural-sociological dimensions of their lives (Diehl 1999). Third, marital strains likely prompt individuals to engage in self-change to make sense of the past and ensure future marital success through the self-change processes described in Kiecolt (1994). Frequent conflict and an absence of positive interaction with the spouse over an extended period of time likely leads individuals to question their communication style, resulting in negative reflected appraisals in these areas. After all, a spouse is the most significant other in most, if not all, adults' lives and is likely the major contributor to one's "looking-glass self." In addition, negative self-image likely diminishes an

individual's self-efficacy and self-esteem, as conjugal life is an essential part of one's private life, and failure in the construction of a workable common *nomos* (Berger and Kellner 1964) highlights the issues of interaction skills and ultimately one's own ability to select a compatible mate in the first place. Resounding marital success is still highly desirable in society, and its absence likely generates unfavorable comparisons with others. The ensuing divorce forces people to face reality and closely examine their interaction style, mate selection criteria, and expectations of a happy marriage. Indeed, the period between marriages is often viewed as a window of opportunity for personal growth (Albrecht 1979; Rands 1988), especially for women whose lives may have centered largely on the family before divorce. Successful coping with this crisis has been regarded as a turning point in life (Clausen 1995).

I propose that individuals learn from previous divorce and embark on a journey of self-change to improve the prospects of their remarriage and consequently enjoy higher re-marital happiness. First, they are likely to exercise greater caution in selecting a compatible spouse. Compared to remarriages, first marriages are more likely to be characterized as immature, impetuous, and insecure. When deciding on whether to enter into yet another marriage after a failed first attempt, individuals look for qualities conducive to the long-term viability of marriage, such as compatible personality and shared interests, rather than traits "with greater social currency," such as appearance, occupation, earnings, and socio-demographic homophily (Furstenberg and Spanier 1984, 1987; Ganong and Coleman 1994), as homogamous identity styles are strongly associated with marital happiness and satisfaction (Cook and Jones 2002). People also enter into remarriage with more realistic and modest expectations than when entering a first marriage and are more inclined to reveal their shortcomings as soon as possible and less likely to idolize their future spouses (Albrecht 1979; Berger and Kellner 1964; Furstenberg and Spanier 1987; MacDonald and DeMaris 1995). As a result, remarriers tend to move quickly beyond the courtship stage and into cohabitation as a trial

marriage (Ganong and Coleman 1994). In addition, as internal dynamics of a marriage are usually determined at the outset, a remarriage allows individuals to have the opportunity to “reset” power relations and feelings of equity or being deprived and strike a new deal in housework shares and decision-making processes. Indeed, remarried couples are more likely to report equal decision making and a more egalitarian division of household labor, with husbands doing more (Amato, Johnson, Booth, and Rogers 2003; Blair 1993; Deal, Hagan, and Anderson 1992; Furstenberg and Spanier 1987; Ishii-Kuntz and Coltrane 1992; Kamp Dush and Taylor 2012) and wives doing less housework (Pyke and Coltrane 1996; Sullivan 1997). Feelings of equity (or deprivation) are related to the comparison of marital quality across marriages (Buunk and Mutsaers 1999; Pyke and Coltrane 1996). Remarried individuals, particularly women, are also less likely to feel deprived (Buunk and Mutsaers 1999; Pyke and Coltrane 1996). Taken together, I suggest that remarried individuals will enjoy higher marital happiness than themselves in the previous marriage.

In addition to selecting a more compatible spouse *before* marriage, divorced individuals’ learning can also occur *ex-post*. Apparently not all divorced individuals carry over interaction patterns or possess personality traits that automatically doom the next marriage, as some scholars have previously suggested (e.g., Booth and Edwards 1992). Instead, with time they can learn to get along with each other’s idiosyncrasies and communicate more effectively, build a better life together through greater sharing of life and reducing conflict. Remarried couples’ communications are often characterized as more open and shared, and they were more mutually sympathetic to one another than in their first marriage (Furstenberg and Spanier 1987). They are also more likely to laugh together and discuss issues calmly (Umberson, Williams, Powers, Liu, and Needham 2005). All these are beneficial for the construction of common realities among couples. With respect to marital conflict, remarried couples potentially differ from their first-married counterparts due to the presence of stepchildren, and hence their continued entanglement with a former spouse. Further,

Cherlin's "incomplete institutionalization hypothesis" (1978) argues that the lack of clear, specific guidelines for remarried dyads to navigate more complicated relationships with stepchildren and in-laws makes them more susceptible to conflict. Despite this, I suggest the opposite: remarried couples likely will have less frequent conflict by selecting a more compatible spouse in the first place; further, they strive to reduce arguments, should they arise, in order to avert another life crisis.

Literature Review

There is a large body of empirical studies comparing the global quality of remarriages with that of first marriages, and it can be largely grouped into three categories. The majority of studies based on more recent or population-level data and employing more refined statistical techniques generally report a similar level of marital happiness as the first-married (Aldous and Ganey 1999; Amato, Johnson, Booth, and Rogers 2003; Bulanda and Brown 2007; Corra, Carter, Carter, Knox 2009; DeMaris 1984; Johnson and Booth 1998; Kurdek 1999; Ward and Spitze 1998; White and Booth 1985; Whitton, Stanley, Markman, and Johnson 2013). Slightly fewer studies, usually based on more dated data or clinical samples, found a significantly lower level of marital happiness among the remarried than their continuously married counterparts (Gleen and Weaver 1979; Kaufman and Taniguchi 2006; Lye and Biblarz 1993; Mirecki, Chou, Elliott, and Schneider 2013; Myers 2006; Vemer, Coleman, Ganong, and Cooper 1989; White 1979). A distinct minority of studies, however, show that remarried individuals rated their current marriage happier than previous ones (Albrecht 1979; Buunk and Mutsaers 1999; Deal, Hagan, Anderson 1992; Kurdek 1989; Umberson, Williams, Powers, Liu, and Needham 2005). Many of these studies, however, are based on clinical, community, or relatively small samples. Even if the sample is sufficiently large, oftentimes the data is not nationally representative, is cross-sectional in nature, or its longitudinal feature is left unused. In addition, most studies compare the remarried with the continuously married, risking serious selection bias when heterogeneity is substantial. For the precious few longitudinal studies comparing

marital happiness of the same individuals across different marriages (e.g., Johnson, Amoloza, and Booth 1992; Johnson and Booth 1998; Kamp Dush and Taylor 2012; Umberson, Williams, Powers, Liu, and Needham 2005), most are limited by fairly short panels, very few remarried couples, or older data. Often, remarriage is not the focus of attention.

Positive interactions across marriages are less extensively studied by sociologists than negative ones, and results are mixed. Based on a short longitudinal sample from central Pennsylvania, Furstenberg and Spanier (1984, 1987) found couples in remarriage were more likely to confide in each other, to laugh together, and to discuss issues calmly. Based on three waves of Americans' Changing Lives over a period of eight years, Umberson, Williams, Powers, Liu, and Needham (2005) also found that remarried persons were significantly more likely to report feeling loved, listened to, and could share private thoughts with their spouse than themselves in first marriage. Interestingly, a negative slope of remarriage suggests these positive experiences tend to grow pale over time. On the other hand, Halford, Nicholson, and Sanders (2007) found that remarried couples reported fewer positive interactions than the first-married and were more likely to withdraw from interactions.

With respect to negative interactions, several scholars found remarriage is significantly associated with an elevated level of marital conflict. DeMaris (1984) reported remarried couples were more susceptible to conflict over the long haul, and Johnson and Booth (1998) also found significant carryover of arguments across marriages. However, the latter's findings are based on two items only and effect sizes are small. Kamp Dush and Taylor (2012) also reported remarried people were more likely to have high-conflict/low-happiness or middle-conflict/low-happiness marriages. However, MacDonald and DeMaris (1995) found remarriage unrelated to conflict and a double-remarriage was actually associated with significantly fewer conflicts. On the other hand, Umberson, Williams, Powers, Liu, and Needham (2005) suggested that remarried individuals have fewer negative marital experiences (based on two items only, however), but that increased over time.

Moreover, Deal, Hagan, and Anderson (1992), Furstenberg and Spanier (1987), and Halford, Nicholson, and Sanders (2007) all found that the remarried reported a lower level of conflict in the current marriage than in the first marriage, or at least conflict was perceived differently and readily accepted as an integral part of conjugal life. Cherlin's incomplete institutionalization hypothesis has received mixed empirical support over the decades. On the one hand, several studies (e.g., White and Booth 1985; Teachman 2008) confirmed that stepchildren at home present a unique challenge to remarried couples. On the other hand, stepchildren were found to be significantly positively associated with marital quality when both spouses were remarried (Albrecht 1979; Kurdek 1989, 1999; MacDonald and DeMaris 1995).

Data and Sample

I used the National Longitudinal Survey of Youth 1979 (NLSY79) for the present study. This dataset has several strengths. First, it is an ongoing longitudinal survey with a sufficiently long panel (18 years, 10 data points) and a fairly large number of individuals in their second or higher order marriage. Second, both global marital happiness and items of positive and negative interactions are measured at the time of interview rather than retrospectively (e.g., Albrecht 1979), minimizing the risk of recall error and post-hoc rationalization in favor of the current marriage. Third, it contains more than a dozen measures to capture several dimensions of dyadic interactions instead of relying on just three or four items (e.g., *Americans' Changing Lives*). Finally, it captures the experiences of remarriage after divorce overtook death as the leading cause of marital disruption in 1973–74 (Glick 1980). Corollary to this, it also captures the remarriage experience of the first cohort of women who came of age after divorces in the US reached its plateau in the early 1980s.

The NLSY79 is a nationally representative longitudinal dataset administered by the Bureau of Labor Statistics (BLS) and later the Center for Human Resource Research of the Ohio State University. Starting from 1979, 12,686 civilian youths aged 14–21 were interviewed each year and,

after 1994, biennially. The BLS collected basic demographic information as well as detailed background and family histories at the baseline interview. Starting from 1992, married or partnered women were asked a series of questions about their overall marital happiness and the frequencies of both positive and negative interactions with their current spouse or partner. Specifically, women were asked “Would you say that your relationship or marriage is very happy, fairly happy, not too happy?” This global measure of marital happiness is considered a sufficient or even preferred measure (Fincham and Bradbury 1987). Since most respondents reported their marriage as “very happy,” I combined the first two groups together and used logistic regression later. Both positive and negative interaction items were part of Spanier’s Dyadic Adjustment Scale (1976). For positive interactions, respondents were asked how often they calmly discuss something, laugh together, and tell each other about the day with their spouse or partner. These measures are similar, but not identical, to those used in previous literature to tap how couples construct their common realities through daily interactions. The NLSY79 has eight items tapping the frequency of marital conflict or negative interactions, including arguing about household chores and responsibilities, children, money, showing affection, religion, leisure time, drinking, other women, and relatives on either side. Again, these measures are consistent with those used in previous studies on marital conflict. I used the raw scores of marital happiness and performed exploratory factor analyses for dyadic interactions to construct scales and avoid running 13 separate regressions.

The NLSY79 documents respondents’ marital history extensively throughout its data collection and creates summary variables (beginning and ending dates) up to the third marriage. I used the created variables from the 2008 interview and calculated the dates for marriages beyond the third one. I updated these dates if respondents were last interviewed in 2010. I also used information from respondents interviewed between 1992 and 2008 but not in the latest wave released (2010). Based on these dates, I calculated the duration of the current and previous marriages, if any, at each

interview date from 1992 to 2010, as marital duration is significantly related to marital quality and both positive and negative experiences. Moreover, to examine whether marital happiness and positive experiences decline faster and whether marital conflict rises faster in a remarriage, I also included an interaction term of remarriage and marital duration. As marital quality is strongly related to the presence of children in the household (Bradbury, Fincham, and Beach 2010), I used the household roster from each interview year and constructed dichotomous variables indicating the presence of each type of child (biological, step, foster children, as well as grandchildren).

Among standard socio-demographics, I controlled for race, education (measured in 1992), and age at first marriage. I did not control for age for the following reasons. First, controlling for age at each point confounds marital duration. Age itself is not a mere measure of chronological time. It also represents an individual's learning over the course of life. Consequently, controlling for age confounds with learning in the duration of a given marriage. Second, age is likely collinear with marital duration, especially in fixed-effects models where individuals are compared with themselves and remarriage never ends. Identification will remain difficult even in random-effects models since most remarried individuals only married twice, and their remarriages are no more likely than first marriages to dissolve.

To further control for potential sources of selection bias due to heterogeneity in personality traits, I used several measures of these traits collected from various years. Specifically, I controlled for sociability, risk preference, mastery, and self-esteem as these are likely related to marital happiness and patterns of dyadic interactions. The sociability measure asked a respondent to rate him/herself from extremely shy to extremely outgoing. Less outgoing people probably are more likely to keep to themselves and withdraw from interactions, which is not conducive to the long-term health of a marriage. More risk-tolerant individuals may value stable domestic life less and tend to seek thrills or sensations, and such activities therefore make them more susceptible to marital

conflict and lower marital happiness (Light and Ahn 2010). Mastery is how individuals see themselves as capable of solving problems that may affect their life significantly. People with a greater sense of mastery and higher self-esteem are likely to be more effective in dealing with the vicissitudes of everyday life and solving marital problems through calm discussion rather than escalating to open conflict, hence enjoying greater marital happiness (Johnson and Galambos 2014).

The NLSY79 asked respondents in 1985 about their sociability at age 6 and as an adult. I used the adult measure since it was closer to outcome measures. For risk preference, I used a series of hypothetical gambles from 1993, and 2002 through 2006 as its proxy. Respondents were first asked whether they would take a moderate-sized gamble; based on the answer, respondents were then asked whether they would take a larger or smaller gamble. Following Spivey (2010), I grouped respondents into four categories ranked from “very strongly risk averse” to “weakly risk averse.” Although these hypothetical gambles only measure risk preferences regarding pecuniary matters rather than life in general, the relevance to certain results (shown later) indicated that they were still informative. The NLSY79 also has a Pearlin mastery score from 1992 and Rosenberg self-esteem scores from 1980, 1987, and 2006. For the latter, I used the 1987 measure to avoid reverse causality. Admittedly, these measures are not ideal controls for selection on personality traits since they do not tap dimensions immediately related to conjugal life and most are measured only once and rather distant in time. Yet, these variables are still informative of an individual’s personality in general.

Method

I exploited the longitudinal design of the NLSY79 and regressed binary score of marital happiness and factor scores of positive and negative interactions on current re-marital status from 1992 to 2010, using both random- and fixed-effects models. Since these questions are asked only of married or partnered women and not of divorced ones, identification in a random-effects model is achieved by incorporating both between- and within-individual differences. In a fixed-effects model,

identification is obtained through within-individual variations by comparing a woman's marital happiness and interaction patterns in remarriage (basically the second marriage) with those in her own first marriage. Since marital quality is significantly related to marital duration, I then added marital duration (measured in months) and its interaction with re-marital status to examine whether greater marital happiness for remarried individuals was an artifact of remarriages' shorter durations and whether marital quality declined faster for remarried individuals. I further included the presence of children in household. For random-effects models, I added time-invariant socio-demographic and non-cognitive trait controls. I also performed the Durbin-Wu-Hausman test to detect the presence of unobserved heterogeneity and to examine whether a random- or fixed-effects model was more appropriate for the data. As identification of the effects of remarriage in the original setup was obtained through comparing the second with the first marriage, I later substituted remarriage with the number of marriages at each wave to identify the effects of additional marriage on marital happiness and dyadic interactions.

Results

The NLSY79 began auspiciously with more than 12,000 respondents. However, by the time married or partnered women were first asked of marital happiness and interactions in 1992, the sample size was down to 9,016 due to various types of attrition, primarily the elimination of low-income white (1,621) and military subsamples (1,079). In the latest available data from 2010, 1,151 refused to participate, 595 were deceased, and 370 could not be located, and the sample size was down to 7,565. It should be noted that except for the permanently removed and the deceased, respondents drifted in and out of interviews over the years. As a result, the size of my analytical sample ranged from 2,541 in 1994 to 2,095 in 2010. I used every case interviewed to maximize sample size but excluded the cohabiting women.

Table 3.1 describes changes in the size of my analytical sample.¹ Over time, the ratio of women being ever married increased from 79.85% in 1992, when they were 27–34 years old, to 90.15% in 2010, when they aged 45–52. During the same period, the proportion of women having ever experienced a disruption of the first marriage grew from 35.82% to 54.60%, whereas the ratio of women having ever remarried only changed from 57.89% to 66.69% at the most. Although fewer and fewer women were currently married over time, the ratio of being in a remarriage increased from 17.35% to 33.12%, consistent with life course changes. In total, these women have 2,762 first marriages, 1,926 first divorces, and 1,275 remarriages (from second up to seventh). The NLSY79 averaged 77% white, 15% African American, and 6.75% Hispanic women over the years. However, the currently married samples are composed largely of white women (85%), with far fewer African Americans (8%) and slightly fewer Latinas (6%), and comparable ratios hold for the currently remarried sample. The sample of all currently married women consists of a higher percentage of people with at least a BA degree, whereas the sample of those currently married consists of a much lower ratio of women with a college degree or more, likely due to the negative selection on socioeconomic status into divorce and hence remarriage.

¹ Table B1.1 in appendix B further presents a detailed breakdown of NLSY79 women by number of marriages, in first marriage or remarriage in various years.

Table 3.1: Decomposition of Sample of NLSY79 Women

Year	Women	Ever Married		Ever Disrupted		Ever Remarried		Currently Married		Currently Remarried	
	N	N	Wgt % ¹	N	Wgt % ²	N	Wgt % ³	N	Wgt %*	N	Wgt %**
1992	4535	3417	79.85%	1332	35.82%	569	57.89%	2521	77.65%	436	17.35%
1994	4480	3503	82.64%	1470	38.65%	661	58.68%	2541	76.56%	508	19.86%
1996	4361	3496	84.52%	1569	41.13%	757	61.82%	2507	76.99%	580	23.54%
1998	4299	3537	86.62%	1649	43.00%	837	63.91%	2521	76.38%	633	25.37%
2000	4113	3436	87.80%	1710	45.56%	897	65.38%	2396	74.81%	670	27.23%
2002	3955	3335	88.25%	1713	47.25%	919	65.35%	2304	74.03%	682	28.74%
2004	3984	3384	88.74%	1798	49.32%	985	65.63%	2280	72.31%	694	29.91%
2006	3916	3335	89.29%	1832	51.01%	1016	66.69%	2214	71.57%	711	31.54%
2008	3975	3408	89.41%	1946	53.20%	1077	65.07%	2169	68.83%	709	32.00%
2010	3896	3352	90.15%	1969	54.60%	1092	65.40%	2095	67.88%	712	33.12%

¹: Weighted ratio of ever married (total number of women ever married divided by total number of women interviewed).

²: Weighted ratio ever disrupted (total number of women ever experienced marital disruption divided by total number of women ever married.)

³: Weighted ratio ever remarried (total number of women ever remarried divided by total number of women ever experienced a marital disruption.)

*: Weighted ratio of currently married (total number of women currently married divided by total number of women interviewed.)

** : Weighted ratio of currently remarried (total number of women currently remarried divided by total number of women currently married.)

Table 3.2 presents the distribution of marital happiness and the results of the exploratory factor analysis for the entire analytical sample.² Overall, slightly over 70% of all married women reported their marriage as “very happy,” slightly over one-quarter of them had a “fairly happy” conjugal life, and less than 4% were in a “not too happy” marriage.³ For the frequency of positive interactions (laughing together, calm discussion, and telling each other about day), factor loadings generally increased over time, from mid-0.60 in 1992 to above 0.70 for all three in 2010. The results from the whole sample suggest that all three should be combined to form a scale. Consequently, I averaged each woman’s positive interaction items by year to obtain a single score, with a Cronbach’s alpha of 0.79 and eigenvalue greater than one.⁴ For the frequency of marital conflict, a factor analysis suggested the eight dimensions of “flash points” can be reduced into three major categories. The first and also the strongest factor comprised of arguments about household tasks, children, money, and showing affection, with loadings from 0.43 to 0.63 and an eigenvalue greater than one.⁵ Since these are realms pertinent to the central activities of a marriage, I named the factor score as “core grievances,” and it has an alpha of 0.71. The second factor scale covers arguments about each other’s relatives, and it has a loading of about 0.65 for each item over time. This “in-law grievances” scale has a reliability coefficient of 0.73. Regression results of this scale on remarriage will be a direct test of Cherlin’s incomplete institutionalization hypothesis. The third and much weaker factor includes arguments about drinking, other women, leisure, and religion. Religion is included in this

² Results for separate years are presented in Tables B2.2 and B2.3 in appendix B.

³ Table B2.1 in appendix B shows that, between 1992 and 2010, the proportion of women reporting their marriage as “very happy” declined from 77.35% to 66.41%, the ratio of “fairly happy” rose by almost 9 percentage points from 20.81% in 1994 to the highest of 29.73% in 2008, while the ratio of being “not too happy” more than tripled, from 1.55% in 1992 to 4.73% in 2002.

⁴ I used mean score instead of sum to circumvent the issue of missing values, which will further reduce the sample size.

⁵ The original factor analysis grouped arguments about free time with those about household tasks, children, money, and showing affection. However, removal of this item only reduced the reliability coefficient by about 0.02 but substantially increased that of the factor scale composed of arguments about religion, drinking, and other women. Moreover, factor loading on this item has been consistently low over the years, and including it in the latter group also pushed its eigenvalue to above 0.90 for most years. As a result, I grouped “free time” with arguments about religion, drinking, and other women.

factor scale because of most, if not all, religions' proscription against extramarital affairs and excessive drinking, and arguments about spending free time together could be indicative of fissures in a couple's work in building *nomos*, or worse, one's mind starting to stray beyond the current marriage. Consequently, I labeled this scale as "outside entertainment grievances." Factor loadings on this scale are never high, ranging between 0.35 and 0.45, although eigenvalues are about 0.90. Its alphas, however, hovered just below 0.60 over time and were not as high as the other two factors. Results pertaining to this scale should therefore be interpreted with caution due to its weak properties. Again, I averaged over relevant items for each respondent by interview year to obtain factor-based scores.

**Table 3.2: Factor Analysis Results of Positive and Negative Interactions for All Years
Positive Interactions**

Rotated factor loadings (pattern matrix) and unique variances

Variable	Factor 1	Uniqueness
Frequency of:		
Calm Discussions	0.6858	0.5297
Laugh Together	0.7203	0.4812
Tell Each Other About Day	0.6738	0.5460
Cronbach's alpha:		
Number of items in the scale:	3	
Scale reliability coefficient:	0.7876	

Negative Interactions

Rotated factor loadings (pattern matrix) and unique variances

Variable	Factor 1	Factor 2	Factor 3	Uniqueness
Frequency of Arguing About:				
Chores and Responsibilities	0.6338	0.1862	0.1009	0.5524
Children	0.5236	0.2003	0.0721	0.6805
Money	0.5973	0.2135	0.1396	0.5782
Showing Affection	0.4369	0.1669	0.2978	0.6647
Religion	0.2015	0.1789	0.3396	0.7820
Free Time	0.3785	0.2577	0.2961	0.6742
Drinking	0.2498	0.1507	0.4007	0.7537
Other Women	0.1386	0.1533	0.4006	0.7966
His Relatives	0.1605	0.6565	0.0895	0.5351
Your Relatives	0.1992	0.6616	0.0847	0.5144

Areas of Grievances

Cronbach's Alpha:	Core	In-Laws	Outside Entertainment
Number of items in the scale:	4	2	4
Scale reliability coefficient:	0.7148	0.7262	0.5687

To replicate findings from previous literature, I started with stepwise cross-sectional logistic regressions of marital happiness on re-marital status alone for each survey year. I then added marital duration, its interaction with remarriage, and finally, a full set of socio-demographic controls. Results are consistent with prior literature in that remarriage is related to lower marital happiness between 1992 and 1998.⁶ Starting from 2000, remarriage is associated with higher marital happiness. However, the coefficient estimates of being remarried are largely insignificant. Further, adding more controls seemed to make the effect size more pronounced without increasing its statistical significance. The flipping of remarriage's signs and the overall instability of coefficient estimates likely explains why findings in earlier studies based on cross-sectional data are often inconsistent. To better address this issue, I proceeded to longitudinal regressions.

Table 3.3 presents the results of longitudinal regressions of dichotomous marital happiness on remarriage and other covariates, with the top panel pertaining to random-effects and the bottom one to fixed-effects models. Random-effects estimates show that currently remarried women reported significantly higher marital happiness than their continuously married counterparts. This could be a statistical artifact, as remarriages are of shorter duration than continuous first marriages at any time. Indeed, after accounting for duration, remarriage is no longer associated with marital happiness. To find out whether marital quality declined faster for remarriages, I further included the interaction between remarriage and duration. The significantly negative estimate of the interaction term indicates that marital happiness indeed declined faster for remarried women than continuously married women. The presence of biological children in the household is significantly related to lower marital happiness, whereas that of stepchildren is not.⁷ This counter-intuitive finding likely arises because marital happiness and dyadic interaction questions were only asked of women, and women

⁶ See Table B3.1 in appendix B. I further repeat these regressions with remarriage substituted by the number of marriage, and results are shown in Table B3.2. The patterns and significance of estimates of remarriage are largely the same.

⁷ Only marginally significant at $p=0.088$.

with stepchildren at home—meaning the husbands have custody—are a highly select group. Accounting for a host of socio-demographic controls and an extensive battery of personality traits and attitudes changed neither the patterns nor significance of the main variables of interests.⁸ Specifically, racial or ethnic minorities reported lower marital happiness compared to their white counterparts, whereas those without a high school diploma surprisingly enjoyed significantly greater marital quality.⁹ Age at first marriage is significantly and negatively related to marital happiness, and women with no religious affiliation reported significantly lower marital happiness.¹⁰ Although the relationships between marital happiness and personality trait measures are in the expected direction,¹¹ only the Pearlin Mastery scale (measured in 1992) and the Rosenberg Self-Esteem scale (measured in 1987) attained statistical significance: women with a stronger sense of mastery and higher self-esteem are significantly more likely to rate their marriage as very happy, consistent with previous findings (e.g., Fenn, Chiriboga, and Catron 1991; Clausen 1995).

Identification in a random-effects model is achieved through combining both between- and within-individual variations. In the presence of substantial unobserved heterogeneity, however, a random-effects model may risk comparing the incomparable—the continuously married and the remarried. The pool of the continuously married contains both people enjoying high marital quality and those who are stuck in a low-quality marriage but are unwilling or unable to call it quits for various reasons, while the remarried pool consists largely of people who find it perfectly acceptable to reset their conjugal life through divorce. A fixed-effects model, on the other hand, circumvents this issue by using only the within-individual variations, and identification is obtained by comparison

⁸ Full results of random-effects models are shown in Table B3.3 in appendix B.

⁹ Women with some college education or having a bachelor's degree or more also enjoyed greater marital happiness, but the difference from those with a high school diploma (reference group) is insignificant.

¹⁰ Type II Protestant and Catholic women also had lower marital happiness than mainline Protestants, albeit insignificantly so.

¹¹ The coefficient estimate of Rotter's Locus of Control scale is negative, indicating women with external locus of control tend to have lower marital happiness. Moreover, the less risk-averse a woman is, the lower her marital happiness is. On the other hand, women regarding themselves as outgoing in adulthood report greater marital happiness. However, note that none of these estimates reached statistical significance.

across marriages. In other words, a fixed-effects model compares the quality of different marriages of the same person. The second panel of Table 3.3 therefore tells a drastically different story. In these models, remarriage is always significantly associated with greater marital happiness. As in random-effects models, once marital duration was accounted for, the effect size of remarriage was slashed by half but the coefficient estimate remained highly significant. The divergent stories told by random- and fixed-effects models suggest the former may have used too much between-individual differences and was essentially comparing apples to oranges. Fixed-effects estimates also indicate that it takes about 6 years (72 months) to completely eliminate remarriage's gain in marital happiness,¹² and the source of this initial gain is due likely to a higher quality match. Additional control of the interaction between remarriage and marital duration did not alter the main story of fixed-effects models: although marital happiness declined significantly faster with duration for remarried individuals, its magnitude is infinitesimal and not always significant.¹³ Further, the finding of a significantly positive intercept (being remarried) and negative slope (duration) is consistent with that of Umberson et al. (2005), consistent with the interpretation of a strong benefit from careful initial selection of a more compatible spouse in remarriage and a gradual attenuation of marital quality over time. Again, the presence of biological children in household is significantly associated with lower marital happiness while that of stepchildren is not. As covariates that do not change over time are dropped, I do not present estimates of socio-demographic controls and personality traits of fixed-effects models.¹⁴

¹² In models where marital happiness is not a binary variable, it takes even longer to completely eliminate remarriage's gain in marital happiness: 9 years (108 months). See Table B3.5 in the appendix B.

¹³ It is significant when marital happiness is treated as a dichotomous variable and insignificant otherwise.

¹⁴ I interacted these time-invariant controls with interview year and ran fixed-effects regressions. Results are presented in Tables B3.4 and B3.5 in appendix B. Most coefficient estimates are insignificant.

Table 3.3: Longitudinal Logistic Regressions of Marital Happiness

<u>Random-Effects Estimates</u>	<u>Zero-Order</u>	<u>+Duration</u>	<u>+Interaction</u>	<u>+Children</u>
Number of Observations	23062	23039	23039	23039
Number of Groups	3512	3507	3507	3507
Average Obs. per Group	6.6	6.6	6.6	6.6
Currently Remarried	0.354***	-0.065	0.066	0.045
Current Marital Duration		-0.006***	-0.006***	-0.006***
Remarried*Mar. Duration			-0.001†	-0.002*
Biological Children				-0.585***
Stepchildren				-0.188
<u>Fixed-Effects Estimates</u>	<u>Zero-Order</u>	<u>+Duration</u>	<u>+Interaction</u>	<u>+Children</u>
Number of Observations	14070	14054	14054	14054
Number of Groups	1903	1901	1901	1901
Average Obs. per Group	7.4	7.4	7.4	7.4
Currently Remarried	1.097***	0.573***	0.576***	0.529**
Current Marital Duration		-0.008***	-0.008***	-0.009***
Remarried*Mar. Duration			-0.000***	-0.001
Biological Children				-0.699***
Stepchildren				-0.338†
<u>Fixed-Effects Estimates</u>	<u>Zero-Order</u>	<u>+Duration</u>	<u>+Interaction</u>	<u>+Children</u>
Number of Observations	14337	14105	14105	14105
Number of Groups	1946	1911	1911	1911
Average Obs. per Group	7.4	7.4	7.4	7.4
Number of Marriages	0.945***	0.666***	0.669***	0.594***
Current Marital Duration		-0.008***	-0.008***	-0.008***
Num. Marr*Mar. Duration			-0.000	-0.000
Biological Children				-0.668***
Stepchildren				-0.338†

***: $p < 0.001$; **: $p < 0.01$; *: $p < 0.05$; †: $p < 0.10$

What do we make of the difference between these two models? Is unobserved heterogeneity sufficiently substantial to disregard random-effects models? I performed a series of Durbin-Wu-Hausman endogeneity tests for each set of regressions and results are presented in Table 4. The top panel shows that for the marital happiness regression, the chi-square statistic is 294.97 with degrees of freedom of 5.¹⁵ A highly significant test statistic indicates that the null hypothesis of no systematic differences in coefficient estimates may be rejected and the random-effects model is likely misspecified. In other words, there is very substantial unobserved heterogeneity among respondents and within-estimators (fixed-effects model) are more appropriate. The remaining four panels all show highly significant chi-square statistics for regressions of positive and negative interactions, suggesting the fixed-effects model should be used. Consequently, for the sake of brevity, discussions on dyadic interactions in remarriage will focus on fixed-effects models, and random-effects estimates will be relegated to footnotes.

¹⁵ For the clarity of presentation, I eliminated the presence of foster children, biological grandchildren, and step-grandchildren in the household from regressions for these tests. Their inclusion only substantially increased the chi-square statistic with three more degrees of freedom. In other words, the results of Durbin-Wu-Hausman test still hold. Moreover, I performed these same tests with marital happiness as a three-category variable or using number of marriages as a regressor instead of currently remarried. Substantive results (see Tables B4.1 and B4.2 in appendix B) are the same.

**Table 3.4: Durbin-Wu-Hausman Endogeneity Test Results
Comparing Fixed-Effects to Random-Effects Estimates**

Marital Happiness	Fixed	Random	Difference	S.E.
Currently Remarried	0.536	0.043	0.493	0.121
Current Marital Duration	-0.009	-0.006	-0.003	0.000
Remarried*Mar. Duration	-0.001	-0.002	0.001	0.000
Biological Children	-0.694	-0.588	-0.107	0.048
Stepchildren	-0.335	-0.187	-0.148	0.086
chi2(5) = 294.97	Prob>chi2 = 0.0000			
Positive Interactions	Fixed	Random	Difference	S.E.
Currently Remarried	0.230	0.079	0.151	0.017
Current Marital Duration	-0.001	0.000	0.000	0.000
Remarried*Mar. Duration	0.000	0.000	0.000	0.000
Biological Children	-0.070	-0.062	-0.008	0.005
Stepchildren	-0.053	-0.041	-0.012	0.010
chi2(5) = 195.87	Prob>chi2 = 0.0000			
Conflicts - Core Grievances	Fixed	Random	Difference	S.E.
Currently Remarried	-0.488	-0.280	-0.208	0.020
Current Marital Duration	0.000	0.000	0.000	0.000
Remarried*Mar. Duration	0.000	0.000	0.000	0.000
Biological Children	0.240	0.282	-0.042	0.006
Stepchildren	0.129	0.120	0.009	0.011
chi2(5) = 140.34	Prob>chi2 = 0.0000			
Conflicts - In-Law Grievances	Fixed	Random	Difference	S.E.
Currently Remarried	-0.477	-0.323	-0.153	0.028
Current Marital Duration	-0.001	-0.001	0.000	0.000
Remarried*Mar. Duration	0.001	0.001	0.000	0.000
Biological Children	0.060	0.080	-0.020	0.009
Stepchildren	0.006	-0.027	0.033	0.016
chi2(5) = 43.98	Prob>chi2 = 0.0000			
Conflicts - Outside Entertainment	Fixed	Random	Difference	S.E.
Currently Remarried	-0.260	-0.136	-0.124	0.017
Current Marital Duration	0.000	0.000	0.000	0.000
Remarried*Mar. Duration	0.000	0.000	0.000	0.000
Biological Children	0.035	0.048	-0.013	0.005
Stepchildren	0.043	0.031	0.012	0.010
chi2(5) = 72.34	Prob>chi2 = 0.0000			

Table 3.5 presents the fixed-effects results of regressing a factor-based scale of positive interactions frequency on current re-marital status, marital duration, their interaction term, and the presence of children. Again, remarried women are significantly more likely to calmly discuss, laugh together, and share everyday life experiences with their spouse than their first-married counterparts, suggesting the initial efforts to select a more compatible spouse paid off in better constructing common realities in remarriage, consistent with Umberson et al. (2005) and Furstenberg and Spanier (1987). Although the frequency of positive interactions declined significantly with duration, consistent with the notion that marriages tend to become “bland” over time (Blair 1993), it takes more than 29 years (350 months) for the negative effect of duration to completely eliminate the gains from being remarried. Controlling for the interaction between remarriage and marital duration only slightly dampened the relationship between the intercept and slope and changed neither the significance nor the direction of variables of interests. Having biological children at home significantly lowered the frequency of positive interactions, but less significantly so for stepchildren. This aspect of findings lends partial support to Cherlin’s incomplete institutionalization hypothesis of stepfamilies. Random-effects estimates are again much smaller than those of fixed-effects models, but tell essentially the same story.¹⁶

¹⁶ Table B5.1 in the appendix B shows random-effects estimates of positive interactions. Note that these results are quite different from that of marital happiness as the dependent variable. Throughout the models, being remarried is always significantly associated with more frequent positive interactions, irrespective of the inclusion of marital duration, their interaction, and the entire set of socio-demographic controls and personality traits. Moreover, racial or ethnic minorities tend to have less frequent positive interactions, as did women with less education. Religious affiliation has no bearing on positive interaction, whereas both Pearlin’s Mastery Scale and Rosenberg’s self-esteem scale are significantly related to more frequent positive interactions.

Table 3.5: Fixed-Effects Estimation Results of Positive Interactions Frequency

	<u>Zero-Order</u>	<u>+Duration</u>	<u>+Interaction</u>	<u>+Children</u>
Number of Observations	23049	23026	23026	23026
Number of Groups	3512	3507	3507	3507
Observation per Group	6.6	6.6	6.6	6.6
Currently Remarried	0.267***	0.222***	0.236***	0.231***
Current Marital Duration		-0.001***	-0.001***	-0.001***
Remarried*Marr. Duration			-0.000†	-0.000*
Biological Children				-0.070***
Stepchildren				-0.054*
Sigma u	0.445	0.449	0.448	0.448
Sigma e	0.396	0.394	0.394	0.393
Rho	0.559	0.565	0.564	0.564

***: $p < 0.001$; **: $p < 0.01$; *: $p < 0.05$; †: $p < 0.10$

Tables 3.6 to 3.8 present longitudinal regression results of the three factor-based scales of marital conflict frequencies on remarriage, marital duration, their interaction, and the presence of children. Table 3.6 shows that for “core grievances,” within-estimates suggest that remarried women argued significantly less frequently over key issues such as household chores and responsibilities, children, money, and showing affection than in their own first marriage. What is interesting is that the frequency of conflict over core issues actually declined significantly over the course of marriage, suggesting that in addition to the initial selection of a more compatible spouse in remarriage, mutual adjustment took time to settle and an age effect probably exists, consistent with Birditt, Jackey, and Antonucci (2009) and Blair (1993). The interaction term is positive but the effect size is negligible and insignificant.¹⁷ Children at home contribute to a significantly higher frequency of core

¹⁷ Table B6.1 in appendix B presents random-effects estimates of the frequency of core grievances. Again, remarriage is negatively associated with significantly less frequent conflict over household chores, children, money, and showing affection, and so is marital duration. Earlier entry to the first marriage is related to more frequent conflict, yet the relationship is curvilinear. Racial or ethnic minority women tend to argue more often, yet educational attainment is

grievances, especially for biological ones. On the other hand, as some remarriages may not have any biological children particular to the union, I experimented with a scale without conflict over children. The same pattern of the magnitude and significance of coefficients still hold.¹⁸

Table 3.6: Fixed-Effects Estimation Results of Core Grievances Frequency

	Zero- Order	+Duration	+Interactio n	+Children
Number of Observations	23049	23027	23027	23027
Number of Groups	3511	3506	3506	3506
Observation per Group	6.6	6.6	6.6	6.6
Currently Remarried	-0.482***	-0.507***	-0.512***	-0.487***
Current Marital Duration		-0.000***	-0.000***	-0.000***
Remarried*Marr. Duration			0.000	0.000*
Biological Children				0.241***
Stepchildren				0.130***
Sigma u	0.581	0.581	0.580	0.562
Sigma e	0.471	0.470	0.470	0.465
Rho	0.604	0.605	0.604	0.593

***: $p < 0.001$; **: $p < 0.01$; *: $p < 0.05$; †: $p < 0.10$

Table 3.7 presents results of “in-law grievances,” testing the incomplete institutionalization hypothesis. Remarried women argued significantly less frequently over family members on either side than in their first marriage. Moreover, such conflict declined significantly over marital duration. Although the interaction between remarriage and marital duration is significantly positive, the effects of interaction and duration basically cancels each other out and leaves remarried women a distinctive

negatively related to conflict. Moreover, women with a greater sense of mastery and higher self-esteem appear to better handle differences inevitable in any marriage and avoid escalation to open warfare, whereas those with external locus of control seem to be more susceptible to these arguments.

¹⁸ Table B6.2 in appendix B presents fixed-effects estimates of regressing this factor-based scale on remarriage or number of marriage.

“benefit” in grievances over each other’s relatives.¹⁹ Again, biological children is significantly related to more frequent arguments with the spouse about in-laws, likely because a remarried woman’s biological children represent ongoing involvement with her estranged former spouse, whereas the presence of stepchildren in the household means her husband retains their custody, suggesting either the children’s mother is unable or unfit to care for them or a remarried woman’s strong willingness to provide a good home environment for her stepchildren. To further examine whether a remarried household is indeed more prone to conflict due to a lack of clear guidelines to deal with far more complicated relationships—especially when divorce rather than death is the precursor to remarriage—I constructed a scale based on arguments over in-laws and children and repeated the same analyses. Both fixed-effects and random-effects estimates show that remarried women have significantly less frequent arguments over children and each other’s relatives than themselves in first marriage, and these conflict diminished over the course of marriage. Although the interaction term is positive and significant, it does not even offset duration in the fixed-effects model.²⁰ These findings have major implications for the notion of remarriage and stepfamily as an incomplete institution. If remarriage is indeed incompletely institutionalized in the sense that it is more conflict-ridden due in part to more complicated interpersonal relationships, then this characterization of remarriage is not supported by empirical evidence, at least not from this dataset.

¹⁹ Table B7.1 in appendix B presents random-effects estimates, which followed the same pattern of fixed-effects models. Similar to fixed-effects estimates, the inclusion of more controls appeared to accentuate the effect size of remarriage. Further, African American or women with a college degree or more were less likely to argue over in-laws. Again, women with a stronger sense of mastery or greater self-esteem were better equipped to handle differences and less prone to have conflict about each other’s relatives.

²⁰ See Table B7.2 in appendix B for details.

Table 3.7: Fixed-Effects Estimation Results of In-Law Grievances Frequency

	<u>Zero-Order</u>	<u>+Duration</u>	<u>+Interaction</u>	<u>+Children</u>
Number of Observations	22998	22977	22977	22977
Number of Groups	3510	3505	3505	3505
Observation per Group	6.6	6.6	6.6	6.6
Currently Remarried	-0.384***	-0.431***	-0.485***	-0.472***
Current Marital Duration		-0.001***	-0.001***	-0.001***
Remarried*Marr. Duration			0.001***	0.001***
Biological Children				0.062***
Stepchildren				0.007
Sigma u	0.596	0.598	0.595	0.593
Sigma e	0.602	0.601	0.600	0.600
Rho	0.495	0.498	0.496	0.494

***: $p < 0.001$; **: $p < 0.01$; *: $p < 0.05$; †: $p < 0.10$

Table 3.8 provides results pertaining to “outside entertainment” grievances, namely arguments over the husband’s drinking, other women, spending free time, and religion, many of which have behavioral codes of domestic life and proscriptions against extramarital affairs. Since this scale only has an alpha of 0.57, results should be interpreted with caution. These findings are included because they are consistent with the overall picture painted by other factor-based scales. Again, a remarried woman argued significantly less frequently with her husband over his “outside entertainment” activities than in a first marriage. Marital duration is related to significantly less frequent conflict, but the interaction is insignificant. Although the presence of biological children is significantly associated with more frequent disputes, this set of analyses is the only one where the effect size of stepchildren exceeds that of biological ones, albeit insignificantly.^{21,22}

²¹ Table B8.1 in appendix B presents random-effects estimates, which basically follow the same pattern of magnitude and significance of fixed-effects estimates. Again, the effect sizes of remarriage and current marital duration become more pronounced the more controls are added. Racial or ethnic minority women are significantly more likely to have

Taken together, findings presented here largely support the learning perspective of marital happiness and dyadic interactions within a remarriage, with a few exceptions. Individuals do learn from their past mistakes and choose a more compatible spouse in remarriage. This is borne out by the significantly positive estimates of remarriage (intercept) in the fixed-effects models of marital happiness and positive interactions, and the significantly negative estimates of remarriage in all types of marital conflict. Marital duration, on the other hand, is significantly negatively associated with marital happiness, positive interactions, and all measures of marital conflict, indicating that marriage becomes “bland” over time: while not as happy as it used to be, it is also less conflict-ridden due perhaps to individuals’ learning to better handle inevitable differences in opinions and ways of life. The part that received much less empirical support of remarried persons’ learning within a remarriage is reflected in the interaction term between remarriage and marital duration. In positive interactions, it is significantly negative, indicating remarried individuals’ frequency of calm discussion, laughing together, and telling each other about the day declines faster than themselves in first marriage. Similarly, in all types of marital conflict, the interaction term is significantly negative (albeit marginally so for “outside entertainment”), suggesting remarried couples’ frequency of marital conflict grows faster, however slightly, than themselves in first marriage. Nonetheless, the effect sizes of these interaction terms are infinitesimal at best, and in the end it is the intercept term—the initial choice of spouse for remarriage—that dominates. Results of random-effects models are largely the same, except for marital happiness, indicating that the remarried have significantly more

more frequent conflict over these issues, whereas few of the educational attainment and none of the religious affiliation variables have any bearing on arguments about husbands’ involvement with drinking, women, and spending free time. Similar to core and in-law grievances, women with a greater sense of mastery and higher self-esteem are significantly less likely to engage in these arguments, whereas more risk-tolerant (less risk-averse) women are significantly more likely to fight over these topics. One possibility is positive assortative mating in risk preference, but NLSY79 does not have this measure for spouse.

²² As the inclusion of arguments over religion does not make an airtight case of “outside entertainment” grievances, I experimented with a scale that included only spending free time, drinking, and other women. The reliability coefficient of this new variable dropped precipitously to 0.4940. I nonetheless proceeded with fixed-effects estimation, and Table B8.2 in appendix B shows the results. The overall patterns of the magnitude and significance of the main variable of interest—remarriage, current marital duration, and their interactions—did not show any meaningful change at all.

frequent positive interactions and less frequent marital conflict than the continuously married. Overall, these findings are consistent with the notion that marital quality is a product of a dyadic environment and hence should exhibit little correlation across marriages (Johnson and Booth 1998; Johnson, Amoloza, and Booth 1992).

Table 3.8: Fixed-Effects Estimation Results of Outside Entertainment Grievances Frequency

	<u>Zero-Order</u>	<u>+Duration</u>	<u>+Interaction</u>	<u>+Children</u>
Number of Observations	23028	23006	23006	23006
Number of Groups	3511	3506	3506	3506
Observation per Group	6.6	6.6	6.6	6.6
Currently Remarried	-0.245***	-0.252***	-0.262***	-0.258***
Current Marital Duration		-0.000*	-0.000**	-0.000*
Remarried*Marr. Duration			0.000	0.000†
Biological Children				0.035**
Stepchildren				0.042†
Sigma u	0.383	0.382	0.382	0.381
Sigma e	0.371	0.371	0.371	0.371
Rho	0.516	0.515	0.515	0.514

***: $p < 0.001$; **: $p < 0.01$; *: $p < 0.05$; †: $p < 0.10$

Robustness Check

Identification of the effects of independent variables in fixed-effects models comes from the differences in dependent variables over changes in regressors over time. In the settings above, a dichotomous remarriage variable means its coefficient estimates measure the differences in marital happiness, positive interactions, and marital conflict when a woman moved from a first marriage to

a remarriage, namely the second one.²³ Although remarriages in this sample consist predominantly of second marriages (82.28% of all person-year cases), a non-trivial proportion of remarriages (17.72%) are the third or even higher-order marriages.²⁴ Consequently, a great deal of information, amounting to 1,220 person-year cases for marriages beyond the second one, would be left unused if we focus solely on the difference between the first and second marriages. To better identify the relationships between remarriage and its internal dynamics, I generate a variable “number of marriages” for each respondent at each interview year and interacted it with the duration of the current marriage at that point. This way I would be able to compare the second marriage to the first one, and the third to the second, and so forth. Results show that patterns of the magnitude and significance of number of marriages and its interaction with marital duration in the regressions of marital happiness and dyadic interactions are almost identical to those using remarriage as a binary variable. Moreover, estimates of the number of marriages are consistently more pronounced than those obtained from models using a dichotomous remarriage variable.²⁵ Consequently, the highly significant associations between remarriage and marital happiness and both positive interactions and marital conflict are unlikely a statistical artifact of divorce-prone individuals selecting themselves into remarriage alone. Instead, it appears that while pursuing the ever-elusive perfect match and marital bliss, individuals continue their self-improvement projects to make their next marriage more successful.

Finally, if respondents with less successful remarriages tend to drop out of interviews earlier, the happily remarried couples with better interactions may be over-represented in the analytical

²³ In rare cases when the second marriage is short and not captured, mainly because respondents tended to drop out of interviews in the event of a marital disruption, a fixed-effects model would compare the third marriage to the first one.

²⁴ Please refer to the bottom panel of Table B1.1 in appendix B for further details of marriages beyond the second one.

²⁵ Results of marital happiness are presented in Tables B3.6 (fixed-effects) and B3.7 (random-effects). Results of positive interactions are shown in Tables B5.2 (fixed-effects) and B5.3 (random-effects). Tables B6.3 (fixed-effects) and B6.4 (random-effects) pertain to results of core grievances frequency regressions, whereas Tables B7.3 (fixed-effects) and B7.4 (random-effects) show the results of in-law grievances frequency. Tables B8.3 (fixed-effects) and B8.4 (random-effects) presents results of frequency of outside entertainment grievances.

sample. To address this concern, I performed the same fixed-effects analyses using only those respondents who were interviewed till the latest wave and found the patterns of magnitude and significance essentially the same as before.²⁶

Limitations

This study has several limitations. First, the NLSY79 asks only women about their marital happiness and dyadic interactions but not men, and the results may not be readily generalizable to the entire population. However, to the extent that it is usually women who initiate a divorce and who typically report lower marital happiness than men (Aldous and Ganey 1999; Amato, Johnson, Booth, and Rogers 2003; Blair 1993; Dillaway and Broman 2001; Vemer, Coleman, Ganong, and Cooper 1989), results of this study will likely hold for men. Second, the NLSY79 only asks these questions starting from 1992, when the respondents were between 27 and 34 years old. At that time, many would have already ended their first marriage or were in the less satisfying part of it. Further, the NLSY79 would have captured individuals in the early phase of remarriage, making the comparison of marital happiness and various dimensions of couple interactions dubious. On the other hand, since these measures were captured over the entire duration of remarriages, at least we can compare the tail ends of both first marriage and remarriage. Third, the NLSY79 is individual-level data rather than couple-level, and it is difficult to directly assess the compatibility of personalities and worldviews. What can be gleaned is the result of the match—marital quality.

Fourth, limited by its scope, this study has not examined the relationship between marital quality, dyadic interactions, and the marital instability of remarriage. Several studies (e.g., Amato, Johnson, Booth, and Rogers 2003; Furstenberg 1990) have documented the greater instability of remarriages as compared to first marriages, and this stylized fact may be difficult to reconcile with findings presented here. There are two possibilities. On the one hand, it has been suggested that

²⁶ Tables B10.1 and B10.2 present the results of these fixed-effects estimations.

having gone through a divorce, remarried individuals are all too familiar with the warning signs that a marriage may not work out despite their best efforts. Consequently, they may decide to cut losses early on to prevent further damage to their life and career (Furstenberg and Spanier 1987), as witnessed by remarriage's much greater fragility at the short duration compared to first marriages (Weed 1980). On the other hand, preliminary empirical results from the NLSY79 do not support the notion that remarriages are any more fragile than first ones. In 2010, for instance, only 45.40% of first marriages remained intact, whereas 50.61% divorced or separated. However, 50.61% of second marriages remained intact and 45.79% ended in divorce or separation.²⁷ The proportion of intact third marriages is even higher, likely due to their much shorter duration. Though much less refined than desired, these estimates nonetheless resonate with Myers's finding that remarried individuals have exhibited a decreasing propensity to divorce, due perhaps to a declining popularity of remarriage in contemporary US society, and hence its selection of those with a particularly strong predisposition to succeed (2006). Glenn and Weaver (1977) also pointed out that marital happiness and marital instability are not the same thing: many unhappy marriages are quite stable, as many people would not divorce under any circumstance.

Fifth, I did not control for age, as it likely confounds with marital duration in terms of learning. Moreover, since the pool of the remarried consists predominantly of people in their second marriage (82.27%), the inclusion of age may introduce collinearity, and identification would have come from the third or even higher-order marriage. Nevertheless, age effect may well provide a valid alternative explanation to the findings presented above. According to socioemotional selectivity theory (Castensen, Issacowitz, and Charles 1999), emotional regulation becomes an increasingly

²⁷ Table B9 in appendix B shows the causes of disruption by marriage order. In all years, the proportion of intact second marriages is always greater than that of the first one, and its corollary is that the proportion of disrupted second marriages through separation or divorce is always greater than that of the first marriage. Although the ratio of second marriages ended in divorce or separation rose by 13 percentage points between 1992 and 2010 that of first marriages increased even further by 16 percentage points over the same time period.

important goal as people age. Consequently, they tend to focus on the present and the positive aspect of things, ignore negative emotions, and are less sensitive to others' reactions (Neugarten 1973). Moreover, when time together is more limited, people are more likely to navigate social interactions more carefully. As a result, as time goes by, individuals are more likely to report greater marital quality and more frequent positive interactions and downplay the prominence of marital conflict.

Finally, although the use of a fixed-effects model can eliminate selection on time-invariant factors, it did not tackle other sources of selection bias such as sample attrition and non-participation. As the popularity of remarriage waned over the past three decades, those who remarried after being bitten by the failure of a first marriage became an increasingly select group, since both cohabitation and living apart together have gradually become acceptable living arrangements after divorce. Consequently, only those who believe they will be “happily ever after” would remarry. This part of selection bias is a missing variable problem and requires better data to measure intentions of marriage. Moreover, as of 2010, 595 respondents have deceased. To the extent that marital conflict and divorce are important risk factors of mortality (e.g., Choi and Marks 2008; Lillard and Waite 1995; Hughes and Waite 2009; Umberson, Williams, Powers, Liu, and Needham 2006), sample attrition due to respondent deaths could have been dealt with to obtain a more precise relationship between remarriage, marital happiness, and dyadic interactions. Further, a more comprehensive correction for selection bias could have considered respondent participation, as their non-interview in any given year appears to have corresponded to changes in marital status. Further extension of this study would benefit from the aforementioned procedures.

Discussion and Conclusion

Remarriage used to be viewed as an inferior substitute for first marriage and a slightly better alternative to being single, arising out of necessity for woman to recover from post-divorce financial

turmoil and for a man to have someone to take care of children and the household rather than enthusiasm for another chance at conjugal happiness to rekindle their lives. This inaccurate depiction emerges partly because social scientists used to perceive adults as on relatively fixed life trajectories determined earlier in life, and partly because sociologists tend to regard divorced persons as socialized by experiences of frequent marital conflict who carry these ineffective or even detrimental interaction styles to the next marriage. Consequently, marital quality suffers. In other words, previous literature suggests that divorce casts a long shadow over an individual's future marital happiness. Even in the best case scenario where marital happiness in remarriage is on par with that of the first marriage, remarried couples still face the unique challenge of ongoing involvement with the former spouse and the presence of stepchildren in the household. It appears that one divorce alone is sufficient to condemn people to lifelong misery.

Drawing from adult development literature within the life course paradigm, especially Kiecolt's (1994) model of self-change under stressful circumstances or after a critical event, this study brings a fresh perspective to marital happiness and couple interactions in remarriage by suggesting that divorced individuals learn from their past mistakes and become more careful in selecting a more compatible spouse to give their remarriage a head start. Accordingly, divorced individuals revise their expectations of and change their behaviors. Consequently, individuals would enjoy higher marital quality in subsequent marriages.

Built on earlier scholars' contributions, empirical evidence presented in this study support this view. Based on the NLSY79 between 1992 and 2010, fixed-effects estimates indicate that remarried individuals have greater marital happiness, are better able to build a common reality effectively through frequent discussion of issues in a calm manner, and sharing a laugh or life in general. Moreover, remarried persons engage less frequently in open conflict in all potential flashpoints such as housework, children, money, showing affection, and dealing with each other's

relatives, than they did in first or earlier marriages. Random-effects results also suggest remarried individuals have more frequent positive interactions and less frequent arguments than their continuously married counterparts. On the other hand, the highly significant but infinitesimal interaction terms between remarriage and marital duration suggest there is little support for the view that learning continues within a remarriage: upon landing a “perfect match,” remarried individuals are no more likely to learn to improve their communication skills than they did in a first marriage or than their first-married counterparts.

Findings of this paper partly explain the enduring popularity of remarriage in a society when marriage is increasingly volitional, particularly after divorce when the role of marriage as a social marker has largely been fulfilled in the first one. After all, people still long for intimate relationships even after they have been previously scorned and would like social recognition of and legal protection for their union, similar to the desire that underlines the growing acceptance of same-sex marriage in the US. For people concerned that the high level of divorce would erode the health of marriage and the family, this study provides reassuring evidence of the continuing relevance of marriage as a social institution.

CHAPTER 4

ONCE BROKEN, ALWAYS BROKEN?

SOCIAL EMBEDDEDNESS OF REMARRIAGE

Introduction

Just as marriage is an all-encompassing social institution that governs individuals' private spheres and social lives, divorce is a powerful event that unravels social networks and wreaks major havoc in everyday life. Remarriage has the potential to restore stability to one's life and reconstitute a web of confidants. On the other hand, with remarriage typically occurring in midlife or later when most people are well set in their life trajectories, the restitutive effects of remarriage in social life may be more limited. Further, scholarly interests in how divorce disrupts social relations have been on the wane in recent years, so our understanding of how remarriage shapes network configurations of older adults is necessarily constrained.

The purpose of this study is to provide timely information on the relationship between remarriage and the social networks of older adults, focusing on both the static (cross-sectional) and dynamic (longitudinal) aspects of social relations. It seeks to address two research questions. First, how do the social networks of remarried older adults compare with those of the first married? If the continuously married is not an appropriate benchmark of comparison, then how do the remarried fare compared to the divorced? In addition, with the painful disintegration of social network in memory and constrained by various life-course factors, people may be disinclined to weave a new spouse into their hard-earned social network in remarriage. Hence a natural sequel to the previous research question concerns the extent to which a spouse in remarriage is embedded to an existing network and what role that spouse would play in maintaining a couple's connectedness to their

social milieu. While cross-sectional findings are invaluable in expanding our knowledge of remarried individuals' social relations at a given point in time, network structure is fluid and constantly subject to the influences of various factors. With only snapshots in hand, our apperception of network dynamics likely remains seriously inadequate. The second research question therefore is: How do remarried individuals' social networks change over time vis-à-vis those of the continuously married? Specifically, how do various network components and structural characteristics evolve in relation to baseline marital status?

There are several implications of this study. First, there are an increasing number of couples where one or both spouses are in second or higher order of marriage. As of 2001, 27.56% of men aged 54 and above were ever remarried, and 23.78% of women of the same age group were ever remarried (Kreider 2005). With divorce settling at a high plateau, it is reasonable to expect a substantial proportion of the US population will experience divorce and subsequent remarriage in the foreseeable future. Consequently, it is imperative that family sociologists obtain a firmer grip on remarriage and its implications on network configurations. Second, while divorce may drive a wedge between divorcees and their families or friends in midlife, with time, such minor grudges may widen considerably and translate to fewer contacts and exchanges of support in old age (de Jong Gierveld and Dykstra 2002; Dykstra 1998), right at the time when the need for caregiving starts to accumulate. As a result, it is crucial that social gerontologists identify where the gap between supports provided and received lies such that social service organizations or relevant authorities may step in to help. Finally, by using a nationally representative dataset of older adults in the US, this study is well equipped to characterize the state of remarriage among them, advancing social demographers' knowledge of older adults' intimate relationships and shedding light on the nature of remarriage and its position in contemporary US society.

Conceptual Framework

Individuals move through their life course surrounded by a convoy of people to whom they are related by exchanging affection, affirmation, and aid (Antonucci 1994; Kahn and Antonucci 1980). The composition of a person's convoy at any given point in time is conditioned not only by the enduring characteristics and stage of life course, but also by the contexts of these relationships and preceding life experiences. In the latter part of midlife, people start to plan for retirement and begin to gradually withdraw from the labor force. With declining significance of work-related roles and relations, the advantages of weak ties, which are more capable of generating heterogeneous information to advance one's career, slowly fade away (Frederickson and Carstensen 1990). Instead, individuals increasingly turn to their private spheres for social, emotional, and instrumental support, concomitant with their growing introspection in midlife (Neugarten 1973). Consequently, strong ties such as family members and friends rise to prominence and constitute the bulk of older adults' social networks, and each type serves different functions according to the nature of the relationships (Acock and Hurlbert 1993). However, there are marked differences between these two types of associates. Relationships with kin, especially consanguines, occur at the birth of the younger party or the start of a marriage in the case of affines. They are obligatory in nature and usually cannot be relinquished (Fischer 1982; Carr and Moorman 2012; Shulman 1975), except for a serious offense, death, or marital dissolution. As consanguineal kin have often known one another for a long time, information cost is low, and they tend to have accrued substantial "credit" with one another through mutual assistance over an extended period of time. In addition, kin relationships are likely embedded in a dense web of family relations, making it easier to enforce the norm and to help family members in need. As a result, kin members generally occupy the "core" of a person's social network (Kahn and Antonucci 1980; Morgan, Neal, and Carder 1997) and can be trusted to perform tasks that are miscellaneous and unspecified in nature and undetermined in time of provision (Cantor 1979;

Litwak 1985), such as various large and small services, financial aid, and emotional support (Wellman and Wortley 1992).

Friendships, on the other hand, are voluntary in nature, based on shared interests and compatible personality, and can be terminated unilaterally without inflicting too much damage on oneself (Blieszner and Adams 1992; Fischer 1982; Carr and Moorman 2012; Litwak 1985). Since volition and common interests are indispensable components, friendships are non-ascribed, socially unregulated in nature, and free from formal role prescriptions. Therefore, they become an important source of affirmation of self-concept, the development of ego, and the provision of affection. As a result, friendships enhance self-esteem and psychological well-being (de Vries 1996) and are better able to provide companionship and emotional support than kin (Wellman and Wellman 1992), who can sometimes cause irritating friction and great distress given the proximity of living quarters and the frequency of interactions. Unlike kin, there are few guidelines governing the exchange of support among friends, except for the norm of reciprocity: friends who do not or cannot reciprocate will ultimately be dropped (Klein Ikkink and Tilburg 1999). Friendships tend to dissolve when illness and disability place an extra burden on the relationship (Johnson 1983). Although friends share intimate thoughts and can sometimes pass as kin (Johnson 1983), the lack of constant monitoring and not being embedded in a dense network implies that friends are more often counted on for specialized, ad hoc assistance (Litwak 1985; Shea, Thompson, and Blieszner 1988).

Network configuration and the relative importance of different types of associates, however, are not uniform over the life course (Cornwell and Laumann 2015). Network configuration crystallizes underlying network processes, which are a series of events that create, sustain, and dissolve social structures (Doreian and Stokman 1997). They are subject to the influence of aging processes and previous critical events, especially those in marital history. Aging influences network processes in two important ways: through socioemotional selection and an elevated need for care

and assistance with daily life. Socioemotional selectivity theory (Frederickson and Carstensen 1990; Luong, Charles, and Fingerman 2011) posits that as time goes by, the growing salience of social endings—the cessation of repeated future dealings but not necessarily death—curtails horizons of expected social interactions and prompts people to focus more on the present and become more selective in choosing their social partners. In the context of aging, older adults increasingly feel time available to them is limited and see the prospects of interacting with others as diminishing. Consequently, emotional regulation assumes primacy as a means to conserve energy during interactions and to attain psychological well-being. On the one hand, older adults tend to focus on receiving immediate emotional rewards from interactions and adjust their networks to include more of those who are more compatible and better capable of delivering affective benefits, namely people who have been known to them for a long time, are emotionally close, and can be reasonably expected to deliver support—the core of an individual’s network. Further, since kin relationships are bound by blood and dictated by social norms, interactions with them are likely to continue until the very end and become part of the core of an older adult’s social network. On the other hand, older adults may well rotate out associates with whom they are not very familiar—peripheral alters—since less familiarity means affective rewards cannot be assured and a dwindling interaction horizon implies unpleasant exchanges are unlikely to be recouped. Greater demands for health care and assistance with daily living also induce older adults to rely more heavily on kin, since kin are generally regarded as a more appropriate source of support (Cantor 1979). Friends, however close and ready to provide emotional support (Carr and Moorman 2012), are unlikely to know every aspect of daily life and are not obliged to assist in these intimate yet miscellaneous tasks. As a result, social networks tend to become kin-centered with age (de Vries 1996; Fischer 1982; Shulman 1975; Shaw, Krause, Liang, and Bennett 2007; van Tilburg 1998).

Network configurations are not only shaped by forces constant over the life course, such as time, but are also transformed by events that dislodge individuals from their permanent trajectories. A critical event causes a fundamental reorientation in the meaning, purpose, and direction of life, making people view themselves differently and change their roles in relation to others (Kiecolt 1994; Diehl 1999). Consequently, critical events usually pinpoint significant discontinuity in life course trajectories and become turning points in life (Clausen 1995). As an individual's self-concept changes in response to a critical event, so will his or her relationships with others, and the composition of social networks ensues. Divorce and remarriage are generally viewed as critical events (Wethington, Kessler, and Pixley 2004) since the institution of marriage organizes a person's domestic sphere and everyday life, and his or her social activities outside of work tend to evolve around the family. In more ways than one, divorce could be interpreted by those involved as a personal failure, if not worse, and provides ample opportunities for introspection. Individuals may consider how to improve themselves next time around, and not just in how they handle interactions within marriage, but also how they configure the circle of associates with whom to discuss important matters.

While a marriage brings together family and friends of both spouses (Felmlee 2001), a divorce dissociates the two networks (Rands 1988). The impact on interpersonal relationships varies by the type of associates. When the primary bond—conjugal relationship—ceases to exist, former affines are likely to side with their own kin member and no longer feel obliged to maintain contact (Anspach 1976; Rands 1988; Spicer and Hampe 1975; Terhell, Broese van Groenou, and van Tilburg 2004). Shared friends or those met through the former spouse may feel torn between antagonistic parties (Albeck and Kaydar 2002). Even if hostilities are negligible and loyalty is undivided, divorce may reveal unflattering aspects of people, making friends question whether it is judicious to continue the friendship. Individuals facing impending divorce are also likely to extricate themselves from their spouse's networks (Milardo 1982). Although consanguines are the most robust type of associates,

especially those between parent-child (Thuen and Eikeland 1997), divorce proper may still drive a wedge between a divorcee and his or her own kin should they hold a less forgiving view of it. Besides divorce, other attendant factors may reduce network size and emotional closeness. A residential move following divorce often pulls individuals away from their social contacts (Degenne and Lebeaux 2005; Terhell, Broese van Groenou, and van Tilburg 2007), and diminished economic resources and the demands of juggling both family and work make it difficult to maintain an active social life (Kalmijn and Broese van Groenou 2005), especially for women (Waite and Harrison 1992). Moreover, as social activities tend to be organized around the family, divorced people may feel awkward and have a difficult time fitting into the scene (Vaughan 1987).

On the other hand, divorce does not necessarily spell disaster for one's social relations. Marriage has become a "greedy institution" in modern society in that it commands undivided commitment in time and energy from both spouses to focus on domestic issues. The family, based on conjugal union, has primacy over individual lives and becomes a self-sufficient unit (Gerstel 1988a), often at the expense of maintaining relationships with other family members and friends and integrating into the larger social milieu. Specifically, marriage tends to isolate women from non-kin and prevent men from having confidants other than the wife (Rands 1988). A divorce may well liberate one from a jealous, controlling, or widely disliked spouse and likely frees up resources to reconnect with relatives and friends (Albeck and Kaydar 2002; Anspach 1976; Gray, De Vaus, Qu, and Stanton, 2011; Kalmijn and Broese van Groenou 2005). With more time on hand and possibly better personal finances (Jarvis and Jenkins 1999; McManus and DiPrete 2001), divorced men tend to seek out instant networks by engaging in activities oriented to meet people. Women, cash strapped and often having to juggle work and care for minor children, tend to intensify existing ties and center their social activities within the household (Gerstel 1988b). The presence of children likely helps divorced women to integrate more tightly to her kin network, and financial difficulties

may prompt them to seek out instrumental aid from their own relatives (Kalmijn and Broese van Groenou 2005). In addition to constraints, divorced individuals have strong incentives to reconstruct their social ties to meet the instrumental and affective needs previously fulfilled by their spouse and lost contacts, and their mental health depends in no small measure on the extent of the success of this reconstruction (Lin and Westcott 1991). More importantly, a reconstituted network with a higher ratio of friends serves to cast a wider net for meeting a potential spouse for remarriage (Bidart and Lavenu 2005).

Remarriage has the prospect of replenishing depleted ties and restoring an individual's connections to the immediate social environment. After all, remarriage should bring another set of kin and joint friends to one's life. Remarriage generally improves economic well-being, especially for women (Morrison and Ritualo 2000; Shapiro 1996), so that resources could be allocated to socialize again. Entry into another marriage should re-introduce stability into one's life so that relationships with kith and kin can have a solid foundation to develop. Nonetheless, several life course factors may contribute to remarried individuals' being less embedded in their immediate social environment. First and foremost, remarriage typically occurs in midlife; by this time, many have been firmly set along their life course trajectories and committed themselves to many responsibilities both at work and at home. As a result, friendships are relegated to the backburner or at least have become attenuated. Once weakened by dyadic withdrawal (Slater 1963; de Vries 1996), childbirth and childrearing (Munch, McPherson, and Smith-Lovin 1997), and then broken by divorce, it may be difficult for both parties to resume previous closeness. People may even carry grudges about friends' divorce for a long time (Terhell, Broese van Groenou, and van Tilburg 2007). Conversely, by midlife individuals have long left age-stratified environments (such as schools) and entered the age-heterogeneous labor force, thereby limiting their access to age peers (Bidart and Lavenu 2005) from which most friends tend to be drawn. This in turn constrains the formation of new friendships. The

separation of public and private spheres in adult life in the US does not help matters either, as few coworkers are eventually turned into friends (Fischer 1982; Marsden 1987).

Second, there is substantial homogamy with respect to marital history in remarriage, which tends to bring together spouses who have been divorced (Ono 2006). As divorced individuals have more fragmented social networks, the integration of two such networks is unlikely to result in much improved social connectedness for either. Moreover, as affinal kin generally play a rather minor role in adult life, their contribution to the recovery of remarried people's social integration will be likewise limited. Even if former affines have been close and helpful, having lost them in divorce makes people wary of including affines as their close associates again. Third, after going through the experience of losing friends and other contacts in divorce, remarried people have incentive to safeguard their own associates and not let them be poached by a spouse lest they risk losing them again in case of another divorce. Taken together, these contextual, opportunistic, and motivational factors shape remarried individuals' social relations so that their personal networks are smaller than those of the continuously married. Moreover, since the remarried rely heavily on friends for socioemotional support while unmarried and hence are less keen to take on affines as new associates, their networks are likely to contain a higher proportion of friends than the continuously married (Hurlbert and Acock 1990). Based on these discussions, I propose the following hypothesis:

Hypothesis 1: Compared to the continuously married, remarried older adults have a smaller network with a higher ratio of friends.

Network size and composition have a direct bearing on other characteristics such as emotional closeness, contact volume, and density. As people do not have unlimited energy, time, or resources, the larger a network is, the thinner a person is spread over these members and the less close he or she feels to an average member (Adams and Torr 1998). Similarly, contact volume to an average

member will be lower in a larger network because there are more associates to talk to and emotional closeness to an average alter is lower. Moreover, the relative composition of kin and kith in network affects its density. On the one hand, kin members tend to be drawn from fewer social contexts (lower multiplexity), and networks more heavily populated by kin are likely to be denser (Fischer 1982). Since friendships are based on shared interests and typically drawn from diverse contexts (higher multiplexity), friends can be easily compartmentalized by the ego. As a result, compared to kin, the ego's friends are less likely to know about and talk to one another, and individuals with a higher ratio of friends in networks—such as the unmarried—tend to have networks that are less dense (Hurlbert and Acock 1990; Rands 1988). In addition, since remarried couples are less likely to coalesce a couple identity than their continuously married counterparts, the development of overlapping networks concomitant with the progress of an intimate relationship as described in Milardo (1982) or Kearns and Leonard (2004) is less likely to occur. In other words, the density of remarried persons' networks is likely to be lower.

Hypothesis 2: Compared to the continuously married, remarried older adults are emotionally less close to their alters, talk to them less frequently, and have a lower overall density.

Overall network characteristics may not accurately reflect the structure of remarried older adults' social networks. Specifically, while the remarried may resemble their first married counterparts in many ways, marital disruption and the restart of conjugal life in midlife may place a remarried spouse in a rather different position. On the one hand, a spouse usually occupies the central place in a married individual's network, is connected to most, if not all, members, and sometimes even serves as the only bridge between the ego and all other alters. For a man, the wife often is his only confidant (Carr and Moorman 2012; de Vries 1996), and women tend to be kin-keepers of the family, responsible for bringing together different generations (Waite and Harrison 1992). On the

other hand, since remarried people may be less inclined to weave their spouses to their existing web of friends and are less integrated to their affines, spouses are likely to be less embedded in a remarried person's network. As a result, spouses in remarriage are less likely to know other discussion partners (lower density) and to contact them frequently. Other than a spouse's being less integrated to an existing network, the part of a remarried individual's network without the spouse may also be more segmented: since these alters tend to be one's own friends drawn from different contexts (Fischer 1982; Moore 1990; Rands 1988), they are less likely to even know of one another, and it is also easier for the ego to keep them apart. Consequently, density and contact frequency pertaining to the remaining network of remarried people are likely to be lower than those of the continuously married.

In addition to these measures, there are two other ways to characterize a spouse's connectedness in remarriage: spouse betweenness and spouse-independent ties. A network member is said to be *between* the ego and another member if he or she is located at the shortest path (geodesic) linking the two (Freeman 1979). Strategically situated, a person who is between another two will have a certain degree of control, if not monopoly, over the communication between them. When spouses are less integrated to remarried persons' networks, they are also less likely to be between the ego and other confidants and to wield control over access to either side. Corollary to betweenness is the notion of tie independence. A tie is *spouse-independent* if a network member has little or no contact with ego's spouse (Cornwell 2011), and its presence in a network serves as a proxy for how much autonomy from the spouse a person has in communicating with others. Provided that a remarried spouse is socially less embedded, there will be more spouse-independent ties in the networks of remarried older adults than in those of the continuously married.

Hypothesis 3a: Compared to spouses in continuous first marriages, those in remarriage are less likely to be connected to the ego's other network members. Even if they know of these associates, remarried spouses talk less frequently to them than their continuously married counterparts.

Hypothesis 3b: Members other than the spouse are less likely to know of one another in a remarried older adult's network compared to those in a continuously married person's network. Moreover, frequency of contact among them is likely to be lower than among their counterparts in continuously married people's networks.

Hypothesis 3c: Compared to the first married, a remarried spouse is less likely to be between the ego and other network members. In addition, the remarried are likely to have more spouse-independent ties in network than the continuously married.

Network Change

Social networks are not static. Instead, people adapt their networks to changing needs associated with their life circumstances. Major upheavals in one's social world usually follow major life events such as marital disruption or the death of an alter. In the absence of such events, network change takes place in small increments, conditioned by existing network characteristics, namely the composition and the extent of fragmentation. People with more friends and fewer kin in network are likely to experience higher turnover in network membership over time (Leslie and Grady 1985) as it is difficult to ditch kin without wreaking major havoc in family relations, whereas it is easier to shed friends or other associates without substantial ramifications (Burt 2000; Degenne and Lebeaux 2005; Klein Ikkink and van Tilburg 1999; Wellman, Wong, Tindall, and Nazer 1997). Moreover, a more tightly knit network characterized by higher density, contact volume among alters, and greater emotional closeness makes it costly to remove contacts without affecting the rest of a network

(Leslie and Grady 1985; Shulman 1975). Consequently, individuals whose networks are less dense, have lower contact volume among alters, or are emotionally less close to alters are more likely to change network membership over time.

Nonetheless, it remains unclear as to where these changes in network memberships would lead to. On the one hand, people with more fragmented networks may continue to drop friends and other associates to whom they are not strongly attached until the network reaches a low-level equilibrium, so that only the core—consisting largely of consanguines—remains. On the other hand, it is probable that despite the challenges in midlife to meet people whom could be called confidants, people may well replace lost ties with others of similar characteristics—emotional closeness and connectedness to others in network—in order to maintain basic sociability. These new alters may have been known to the ego for quite some time but remained at the periphery. By taking in these peripheral, interchangeable ties in small increments over time, overall structural characteristics of a network are preserved despite gradual changes in membership. As remarried individuals tend to have more fragmented networks, I propose the following hypothesis:

Hypothesis 4: Compared to the continuously married, remarried older adults' networks experience higher turnover over time. While they may exhibit the same tendency to keep kin, they are more likely to rotate in and out friends as discussion partners of important matters. Moreover, remarried individuals are more likely to change associates to whom they feel less close and with whom they have less frequent contact. On the other hand, it is less clear whether remarried older adults would replace these lost ties with others of similar characteristics or their network would continue to shrink.

Data and Measures

I used both waves of the National Social Life, Health, and Aging Project (NSHAP) to examine the relationships between marital status, network characteristics, and network change. The NSHAP,

administered by the National Opinion Research Center (NORC), is a nationally representative longitudinal dataset of 3,005 community-dwelling individuals aged 57 to 85 first interviewed in 2005–06. It oversamples African Americans and Hispanics as well as men due to the last group’s higher mortality level from midlife (Goldman, Westoff, and Hammerslough 1984). The second wave of interviews was conducted in 2010–11. Of the original respondents, 430 were deceased, 139 were too ill to interview, 4 were living in nursing homes and hence became ineligible, and another 161 were known to be alive but did not participate in the interviews. To offset these losses, NORC replenished the wave 2 sample with non-interviewed respondents from wave 1 and spouses of wave 1 respondents, bringing the total sample size to 3,377. However, as this study concerns changes in personal networks over time, I use the 2,261 older adults for whom information from both waves is available. Since only first-wave respondents were used, weights and variables to account for design effects from the first wave were applied to obtain nationally representative estimates. Overall, the weighted response rates of both waves are 75.5% and 76.9%, and the weighted response rate of wave 1 respondents in wave 2 is 87.8% (Cornwell and Laumann 2015).

In each wave, NSHAP respondents were asked to name five individuals with whom they “discussed important things” over the last 12 months (Roster A) and to provide detailed information on these social contacts: demographic information, their relationships to the respondents, their contact frequency with the respondents and among themselves, emotional closeness to respondents, whether respondents discuss health issues with them, and whether they live in the same household. If a respondent is married or cohabiting and a spouse or a partner is not included in Roster A, the spouse or partner will be listed in Roster B.¹ Respondents are allowed to add one more person who is important or especially close to them in Roster C. It should also be noted that the NSHAP adopts

¹ There are very few respondents living with a partner at wave 1 interview (N=60). As a result, eliminating them from analysis left the results virtually unchanged.

a GSS-type name generator, which tends to elicit strong ties (Cornwell and Laumann 2015) so that these networks are often kin-centered and dense (Marsden 1987). Furthermore, “important matters” usually pertains to personal or intimate relationships or other aspects of personal life (Bailey and Marsden 1999).² In wave 2, after providing the names of Roster A confidants, respondents were asked to compare them with wave 1 alters preloaded in the computer-assisted telephone interviewing (CATI) system and to confirm that the computer-generated matches were correct. A network changes when (1) a Roster A confidant in wave 1 failed to be nominated in the same roster in wave 2, or (2) a Roster A confidant in wave 2 was not previously nominated in the same roster. A movement from Roster A to B or C or vice versa is therefore counted as a loss or gain in confidant, while changes in Rosters B and C are excluded from analysis. The rationale to focus on Roster A is that if a confidant is really important—someone with whom a respondent can discuss important matters—this person should have been listed in the first place without further probing (Cornwell, personal communication, March 2014). Moreover, to include respondents who only nominated their spouses in Roster B or those who named additional alters in Roster C means that I would be comparing people with five, six, or seven discussion partners. In other words, the best way to keep everyone on equal footing is to concentrate on Roster A confidants. Finally, I do not include associates lost through death, as death clearly is not due to respondents’ volition and their inclusion will distort the focus on voluntary network changes.

I focus on the following measures that are of particular interest to social network researchers: average network size, proportion of kin and friends, network volume as represented by contact frequency, network density, average emotional closeness, and ratios of spouse-between and spouse-independent ties. Network size is relevant for older adults’ well-being because a larger network will

² Since the name generator is placed immediately after demographic information, NSHAP is able to minimize undue influences on the alters elicited by the part of the interview that precedes it.

likely provide individuals with greater opportunities to interact with a more diverse group of people, making available greater amount of social support and information. While a higher ratio of kin may reduce the diversity of information, kin (especially consanguines) can be entrusted to perform various tasks and provide instrumental assistance to the elderly (Cantor 1979; Litwak 1985). On the other hand, based on shared interests and experiences and serving to affirm and validate self-concept, a higher ratio of friends in a network may well afford greater emotional satisfaction through social interactions (de Vries 1996). For contact frequency, I used the raw score, ranging from 1 (equal to “less than once a year”) to 8 (equal to “every day”). Density is defined as the proportion of existing ties among all possible ones. For instance, if a respondent named five alters as discussion partners, there are at most 10 possible ties ($5 \times 4 \div 2 = 10$). If there are eight ties among those alters, then the density of that network is 0.80. For average emotional closeness, I again used the raw score, with 1 equal to “not very close” and 4 equal to “extremely close.” Further, to compare spouse’s social connectedness in continuous first marriage and remarriage, I re-calculated these same measures for the part of the network pertaining to the spouse. Moreover, for the comparison between the remarried and divorced, I also calculated the same characteristics by removing the spouse and any connection therewith to equalize the baseline, since the spouse is generally the most important alter in the network and his or her presence will make the measures gravitate toward him or her.

Following Cornwell and Laumann (2011), spouse betweenness is operationalized as the situation where frequency of contact between a spouse and an alter is higher than that between the alter and the ego, indicating a spouse is “central” in that pair of relationships. However, using the mere presence of a spouse-between tie to describe an entire network as dominated by a spouse may overstate the extent of spouse betweenness. I therefore constructed another variable to account for the ratio of spouse-between ties in network. A spouse independent tie is defined as an alter having

contacted the spouse no more than “a couple of times per year,” regardless of this alter’s frequency of contact with the ego. Here “a couple of times” refers to twice per year. Again, I calculated the ratio of spouse independent ties in network to better reflect the extent to which a spouse is strongly connected to other associates. It should be pointed out that while spouse betweenness and spouse dependence are highly related, these two notions are distinct. For instance, an associate may well have very frequent contact with the spouse (hence spouse dependent) while simultaneously maintaining equally frequent contact with the ego (not spouse between). By the same token, an alter may have infrequent contact with the spouse (hence spouse independent) but even fewer frequent contact with the ego (hence spouse between). Consequently, these two notions tap different dimensions of a spouse’s involvement in one’s social network. Moreover, both spouse betweenness and independence are only applicable to a subset of the sample: those who were married, have nominated spouse in Roster A, and have at least two Roster A confidants (spouse included).

The NSHAP collects extensive information on respondents’ socio-demographics, marital and cohabitation status and history, and a slew of self-reported measures of physical health, mental health, and biomarkers. Besides formal and informal marital status and history in each wave, I also calculated changes in marital status between waves. Respondents’ race and ethnicity is grouped into four: white, African American, Hispanic, and others. Educational attainment is categorized into four groups: less than high school, high school graduate, some college, and bachelor’s degree or more. Additionally, I include several variables on health as it has direct bearing on an older adult’s interests and ability to engage in social life and connect to family and friends (de Jong Gierveld and Peeters 2003; Litwin 1997, 2001; Waite and Harrison 1992). I used the raw scores of self-rated physical and mental health, where respondents were asked whether their health is poor, fair, good, very good, or excellent. Self-reported morbidity has been found to be a more precise measure of health (Ferraro and Farmer 1999). Since the NSHAP is a sample of older adults, I used additional information to

complement these self-rated health measures: a 9-item instrumental activities of daily living (IADL) for functional limitations; an 11-item Center for Epidemiological Studies Depression Scale (CES-D), a 7-item Hospital Anxiety and Depression Scale (HADS), and a 3-item UCLA Loneliness Scale for mental health. IADLs ask respondents to rate how much difficulty they have in performing the following tasks: eating, bathing, dressing, getting in or out of bed, walking across the room or one block, using the toilet, and driving in daytime or at night. If an informant experiences any difficulty in carrying out the aforementioned tasks, he or she is likely to resort to network members, especially kin, for assistance, which in turn affects network maintenance (Klein Ikkink and van Tilburg 1999). I therefore generated a binary variable indicating whether a respondent has any difficulty in performing any of these tasks. The CES-D is a standardized self-report screening test for depressive symptoms, asking whether respondents are depressed, sad, could not enjoy life, could not get going, and so forth. While it could not replace a clinical diagnosis, the CES-D is indicative of a person's depressive symptoms. An individual with more depressive symptoms is more likely to withdraw from social interactions, resulting in having a smaller network size and presumably more fragmented networks. The anxiety subscale of Hospital Anxiety and Depression Scale (HADS) is a self-assessed test developed to detect subjective, emotional aspects of anxiety disturbances among the general population (Bjelland, Dahl, Haug, and Neckelman 2002). As individuals suffering from anxiety disorder may have difficulty interacting with unfamiliar people, their networks may be smaller, denser, and consist mainly of kin and very close friends. The 3-item UCLA Loneliness Scale is a shortened version of the revised scale with simplified response categories, making it more suitable for large-scale social surveys. It is a self-assessment about a lack of companionship and a feeling of being left out or isolated. More importantly, this shortened version appears to capture overall feelings of loneliness quite well (Hughes, Waite, Hawkley, and Cacioppo 2004). I summed each

respondent's CES-D, HADS, and UCLA Loneliness Scale, respectively, based on available information and deleted cases listwise in case of missing values.³

Sample Attrition

To properly account for attrition (about one-quarter of the original sample), I performed a two-step procedure to correct “selection” in wave 2 interviews. As attrition through death and refusal to participate are distinct processes,⁴ I followed the procedure proposed by Dubin and McFadden (1984) where a multinomial logistic regression is used in the first step to estimate wave 2 dispositions (death or refusal to interview). Based on these results, I then calculated the inverse Mills ratio and included it in regressions where outcome variables are changes in network characteristics to correct for selection into the wave 2 interview. Specifically, health measures are strongly associated with subsequent morbidity and mortality,⁵ and interviewer evaluation of cooperativeness is related to refusal to participate in wave 2.⁶ On the other hand, as neither the aforementioned health issues nor perceived rapport are directly linked to network features and changes,⁷ they were not included in the second stage estimation. Consequently, identification is achieved through exclusion restrictions rather than non-linear functional form in the first stage. Admittedly, this two-step procedure

³ I did not convert the CES-D, HADS, or UCLA Loneliness scores into log units, as these variables appear on the right hand side of regressions and there is no need to use log transformation to make error terms follow normal distribution, just as gender follows a binomial distribution.

⁴ I combined the deceased, too ill for interview, and living in a nursing home into “attrition through ill health or death” and treated respondents known to be alive but did not participate as “refusal to interview.” I left out the 10 respondents whose survival at the time of the wave 2 interview was uncertain.

⁵ In particular, olfactory dysfunction (Pinto et al. 2014), respondents' currently using any alternative medicine, currently smoking, or having ever been told to have had a heart attack or heart failure, stroke, hypertension, diabetes, cirrhosis, and cancer are all strongly associated with mortality or poor health by wave 2. But these variables are unrelated to refusal to subsequent participation. On the other hand, room dirtiness is particularly useful because the dirtier the room is, the more likely a respondent is likely to be deceased or too ill to be interviewed at wave 2. Yet, the cleaner the room is, the more likely a respondent will refuse to participate at wave 2. It is plausible that these respondents could have spent a lot of time and energy to clean up a room for the interview, and therefore found it not worthwhile to endure the hassles again.

⁶ Interviewers' assessment of respondents' candidness and the difficulty to get a case are significantly related to refusal to participation in wave 2. Other variables, such as functional limitations, have the ability to differentiate these two types of attrition by being associated with ill health and non-participation in different directions. However, these variables are too costly to implement due to a large number of cases with missing value. Please refer to Table C1 in appendix C for multinomial logit results.

⁷ I performed correlation analysis and found health measures or perceived rapport to be very weakly correlated with network characteristics.

generates larger standard errors and is inefficient when compared to the full-information maximum likelihood method (Cameron and Trivedi 2005, p.550), and results should therefore be considered as conservative estimates of the effects of marital status on network changes. In addition, I experimented with a simpler way to deal with selection bias by combining all attrition cases into one group and performed a standard Heckman two-step correction (i.e., obtaining Heckman's lambda and including it in the second stage regression) while using the same first-step regressors. Results are substantively the same as before.⁸

Results

Table 4.1 presents NSHAP sample descriptive statistics for both waves, replicating those reported in Cornwell, Laumann, and Schumm (2008) and Cornwell and Laumann (2015). In the baseline interview in 2005–06, 41.34% of the respondents were aged between 57 and 64, 34.86% aged between 65 and 74, and 23.81% between 75 and 85. Approximately five years later, 45.11% of the respondents interviewed in both waves were aged between 62 and 69, 34.17% between 70 and 79, and 20.72% between 80 and 91 years of age. The slight decrease in the ratio of the oldest group over time likely reflects attrition from death and poor health. In both waves, slightly below half of the sample were male, and African Americans and Hispanics took up about 10% and 7% of the sample respectively, as the former have higher mortality and there were considerably fewer Hispanics among older adults. Most of the NSHAP respondents have completed high school education, and more than half have at least some college education, likely reflecting differential mortality by education: less-educated people suffer greater mortality and hence are less likely to have survived and be sampled. Very few (about 3%) were never married, particularly the older part of the sample, since these are the parents of Baby Boomers and marriage was almost universal for these cohorts; another 2% were cohabiting. The majority of respondents were still married, though the ratio of first

⁸ Please see Table C2 in appendix C for two-step Heckman results.

married declined sharply over time, with a comparable increase in the widowed. As a result, the proportion of remarriages among all current marriages grew from 31.42% to 36.34%, while the ratio of the divorced remained steady at about 12%.

Table 4.1: NSHAP Sample Descriptive Statistics

Wave 1 (N=3,005)		Wave 2 (N=2,261)	
<u>Age Groups</u>	<u>Weighted %</u>		<u>Weighted %</u>
57-64	41.34%	62-69	45.11%
65-74	34.86%	70-79	34.17%
75-85	23.81%	80-91	20.72%
<u>Gender</u>			
Male	48.48%		47.98%
<u>Race/Ethnicity</u>			
White	80.65%		80.90%
African American	10.03%		9.97%
Hispanic	6.84%		6.63%
Others	2.48%		2.51%
<u>Education</u>			
Less Than High School	18.53%		16.48%
High School	26.95%		25.27%
Some College	30.02%		31.46%
BA and More	24.50%		26.79%
<u>Marital Status</u>			
Never Married	3.29%		3.18%
Cohabiting	2.15%		2.26%
Continuously Married	45.51%		35.75%
Remarried	20.85%		20.41%
Divorced/Separated	11.34%		12.44%
Widowed	16.85%		25.96%

Table 4.2 presents the socio-demographics and health status by marital status at wave 1. More than 60% of all remarried respondents are male, significantly higher than 54.87% among the continuously married,⁹ and all groups of unmarried people have far fewer men, especially the widowed. This pattern is consistent with greater female longevity and their disadvantaged position in the marriage market (England and McClintock 2009). Remarried respondents are much younger than other marital status groups,¹⁰ but the difference between the remarried and first married is only marginally significant. Remarried and first married individuals are similar in the proportion of race and ethnicity, whereas African Americans are far more likely to be never married, divorced, or widowed. With respect to education, remarried and continuously married respondents are statistically indistinguishable, while various groups of unmarried people tend to have less education, reflecting the positive selection into marriage by socioeconomic status commonly found in the literature. With respect to physical and mental health status, both the continuously married and remarried fared significantly better than the unmarried in items such as self-rated physical and mental health, difficulty in conducting instrumental daily living activities, depressive symptoms, and loneliness. The remarried are indistinguishable from the first married in all of these areas but two: self-rated mental health and UCLA Loneliness Scale. The remarried reported significantly better self-rated mental health than the continuously married due to the former's being younger in general. On the other hand, the remarried (especially men) are significantly more likely to feel lonely than the continuously married, consistent with Gray, De Vaus, Qu, and Stanton (2011).

⁹ I performed paired t-tests for results presented in Tables 4.2 to 4.4. Hence "significant" means statistical significance at 5%.

¹⁰ Most remarried respondents are in their second marriage (73.92%) and a much smaller proportion of them in the third (18.35%). Fewer than 8% of remarried individuals are in even higher order of marriage. Moreover, the mean age at which respondents entered their current remarriage is 45 and the mean duration of current remarriage is almost 250 months (more than 20 years), making the analytical sample comparable to Kalmijn and Broese van Groenou (2005).

Table 4.2: NSHAP Sample Descriptive Statistics by Marital Status at Wave 1

	Total	Never Married	Cohabiting	First Married	Remarried	Separated/ Divorced	Widowed
Total N	3,005	111	60	1,245	556	372	661
Male	48.48%	46.39%	43.12%	54.87%	61.45%	38.01%	23.32%
<u>Age Groups:</u>							
57-64	41.34%	42.91%	53.78%	44.04%	51.93%	46.39%	15.62%
65-74	34.86%	33.35%	34.81%	35.66%	32.91%	37.77%	33.42%
75-85	23.81%	23.74%	11.41%	20.29%	15.16%	15.84%	50.96%
<u>Race/Ethnicity</u>							
white	80.65%	72.40%	80.77%	82.56%	84.53%	72.19%	77.94%
black	10.03%	19.86%	7.16%	7.40%	8.58%	17.35%	12.48%
hispanic	6.84%	4.88%	7.61%	7.57%	5.93%	7.33%	5.95%
other	2.48%	2.85%	4.45%	2.47%	0.95%	3.14%	3.63%
<u>Education</u>							
Less than HS	18.53%	21.47%	23.39%	15.47%	13.58%	21.87%	29.51%
High School	26.95%	20.66%	17.63%	26.22%	25.68%	27.37%	32.59%
Some College	30.02%	25.53%	33.37%	30.09%	35.28%	29.19%	24.33%
BA and More	24.50%	32.34%	25.61%	28.22%	25.46%	21.57%	13.58%
<u>Health</u>							
Self-Rated Physical Health	3.27	3.15	3.31	3.35	3.38	3.09	3.04
IADLs, any difficulty	47.80%	52.36%	47.96%	43.41%	45.71%	49.85%	59.94%
Self-Rated Mental Health	3.78	3.68	3.87	3.81	3.94	3.64	3.61
CES-D	16.32	16.97	15.06	15.67	15.92	17.34	17.92
Anxiety	10.58	10.24	10.06	10.49	10.65	10.81	10.71
UCLA Loneliness	3.99	4.38	3.62	3.70	3.89	4.64	4.49

Table 4.3 shows the extent to which first married and remarried couples are connected to their social milieu by comparing the compositional and structural characteristics of discussion networks. On average, the continuously married have the largest networks and the never married have the smallest ones, consistent with findings from the literature (Ajrouch, Blandon, and Antonucci 2005; de Jong Gierveld and Peeters 2003; Gerstel, Riessman, and Rosenfield 1985; Rands 1988). The remarried, however, are closer to all unmarried groups in network size, although the gap between the remarried and continuously married is insignificant, consistent with de Jong Gierveld and Peeters (2003). Compared to the divorced, both groups of married people have networks that are more kin-centered, as pointed out in Fischer (1982). Although both the continuously married and remarried report more affinal kin in network, the overwhelming majority of kin with whom people discuss important matters are still their consanguines, similar to earlier findings (Anspach 1976; Leslie and Grady 1985; Spicer and Hampe 1975; Terhell, Broese van Groenou, and van Tilburg 2004). With a maximum of five discussants nominated, a greater proportion of kin implies much fewer friends in network such that the remarried have significantly more friends than the first married, lending support to the notion that marriage is a greedy institution and the experience of marital disruption facilitates reconnection with friends (Gerstel 1988a, 1988b). Moreover, a higher ratio of friends for the remarried compared to the first married has likely contributed to their better mental health, as mentioned earlier (Carr and Moorman 2012; Litwin 2001; Wellman and Wellman 1992; Wellman and Wortley 1990).

For structural network characteristics, the continuously married have the densest discussion networks likely due to the greater presence of kin (Fischer 1982; Moore 1990); they are followed by the widowed and the remarried, although both had significantly less-dense networks than the first married. The divorced and never married, on the other hand, have the least dense networks among

all marital status groups. With respect to alters' frequency of contact with respondents, the first married and widowed are statistically indistinguishable, while the remarried, divorced, and never married all report significantly less frequent contact with their associates. In average emotional closeness to network members, the continuously married and remarried are similar, but the widowed, divorced, and never married all report feeling significantly less close to their associates. Taken together, married people—particularly the continuously married—tend to have more close-knit discussion networks and are therefore more embedded in their immediate social environment, whereas the never married and divorced have the most fragmented networks on average, with the remarried somewhere in between and sometimes significantly different from the continuously married (regarding density, contact frequency, and proportion of friends in network).

Table 4.3: Network Characteristics by Marital Status

Wave 1	Never Married	Cohabiting	First Married	Remarried	Separated/ Divorced	Widowed
Total N	111	60	1,245	556	372	661
Network Size (Roster A)	3.13	3.48	3.60	3.44	3.39	3.43
% Kin	44.88%	43.28%	73.48%	67.64%	51.99%	66.33%
% Consanguineal Kin	96.73%	92.32%	89.94%	87.22%	95.75%	92.43%
% Affinal Kin	3.27%	7.68%	10.06%	12.78%	4.25%	7.57%
% Friends	47.10%	32.50%	19.86%	24.73%	36.66%	25.33%
Avg. Density	75.61%	87.04%	89.23%	82.76%	74.08%	85.95%
Avg. Alter Volume to R	6.45	6.93	6.92	6.83	6.69	6.85
Avg. Emotional Closeness	2.94	3.24	3.19	3.16	3.10	3.13

Table 4.4 shows network outcome variables by remarital status.¹¹ The top panel presents standard measures of a respondent's connectedness to his or her discussion partners, with a network

¹¹ Please see Table C3 in appendix C for comparison between remarried and divorced individuals in network features unrelated to spouse. Except for density, the remarried fare significantly worse than the divorced in the zero-order effects of all other measures: ego's frequency of contact with rest-of-network alters, frequency of contact among rest-of-network alters, and emotional closeness to them.

divided into parts pertaining to the spouse and those to the rest of network. The bottom panel gives the results of spouse-betweenness and spouse-independent ties. The first row shows that both continuously married and remarried persons talk to their spouse on an almost daily (8) basis. However, when it comes to the rest of their networks on the right panel, the continuously married contact their associates significantly more frequently than the remarried do, consistent with their networks containing a higher ratio of kin, as shown in Table 4.3. The second row shows a spouse's average frequency of contact with these other alters; a remarried spouse talks less frequently with them (5.12) than a first-married spouse does (5.71). This is consistent with results shown in the left half of the row 4, where a spouse in remarriage knows significantly fewer of the ego's associates (96.41%) than in a continuous first marriage (98.28%). Moreover, if we look at the rest of a person's network alone, the rightmost two columns of row 4 indicate that remarried respondents' social contacts are significantly less likely to have ever talked among themselves (72.56%) than those of the first married (82.04%), consistent with the patterns of contact frequency among alters found in row 3 (3.03 of the remarried versus 3.67 of the continuously married). Regarding emotional closeness to spouse, the remarried and continuously married are statistically indistinguishable. The remarried, on the other hand, are emotionally less close to the rest of discussion partners than the first married, albeit marginally significantly so ($p=0.084$).

The lower part of Table 4.4 demonstrates spouse betweenness and spouse-independent ties by remarital status. The first row shows whether there is any network member with whom the spouse has more frequent contact than the respondent does. Consistent with earlier findings that the continuously married have more close-knit networks, it is likely that their spouse dominates the communication with at least one alter, since the spouse will have more opportunities to know many of them. Indeed, 26.07% of the continuously married have any spouse-between tie in network,

significantly more than 20.61% of the remarried. The second row shows the proportion of all spouse-between ties in a discussion network, a more refined measure than the mere presence of one single spouse-between tie. On average, the continuously married people have 11.79% of their contacts talking more frequently to their spouse than to the respondents themselves, compared to 9.26% of the remarried people, and the difference is significant. Row 3 of the bottom panel of Table 4.4 shows the existence of any spouse-independent tie in network, defined as an associate with a frequency of contact with the spouse of no more than twice a year. Among the first married individuals, almost 30% of their networks include at least one spouse-independent tie. On the other hand, almost 40% of remarried people's networks contain such a tie, significantly more than the continuously married. The next row reveals that on average, 14.08% of a continuously married person's ties are spouse-independent, compared to 22.44% of a remarried person's ties, and the difference is highly significant.

Table 4.4: Network Characteristics of the First Married and Remarried NSHAP1 Respondents

Part I: Comparing Network Characteristics With and Without a Spouse

	Spouse		Rest of Network	
	First Married	Remarried	First Married	Remarried
Average Volume to R	7.99	7.98	6.50	6.32
Average Volume from Spouse to Rest of Network	5.71	5.12		
Average Volume among Alters			3.67	3.03
Average Density	98.28%	96.41%	82.04%	72.56%
Average Emotional Closeness	3.64	3.68	3.01	2.94

Part II: Spouse Betweenness and Spouse-Independent Ties

	First Married	Remarried
Any Spouse Betweenness	26.07%	20.61%
Proportion of Spouse-Between Ties in Network	11.79%	9.26%
Any Spouse-Independent Tie	29.93%	39.73%
Proportion of Spouse-Independent Tie in Network	14.08%	21.44%

Table 4.5 presents results of married respondents' network characteristics regressed on being remarried and a host of other controls, all measured at the baseline interview. Each cell includes the coefficient estimate and associated standard error of being remarried.¹² The outcome variable is the network characteristic of the row to the left, and regressors are grouped into four settings by column (models 1 to 4). Table 5 therefore shows the results of a total of 40 regressions (10 network

¹² Logistic regressions are used in the regressions of "any spouse between tie" and "any spouse independent tie," where the outcome variables are binary. Consequently, I present odds ratios and 95% confidence intervals.

characteristics¹³ × 4 models).¹⁴ Discussions are organized as follows: (1) respondents' connectedness to all network members except for spouse, measured by average frequency of contact with and emotional closeness to these rest-of-network alters; (2) spouses' connectedness to rest-of-network alters, measured by the density of ties connected to and the frequency of contact with them; (3) connectedness among rest-of-network alters, represented by density and frequency of contact among themselves; (4) spouse betweenness; and (5) spouse-independent ties in network. Model 1 contains only whether one is remarried or still in first marriage. Model 2 adds basic demographics, socioeconomic status,¹⁵ and whether a respondent is retired, as retirement generally marks the beginning of another phase of life course and people tend to lose work-related connections once they withdraw from the labor force (Cornwell 2011; de Vries 1996; Fischer and Olicker 1983; Moore 1990). Model 3 further accounts for physical and mental health, difficulties experienced in activities of daily living, depressive symptoms measured by CES-D, and the UCLA Loneliness Scale.¹⁶ Finally, model 4 controls for two network characteristics—network size and proportion of friends in network¹⁷—as these compositional factors are closely related to density, contact frequency, or emotional closeness.¹⁸

¹³ I did not present results of respondents' average frequency of contact with and emotional closeness to spouse, as 99% of respondents reportedly interacted with their spouse on a daily basis, and over 97% indicated they were very or extremely close to their spouse. No amount of controls would differentiate the remarried from the continuously married respondents.

¹⁴ For detailed information on each regression, please refer to Tables C4.1-C4.12 in appendix C.

¹⁵ Ideally, household income or assets should be used to account for socioeconomic status, which affects both the size (Moore 1990) and composition (Kalmijn and Broese van Groenou 2005) of discussion networks. However, many respondents were no longer working, making earnings last year a problematic measure of socioeconomic status, as older adults who still work may do so out of economic reasons. Further, at this stage of life, total household assets are better able to capture an individual's capacity to engage in various activities and pay for health care services. Its inclusion in regressions unfortunately reduced sample sizes by about 200, about one-sixth to one-fifth of the analytical samples. As a result, I could not include it in regressions.

¹⁶ I also experimented with including a 7-item Hospital Anxiety Disorder Scale and a 4-item Perceived Stress Scale. However, neither of these variables is significant in any regression and is therefore eliminated in the final results.

¹⁷ For the regression of network size, model 4 controlled for ratio of friends and those in model 3. For the regression of ratio of friends, model 4 controlled for network size and those carried over from model 3.

¹⁸ For all these regressions, I additionally controlled for the interaction terms of remarriage with gender or age. However, in no regression is the coefficient estimate of either interaction term ever significant. Consequently, I do not report these results.

For network size (row 1), the remarried do not differ significantly from the continuously married when there is no other regressor or only socio-demographics are controlled for. Once loneliness is accounted for, however, the remarried have significantly smaller networks than the first married and additional control of ratio of friends only increases the magnitude of remarriage, consistent with de Jong Gierveld and Peeters (2003). Estimates of other covariates are consistent with the literature: older men have significantly smaller networks than women (Cornwell 2011; Moore 1990), and individuals with more education also tend to have larger networks (Moore 1990). While age is negatively related to network size (consistent with the literature: de Jong Gierveld and Peeters 2003; Suanet, van Tilburg, and Broese van Groenou 2013; van Tilburg 1998), this result is insignificant due perhaps to the sample being limited to older adults. With respect to ratio of friends in network (row 2), in all models the remarried have significantly more friends in network, consistent with the notion that marital disruption frees up resources from the commitment to family so that divorcees have more time and energy to socialize with friends (Gerstel 1988a), and this pattern is carried over well into remarriage. Results of other covariates are consistent with the literature: older men have significantly fewer friends than women, reversing the pattern in midlife (Fischer and Oliker 1983; Shaw, Krause, Liang, and Bennett 2007); people with more education are likely to have more friends (Degenne and Lebeaux 2005; Fischer 1982; Litwin 2001; Moore 1990; Shaw, Krause, Liang, and Bennett 2007). While respondents with better physical health have more friends (Waite and Harrison 1992), the estimate here is insignificant. Taken together, the findings suggest that remarried individuals have significantly smaller networks but a higher ratio of friends providing strong support for Hypothesis 1.

For average frequency of contact between respondents and rest-of-network alters,¹⁹ a highly significant zero-order effect (row 3, column 1) indicates that remarried respondents communicated significantly less frequently with these associates than their continuously married counterparts did, and the inclusion of socio-demographic controls and being retired changed neither the effect size nor its significance. Among controls, being male, older, having some college education or more, or being retired all reported significantly less frequent contact with rest-of-network alters than otherwise. Hispanics, on the other hand, had significantly more frequent contact with these alters than whites. Accounting for self-rated physical and mental health, IADL, network size, and the ratio of friends in network slightly diminished the effect size and significance of being remarried but did not change the overall pattern. None of the health-related variables are significant, but people with a larger discussion network or a higher ratio of friends in network talked to their alters significantly less often.

Although remarried individuals felt no less close to their spouse as the continuously married did, they were significantly less close to everyone else in the network, albeit marginally so. Socio-demographic controls attenuated the effect size and significance of being remarried, and men or older respondents were significantly less close to their associates. Unexpectedly, the inclusion of health accentuated the coefficient and significance of being remarried, suggesting that combining people of different health conditions likely masked how close remarried individuals felt toward their alters.²⁰ The inclusion of network size and friends in network attenuated but did not eliminate the

¹⁹ Since there is no difference between the remarried and continuously married along these dimensions, the difference in contact frequency and closeness to the entire network between the remarried and first married hinges on the difference pertaining to the part of network other than the spouse, and presenting results on just this part makes it easier to understand the structure of discussion networks.

²⁰ Specifically, remarried individuals reported significantly better self-rated mental health but they also scored higher in UCLA Loneliness Scale. Since respondents of better mental health reported being significantly closer to their alters and those scored higher on UCLA Loneliness Scale were significantly more distant to their associates, controlling these two helps characterize the true relationship between remarriage and emotional closeness to alters. Alternatively, individuals

effect size and significance of being remarried. Consistent with Adams and Torr (1998), people with a larger discussion network or who have a higher ratio of kin in network indicated they were significantly less close to their alters.²¹ Findings from these two paragraphs on remarried individuals' emotional closeness to their associates and frequency of contact with them provide strong support for the first part of Hypothesis 2.

A spouse's connectedness to a respondent's rest-of-network alters reflects how tightly the spouse is embedded in a married person's network: the more tightly-knit one's network is, the more likely a spouse would have talked to other network members and the higher the contact frequency between them. All four models suggest that compared to the continuously married, a remarried person's spouse is significantly less likely to have ever talked to rest-of-network alters (row 5), even though these other alters are the ego's discussion partners of important matters, and most controls are insignificant. For a more refined measure, frequency of contact between spouse and the ego's other associates, the spouse of a remarried person has significantly less frequent interactions with all other network members than the spouse in a first marriage, regardless of controls (row 6). Hispanic respondents are more likely to have spouses talk frequently to other network members, whereas those with more education, with more friends in network, or who are lonely tend to have spouses who talk less frequently to other alters and are therefore less integrated to their networks. These results lend support to Hypothesis 3a.

Connectedness among network members other than the spouse is tapped by measures of density of this part of the network and its related contact frequency. Compared to the continuously married, remarried respondents' rest-of-network confidants are significantly less dense and the effect size is large, reaching eight to ten percentage points (row 7, all columns). Men tend to have less

with worse health tend to feel less close to their associates than their healthier counterparts. Since remarried people tend to be younger and hence in better health, controlling for health helps heighten the effect of being remarried.

²¹ The significance of being remarried emerges primarily because network size is accounted for.

dense networks (marginal significance), consistent with Degenne and Lebeaux (2005), and Hispanics' networks are significantly more dense, making them a close-knit group. Respondents with a larger network, a higher ratio of friends, more education, who are retired, who have a higher CES-D score, or who experience any difficulty in instrumental activities of daily living (marginal) all have significantly less dense networks. Similarly, members other than the spouse in a remarried person's network talk significantly less frequently among themselves regardless of controls (row 8, all columns). As with the density measure, Hispanics' rest-of-network alters talked among themselves significantly more frequently than whites, and people with more education, more depressive symptoms, a larger network, or more friends in network have significantly less frequent contact among rest-of-network alters. Taken together, these results lend support to Hypothesis 3b and the last part of Hypothesis 2 on network density.²²

There are two measures of spouse betweenness: the presence of any spouse-between tie and the ratio of such ties in network. Models 1 and 2 suggest that remarried persons are significantly less likely to have any spouse-between tie in network (row 9, columns 1 and 2). In other words, a spouse in remarriage is much less likely to monopolize communications between a respondent and his or her other associates, consistent with the finding that a spouse in remarriage is significantly less likely to know of or have frequent contact with ego's other associates. Between models 2 and 4, separate entries of network size or ratio of friends retained the significance of being remarried, but their joint

²² Table C5 in appendix C replicates the same regressions while comparing the remarried to the divorced in case the latter is a more appropriate benchmark. Again, the first column shows the zero-order effect of being remarried, then socio-demographics and physical and mental health (self-rated health, functional limitations, CES-D and loneliness) measures are added stepwise, and the last column further includes network characteristics (network size, ratio of friends, average closeness, and contact frequency). In ego's closeness to and frequency of contact with alters, and frequency of contact among alters (rest-of-network alters in case of the remarried), the remarried are significantly less close to and talk less frequently to rest-of-network alters than the divorced, regardless of controls. Remarried respondents' associates other than the spouse also talk significantly less frequently among themselves than the divorced in all settings. The only network measure where the remarried do not differ significantly from the divorced is network density (only marginally so in the full model). These findings suggest that in the absence of spouse-related ties, remarried individuals have discussion networks that are even more fragmented than those of the divorced, and the latter probably is not a good benchmark of comparison.

entry reduced it to marginal significance, further eliminated by score of loneliness. Age is only marginally significantly related to the presence of any spouse-between tie, even though older adults increasingly rely on a spouse as the primary caretaker and go-between. Regression of the ratio of spouse-between ties in network paints a slightly different picture (row 10): remarried individuals have significantly fewer spouse between ties, and the significance is eliminated only after the percentage of friends in network is included, suggesting that the higher ratio of spouse-between ties in remarried persons' networks is due entirely to a greater presence of their own friends not reached by their spouse. This time, loneliness score has no bearing, whereas male and age are significantly related to a higher ratio of spouse between ties in network.

Table 4.5: Coefficient Estimates of Remarriage in Regressions Comparing Network Characteristics of Remarried and Continuously Married NSHAP Respondents at Wave 1

	Model 1	Model 2	Model 3	Model 4
	Coefficient (Standard Error)			
<i>Compositional Characteristics</i>				
Average Network Size	-0.17 (0.11)	-0.15 (0.10)	-0.26** (0.07)	-0.28** (0.07)
Average Ratio of Friends in Network	0.05** (0.01)	0.05** (0.01)	0.04** (0.01)	0.05** (0.01)
<i>Connectedness between Respondent and Rest-of-Network Alters</i>				
Average Frequency of Contacts	-0.18** (0.07)	-0.18** (0.06)	-0.14* (0.06)	-0.14* (0.06)
Average Emotional Closeness	-0.07† (0.04)	-0.06 (0.04)	-0.08* (0.04)	-0.07† (0.04)
<i>Connectedness between Spouse and Rest-of-Network Alters</i>				
Average Density	-0.02* (0.01)	-0.02* (0.01)	-0.02* (0.01)	-0.02* (0.01)
Average Contact Frequency	-0.59*** (0.11)	-0.59*** (0.10)	-0.55*** (0.11)	-0.49*** (0.11)
<i>Connectedness among Rest-of-Network Alters</i>				
Average Density	-0.09*** (0.02)	-0.09*** (0.02)	-0.11*** (0.03)	-0.08** (0.02)
Average Frequency of Contacts	-0.63*** (0.12)	-0.63*** (0.13)	-0.65*** (0.16)	-0.46** (0.16)
<i>Spouse Betweenness</i>				
Any Spouse-Between Tie in Network (Odds Ratios with 95% C.I.)	0.74* (0.56, 0.97)	0.70** (0.54, 0.91)	0.77 (0.55, 1.08)	0.85 (0.61, 1.20)
Proportion of Spouse-Between Ties in Network	-0.03* (0.01)	-0.03* (0.01)	-0.02† (0.01)	-0.02 (0.01)
<i>Spouse Independent Ties</i>				
Any Spouse-Independent Tie in Network (Odds Ratios with 95% C.I.)	1.54** (1.19, 2.01)	1.60** (1.20, 2.12)	1.59** (1.14, 2.22)	1.54* (1.06, 2.24)
Proportion of Spouse-Independent Ties in Network	0.07*** (0.02)	0.07*** (0.02)	0.07** (0.02)	0.06** (0.02)

Results of spouse-independent ties are parallel to those pertaining to spouse-between ties: the more a spouse stands between a respondent and other associates, the more likely he or she will have frequent contact with them, and the fewer spouse-independent ties there will be in a network. Across models, compared to the continuously married, remarried respondents are significantly more likely to have at least one spouse-independent tie in network (row 11), a tie less reached by the spouse. Hispanics or those reporting better mental health are significantly less likely to have spouse-independent ties, while the opposite holds true for people with more education, who are retired, or who have better physical health. The significance of self-rated health items is eliminated once network size and ratio of friends are accounted for, suggesting that the larger one's discussion network is or the more friends one has, the more likely there will be an alter with less frequent contact with spouse. The last row (row 12) shows results pertaining to ratio of spouse-independent ties in network. Again, remarried people have a significantly higher ratio of spouse-independent ties in network, and Hispanics, education, and retirement have the same patterns as before. However, neither physical health nor network size is related to the ratio of spouse-independent ties, and it is mental health, loneliness, and ratio of friends that count. Findings from these two rows demonstrate that remarried individuals are less likely to have spouse-between ties but more likely to have spouse-independent ties, supporting Hypothesis 3c.

Taken together, these findings suggest that remarried older adults, despite their closeness to and frequent contact with spouse, are rather loosely connected to other network members than the continuously married in that the remarried are emotionally less close to their other associates and talk to them less often; these alters are less likely to talk among themselves. Similarly, the spouse of a remarried person is significantly less likely to talk to other associates, and even if they communicate, contact frequency is significantly lower. A remarried spouse is also significantly less likely to be between the ego and another discussion partner. These all reflect that a spouse is less woven into a

remarried person's social fabric, which are rather threadbare to begin with. However, these results only provide a snapshot of older adults' networks, and these characteristics may well change over time, depending on their marital histories. Consequently, I exploited the longitudinal features of NSHAP and analyzed whether remarried individuals are more likely to experience a higher turnover of alters as well as the characteristics of alters lost and gained.

Table 4.6 shows changes in network characteristics for respondents who had no marital changes between interviews.^{23,24} The leftmost column presents net changes and the other three show disaggregation into characteristics of alters lost, kept, and gained. It is essential to display different components of network change as they are likely governed by processes that offset each other in the aggregate. Overall, on average, respondents have a net increase of 0.39 associates over time. Whereas these respondents lost 1.49 contacts on average (40.75% of the original network), they more than made up by adding 1.88 alters by wave 2 (47.02% of the new network), while carrying over 1.97 alters from wave 1. The fact that the net increase in network size is significantly different from zero for all marital status groups suggests that older individuals do not merely disengage from social relations (Cumming 1963); they also actively recruit new contacts in their life. Moreover, the ratios of associates lost and gained are consistent with findings from a substantial body of literature that states over time, individuals tend to ditch half of their contacts (Morgan, Neal, and Carder 1997; Rands 1988; Shulman 1975; Terhell, Broese van Groenou, and van Tilburg 2004, 2007; van Tilburg 1998; Wellman, Wong, Tindall, and Nazer 1997).²⁵ That NSHAP respondents dropped an average of

²³ Results here do not include associates lost through death. If these are included, then it introduces another layer of the selection problem: are the associates of remarried individuals more or less likely to die off? On the other hand, removing alters lost through death leaves some gaps in the accounting for alter number, and some minor discrepancies arise as a result.

²⁴ Including respondents with marital changes (mostly widowhood) will contaminate groups to be compared, as changes in marital status inevitably beget important change in other social relations. Results for those who had marital change will be presented separately in appendix D.

²⁵ Interestingly, regardless of the length of time between surveys, in the literature respondents mostly turned over about half of their associates, ranging from two years (Rands 1988) to twelve years (Terhell, Broese van Groenou, and van

1.5 associates after 5 years is also in line with Wellman, Wong, Tindall, and Nazer (1997), who found a person loses a contact every two or three years.

Among the associates recently incorporated into the orbit, kin and friends each takes up half of the share (0.20 and 0.19, respectively), and the great majority of kin added is consanguineal kin. While old friendships are communal in nature and people tend to reminisce and share self-disclosure with old friends (de Vries 1996; Shea, Thompson, and Blieszner 1988), it appears that on average, individuals are more likely to shed (0.53) and add (0.71) friends than to keep them (0.37), confirming what has been found in the literature: friends tend to occupy a peripheral position in one's social network (Cantor 1979; Kahn and Antonucci 1980; Morgan, Neal, and Carder 1997). Consistent with the expansion in network size, both average emotional closeness to and frequency of contact with alters significantly declined, the latter similar to results found in van Tilburg (1998). On the other hand, change in average density is not statistically significant, suggesting that alters lost and gained are similarly connected to those carried from wave 1 to wave 2.

Table 4.6: Characteristics of Network Change of NSHAP Respondents

<u>Compositional Characteristics</u>	<u>Net Change</u>	<u>Lost</u>	<u>Kept</u>	<u>Gain</u>
Number of Confidants Changed	0.39	1.49	1.97	1.88
Number of Kin	0.20	0.77	1.51	0.96
Number of Consanguineal Kin	0.21	0.57	0.98	0.78
Number of Affinal Kin	0.04	0.09	0.07	0.12
Number of Friends	0.19	0.53	0.37	0.71
<u>Structural Properties</u>				
Contact Frequency to Confidants	-0.12	6.38	7.16	6.34
Density of Confidants	-0.67%	79.41%	88.00%	79.51%
Emotional Closeness to Confidants	-0.09	2.90	3.35	2.81

Tilburg 2004). It could be that the length of time does not matter, as suggested by Morgan, Neal, and Carder (1997), but it seems more plausible that most studies of network changes only concern two points in time.

To further examine how individuals' networks change in relation to their marital history, Table 4.7 presents network change results by marital status at wave 1.²⁶ With respect to network size change, remarried respondents do not differ significantly from their continuously married counterparts in the number of alters lost, but they kept significantly fewer associates and gained significantly more than the first married. Regarding kin members, the remarried lost and kept significantly fewer kin than the continuously married, but the number of kin gained is not different. These differences arise mainly from consanguines lost and kept, as there is no difference in change in affinal kin by remarital status. With respect to number of friends changed, the remarried both lost and gained significantly more friends than the continuously married.²⁷ On frequency of contact, emotional closeness, and density, alters rotated in and out invariably score significantly lower than those kept.²⁸ In terms of frequency of contacts lost, kept, or gained, remarried respondents do not differ significantly from the continuously married. With respect to emotional closeness of alters lost, carried over, or gained, the remarried are also statistically indistinguishable from the first married. Regarding associates' connectedness to others in network, remarried respondents' alters lost or gained are significantly less likely to talk to fellow discussants than those of the continuously married.²⁹ However, these results may be due to the fact that remarried people have a low density network at baseline interview, and associates dropped or kept will naturally be less connected to others than their counterparts in the networks of first married respondents. As such, I conducted

²⁶ To simplify presentation, I removed never married, cohabiting, divorced, and widowed respondents from the table.

²⁷ Divorced respondents both lost and gained significantly more alters than the continuously married, and the former kept significantly fewer associates. On the other hand, the divorced only differed from the remarried in that they are more likely to lose alters. With respect to the number of kin changed, divorced respondents differ from the remarried or continuously married only in the number of kin kept, and they keep significantly fewer kin than either group. Divorced respondents lost, kept, and gained significantly more friends than the continuously married, but only lost significantly more friends than the remarried.

²⁸ I performed paired t-tests of each characteristic for "lost versus kept ties" and "gained versus carried over ties" for the entire sample and for each marital status group. Each time the result is highly significant.

²⁹ In divorced individuals' networks, contact frequency of alters lost or gained does not differ significantly from that of continuously married or remarried people. On the other hand, the emotional closeness to alters changed in divorcees' networks is statistically indistinguishable from either married groups, whereas divorced respondents' alters lost or gained are even less connected to other alters than those of remarried respondents.

multivariate analyses and compared these network characteristics of the remarried to the continuously married.

Table 4.7: Characteristics of Alters Lost, Kept, and Gained by Remarried and Continuously Married NSHAP Respondents

<u>Number of Contacts:</u>	<u>First Married</u>	<u>Remarried</u>
Lost	1.43	1.52
Kept	2.13	1.84
Gained	1.76	1.97
<u>Number of All Kin</u>		
Lost	0.83	0.67
Kept	1.73	1.43
Gained	0.97	1.00
<u>Number of Consanguineal Kin</u>		
Lost	0.56	0.45
Kept	0.99	0.66
Gained	0.77	0.76
<u>Number of Affinal Kin</u>		
Lost	0.11	0.09
Kept	0.08	0.09
Gained	0.12	0.16
<u>Number of Friends</u>		
Lost	0.42	0.60
Kept	0.34	0.37
Gained	0.60	0.77
<u>Frequency of Contacts with Associates</u>		
Lost	6.39	6.29
Kept	7.24	7.22
Gained	6.35	6.19
<u>Density of Associates' Connections with Others in Network</u>		
Lost	0.84	0.77
Kept	0.92	0.86
Gained	0.83	0.80
<u>Emotional Closeness to Associates</u>		
Lost	2.92	2.83
Kept	3.37	3.41
Gained	2.85	2.77

The layout of Table 4.8 is similar to that of Table 4.5. Each cell contains the coefficient estimate and corresponding standard error of being remarried in a regression where the dependent variable pertains to the row to the left under the setting specified in the column. As such, Table 4.8 presents the results of 60 regressions (6 characteristics \times 2 directions of change \times 5 models) of characteristics of network members lost and gained. Outcome variables are: network size, the number of kin and friends, contact frequency, emotional closeness, and density. Again, I looked at loss and gain separately because these are potentially distinct processes, and combining these two countervailing forces may blur the results.³⁰ Model 1 contains only the zero-order effect of remarriage, and model 2 further incorporates basic socio-demographics. Model 3 controls for self-rated physical and mental health,³¹ and model 4 adds baseline network characteristics.³² The last model includes inverse Mills ratio to properly account for sample attrition.³³ Row 1 shows that regardless of controls, remarried respondents do not differ significantly from the continuously married in the number of alters lost. On the contrary, remarried individuals are significantly more likely to add new network members than their first married counterparts irrespective of settings, as shown in row 2. Among the controls,³⁴ increasing age is significantly related to losing network members (Klein Ikkink and van Tilburg 1999), while Hispanics and those reporting greater

³⁰ I conducted the same analyses using aggregate measures, and results demonstrate that increment and decrement forces do cancel each other out. The coefficient estimates of remarriage do not attain statistical significance except for net change in the number of kin (and marginal significance for net change in network size), which is eliminated once attrition is accounted for by the inverse Mills ratio. Please see Table C4.6 in appendix C for coefficient estimates of remarriage in regressions using aggregate measures.

³¹ In regressions of network changes, it is the Hospital Anxiety and Depression Scale (HADS) and UCLA Loneliness Scale that are relevant. CES-D is never significant and hence eliminated.

³² Because the dependent variables are essentially change scores, I do not include the same characteristics at baseline as regressors (Allison 1990), as regressing ΔY on Y_1 is equivalent to regressing Y_2 on Y_1 . Since Y_2 and Y_1 are governed by the same network processes, including both in the same regression will unduly introduce autocorrelation into the error terms, violating the zero conditional mean of errors assumption underlying the Gauss-Markov Theorem and making coefficient estimates inconsistent. Moreover, despite its being highly significant in many regressions, I decided to eliminate network density at baseline, as more than 150 continuing respondents have only one or fewer discussion members at wave 1. Including network density will reduce sample size by 11%.

³³ I also included interaction terms of remarriage with gender or age. However, in no regression are these interaction terms significant. I therefore eliminated them from final results.

³⁴ Please refer to Tables C7.1 to C7.12 in appendix C for detailed results of each regression.

loneliness lost significantly fewer alters. The relationship between the numbers of alters lost and education or physical health appears to operate through the ratio of friends in network, which is strongly related to alters lost and indicative of the prominence of peripheral ties in one's network. Moreover, average closeness and contact volume at baseline is significantly negatively related to alters lost. On the other hand, people with better physical health or a higher ratio of friends in network at baseline report significantly more new discussion partners than otherwise.³⁵

Either the measure of alters lost or gained, however, is a summary of distinct strands going on in life, which may well mask substantial changes in different components of one's discussion networks. Rows 3 and 4 pertain to the number of kin lost and gained over time. In all settings, remarried respondents lost significantly fewer kin members as discussion partners than the first married, while the number of kin rotated into one's inner circle does not differ between these groups. While it may be counterintuitive that remarried individuals should lose significantly fewer kin than the continuously married, it may be due to two factors. First, having gone through marital disruptions, remarried people have fewer kin in network at baseline. Consequently, there are fewer kin to lose over time. In addition to a compositional explanation, remarried persons have been found to increase their contacts with consanguineal kin (Anspach 1976; Spicer and Hampe 1975),³⁶ and consanguines also tend to occupy a more prominent position in network after divorce (Leslie and Grady 1985; Rands 1988). Among controls, age is significantly related to the number of kin lost, and average volume at baseline is negatively associated with kin lost.³⁷ On the other hand, the more

³⁵ Here the ratio of friends in network, average closeness, and contact frequency can be seen as proxies of network size at baseline (but circumventing the problem of autocorrelation). Previous findings from the literature (de Jong Gierveld and Peeters 2003; Klein Ikkink and van Tilburg 1999) have shown that individuals with larger baseline networks tend to have higher turnover, presumably because they have more to choose from (for keeping or ditching).

³⁶ Most of the kin lost are consanguines, and the coefficient of affines lost is only one-fifth of that of consanguines lost in all regressions and never significant.

³⁷ Since NSHAP respondents reported very few alters other than kin and friends, the inclusion of friends in a regression of the number of kin is equivalent to inclusion of kin, only the coefficient estimate will be reverse in sign. In other words,

close a respondent felt toward alters at baseline, the fewer kin he or she would rotate in discussion networks at wave 2.

The notion that remarried individuals have less close-knit networks is reflected in a greater proportion of friends: rows 5 and 6 show that remarried respondents have a significantly higher turnover of friends than the continuously married—rotating more friends both in and out.³⁸ While education is unrelated to the loss of friends, it is significantly related to gaining more of them (Degenne and Lebeaux 2005), especially those with some college, likely reflecting the modal attainment of better educated women of those cohorts. Similarly, growing age is associated with gaining significantly fewer friends but not losing them. The influence of racial or ethnic minorities and physical or mental health on rotating out friends appears to operate through average closeness to or volume of contact with alters, and respondents scoring higher on loneliness lose significantly fewer friends. Over time, respondents with better physical health or who are retired gained significantly more friends, albeit only marginally so.

a zero-sum situation leads to potential autocorrelation. Consequently, I do not include friends in regression of kin nor vice versa.

³⁸ Table C8 in appendix C presents regression results of network changes, comparing remarried respondents to divorced ones (reference group), and its format is similar to Table 4.8. Overall, remarried individuals turned over fewer discussion partners than the divorced did, but only the number of alters lost is significant (before baseline network features are controlled) and difference in the number of alters gained is insignificant between these two groups. Remarried individuals, however, do not lose or gain significantly fewer kin than the divorced do, but they do drop significantly fewer friends than the divorced.

Table 4.8: Coefficient Estimates of Remarriage in Regressions Comparing Network Characteristics of Alters Lost and Gained by Remarried and Continuously Married NSHAP Respondents

	Model 1	Model 2	Model 3	Model 4	Model 5
	Coefficient (Standard Error)				
Number of Alters Lost	0.09 (0.07)	0.09 (0.07)	0.09 (0.07)	0.03 (0.07)	0.03 (0.08)
Number of Alters Gained	0.20* (0.09)	0.21* (0.09)	0.23* (0.10)	0.19* (0.09)	0.18† (0.09)
Number of Kin Lost	-0.17** (0.06)	-0.15* (0.06)	-0.15* (0.06)	-0.17* (0.06)	-0.14* (0.07)
Number of Kin Gained	0.03 (0.08)	0.04 (0.08)	0.05 (0.08)	0.06 (0.08)	0.01 (0.07)
Number of Friends Lost	0.18** (0.05)	0.18** (0.05)	0.18** (0.06)	0.15* (0.06)	0.14* (0.06)
Number of Friends Gained	0.17* (0.07)	0.17* (0.07)	0.17* (0.07)	0.18* (0.07)	0.19* (0.07)
Closeness to Alters Lost	-0.08 (0.07)	-0.07 (0.07)	-0.07 (0.07)	-0.01 (0.07)	-0.01 (0.07)
Closeness to Alters Gained	-0.07† (0.04)	-0.05 (0.04)	-0.03 (0.04)	-0.05 (0.04)	-0.04 (0.04)
Volume to Alters Lost	-0.10 (0.08)	-0.11 (0.09)	-0.01 (0.08)	-0.01 (0.08)	-0.01 (0.08)
Volume to Alters Gained	-0.16 (0.15)	-0.13 (0.14)	-0.14 (0.14)	-0.14 (0.14)	-0.15 (0.14)
Density of Alters Lost	-0.07** (0.02)	-0.07** (0.02)	-0.07** (0.02)	-0.05** (0.02)	-0.06** (0.02)
Density of Alters Gained	-0.03† (0.02)	-0.03† (0.02)	-0.05* (0.02)	-0.04* (0.02)	-0.04* (0.02)

The next four rows suggest that remarried respondents do not differ significantly from their first married peers in terms of closeness to and frequency of contact with alters lost and gained, regardless of controls used.³⁹ Combined with previous findings on the number of alters changed,

³⁹ There are only about 900 cases in regressions of the closeness to and frequency of contact with alters, far fewer than the number of ties lost. Two factors contribute to this drastic reduction in sample size. First, only 1,264 of the original sample of first married and remarried respondents made it to the second interview and without any marital change.

these results of insignificance indicate that NSHAP respondents replace their lost associates with others of similar characteristics and that interchangeable peripheral ties are rotated into inner circles in small increments over time (Morgan, Neal, and Carder 1997; Wellman, Wong, Tindall, and Nazer 1997). As a result, a network's structural properties are more stable than its membership, and aggregate characteristics are fairly long-lasting. Among the controls, men and those who are lonely are emotionally much more distant to alters lost, and people with more close-knit networks at baseline (measured by higher ratio of kin and average contact volume) also tend to lose alters whom they feel closer to. On the other hand, alters ditched by men and better educated respondents are significantly less close to them. Consistent with the notion that men tend to have lower frequency of contact with alters (Ajrouch, Blandon, and Antonucci 2005; Munch, McPherson, and Smith-Lovin 1997; Shaw, Krause, Liang, and Bennett 2007), volume to associates lost and gained by men is significantly lower than that of alters changed by women. Racial or ethnic minorities tend to lose and gain associates to whom they talk frequently; the opposite holds true for respondents with more education. Older adults with larger discussion networks are likely to feel less close to an average partner, and contact frequency with these incoming and outgoing alters is significantly lower.

The last two rows pertain to network density associated with ties lost and gained. Since the measure of density requires at least two alters in network, the analytical sample is further reduced, and results should be viewed with caution. In all settings, associates rotated out of or into remarried individuals' inner circles are significantly less likely to know of others compared to associates changed by the continuously married, consistent with earlier findings that remarried people have significantly less dense, less close-knit networks.⁴⁰ Again, as racial or ethnic minorities tend to have

Second, a further 341 respondents did not lose any discussion partners at all. The calculation of number of ties, kin, or friends lost, however, does allow the inclusion of those 341 cases.

⁴⁰ The bottom panel of Table C4.8 in appendix C compares the characteristics of alters lost and gained for remarried and divorced individuals, with the latter serving as the reference group. As in the case of remarried and continuously married

denser networks, alters lost and gained by them are also significantly more likely to be connected to others in networks; the opposite holds true for people with more education. Measures of how tightly integrated a network is at baseline are also in the expected direction: respondents with a larger network or a higher ratio of friends in network tend to lose alters who are less connected to others, and people who are closer to or have more frequent contact with their associates also tend to lose alters who are closely connected to others in network.

Taken together, these findings suggest remarried individuals are no more likely than their first married peers to add or remove alters over time. However, this net result of insignificance is the combination of two distinct processes: the remarried are significantly more likely to rotate in and out their friends than the continuously married and they are significantly less likely to lose kin, especially consanguines, as discussion partners. Consequently, remarried individuals' networks do not shrink over time. These findings lend support to the first part of Hypothesis 4. On the other hand, despite the result on density of ties lost, remarried respondents do not differ significantly from the first married in terms of closeness and contact frequency, contradicting the second part of Hypothesis 4. Further, NSHAP respondents do appear to replace lost associates with others of similar traits, thereby preserving the structural characteristics of their discussion networks.

After these changes (or a lack thereof), results of wave 2 closely mirror those of wave 1.⁴¹ On the other hand, because remarried people rotated in significantly more alters in the interim, the difference in network size between the remarried and first married is now insignificant at wave 2. The direction and magnitude of other differences remain largely the same, except that the associated

groups, differences in average closeness to and frequency of contact with alters lost or gained are never significant. On the other hand, associates rotated into and out of remarried respondents' discussion networks are significantly more likely to have communicated with other associates (higher density).

⁴¹ Please refer to appendix E for wave 2 results.

standard errors have increased substantially due to reduced sample size at wave 2. Consequently, many of the differences originally significant became insignificant at wave 2.

Discussion

An important question concerns the precursor to remarriage. Discussions on the influence of marital disruption on network configurations of remarried individuals focus primarily on divorce. However, since NSHAP is a sample of older adults, it naturally contains a non-trivial proportion (16.21%) of remarriage following the death of a spouse. Remarriage after widowhood could be intrinsically different from that after divorce, as widowhood is less likely to involve marital discord and conflicts that tear apart family and friends. Moreover, close associates of bereaved people tend to mobilize to provide emotional support and practical help to the widowed (Arling 1976; Ha 2008; Utz, Carr, Nesse, and Wortman 2002). As a result, widows and widowers may have more close-knit networks, reflected in greater emotional closeness and a higher frequency of contact and density, making them more similar to the continuously married than the divorced-remarried. Social networks of individuals remarried after bereavement may share these characteristics, and a single category of remarriage may yield incorrect inferences.

Consequently, I split the remarriage group into two: those remarried after divorce (N=455) and those after widowhood (N=101). Individuals in the latter group are older and have less education on average. In all cross-sectional measures of network characteristics (except for spouse-independent ties), people remarried after bereavement resemble those remarried after divorce.⁴² In measures where the first married are similar to those remarried after divorce, people remarried after

⁴² These include ratio of kin or friends in network, average density, average contact frequency between ego and non-spouse alters or between spouse and other alters, average contact frequency among non-spouse alters, average density among non-spouse alters, average closeness to non-spouse alters, and spouse-betweenness measures. Please refer to Table D1 in appendix D for detailed results.

widowhood are actually much less integrated to their social environments than the other two.⁴³ Longitudinal results are more mixed: in addition to the aforementioned two patterns,⁴⁴ respondents remarried after the death of a spouse resemble more the continuously married in the number of alters lost, friends lost, and frequency of contact to alters gained. Among these items, only the difference in number of friends lost between divorced-remarried and first married respondent is significant, suggesting the main result of this measure is dominated by the divorced-remarried group. Elsewhere, the preponderance of evidence indicates that causes of prior marital disruption notwithstanding, remarried individuals as a group generate network configurations that are distinct from the continuously married.

Another important issue concerns age at remarriage. Individuals who remarried younger may have more time to weave their spouse into existing networks, and those who remarried older may risk disturbing the longstanding equilibrium of their networks, making remarriage in later years more disruptive (de Jong Gierveld and Peeters 2003). I subsequently divided the remarried subsample into those who remarried before and after age 50.⁴⁵ In no measures are the networks of individuals who remarried after age 50 more fragmented than those of people remarried before 50.⁴⁶ In contrast, it is those who remarried before age 50 that are less integrated into their social milieu. One possible reason is the different mean age at remarriage by previous marital disruption: the average age of people remarried after divorce is 44, while the mean age of people remarried after bereavement is

⁴³ These include network size, ratio of consanguines or affines in network, frequency of contact to ego, and average emotional closeness to alters.

⁴⁴ The two remarried groups resemble each other and are distinct from the continuously married in number of kin lost, number of consanguines lost, number of friends added, closeness to alters lost, and density of alters lost or gained. Divorced-remarried individuals more resemble the continuously married but are distinct from the widowed-remarried in the number of alters gained, number of kin gained, number of consanguines gained, number of affines lost and gained, closeness to alters gained, and frequency of contact to alters lost. Please see Table D2 in appendix D for details.

⁴⁵ 50 is the midpoint between the mean age of remarriage after divorce and that of remarriage after bereavement.

⁴⁶ Please see appendix D and Table D3 for more details.

almost 57. Moreover, it is plausible that individuals who remarried in later years are a select group due to concerns over social security benefits, inheritance, and likely opposition from children.

I also experimented with alternative controls to generate the inverse Mills ratio to account for attrition. Specifically, I added instrumental activities of daily living, body mass index, and CES-D score to multinomial logistic regression and generated alternative inverse Mills ratio.⁴⁷ In the end, 11 of the 12 regressions on changes in network characteristics as reported in Table 4.8 underwent virtually no change at all. The only result of remarriage that is reduced to marginal significance by the new variable is the density of ties connected to new discussion partners gained. That regression, however, is already not as robust as others in the original setting.

Finally, I examined the time an average “new” alter has been known to respondents. The length of time the ego knows his or her associates may have important implications for the extent to which a network is integrated. The more alters whom the ego has known for a short period of time, the more difficult it may be for them to blend into an existing network and to know of other alters, and the less close-knit the networks will be. Unfortunately, NSHAP did not collect this information on all alters, but it did ask for alters that were added at wave 2. Results show that while these discussion partners were incorporated into one’s inner circle only recently, the majority (68.6%) have been known to respondents for over six years, consistent with Shulman (1975), and less than one percent (0.79%) just under one year. Among married respondents, 74.77% of continuously married and 68.05% of remarried individuals’ average new alters are known to them for six years or more. However, these two groups do not differ significantly in the average length of time they know about new alters,⁴⁸ contradicting findings reported in Hurlbert and Acock (1990).

⁴⁷ Please see Table F.9 for multinomial logit results.

⁴⁸ Adding more controls only bring the coefficient estimate of remarriage to marginal significance. Please see Table E1 for more details.

Conclusion

Social relations among adults are rather fragile: once broken, even though they might be patched up, they may never be the same again. Similarly, the social connectedness of divorced people may not be restored once they remarry. It takes more than a sheer grudge to arrive at this end. Instead, it is the combination of life course positions, homogamy in marital history among the remarried, and disincentives to weave a spouse into existing networks that makes remarried individuals and their spouse to be less embedded in their social environments. Consequently, remarried people have significantly smaller networks with a significantly higher ratio of friends, talk to their associates significantly less frequently and are significantly less close to them. Similarly, a spouse in remarriage is significantly less likely to know the ego's other alters or to talk to them frequently. In addition, a spouse in remarriage is less likely to stand between the ego and other associates, and there are significantly more spouse-independent ties in network. Density of the part of a remarried person's network except for spouse is significantly lower than that of a first married person, and contact frequency is also significantly lower.

This state of lower social embeddedness among the remarried is translated into higher alter turnover. As the core is smaller, there are more peripheral ties and these discussion partners tend to be spun out or drawn in more frequently than the core, resulting in remarried individuals' significantly higher change of friends over time. On the other hand, such changes only occur in small increments rather than in bulk, with alters of similar network properties (emotional closeness, contact volume) replacing one another. As a result, remarried individuals are able to sustain the structural features of their network, and their networks continue to differ from those of the continuously married over time. Based on these findings, it can be concluded that even in the long-

term, remarried individuals are still less embedded in their social environments than the continuously married, and remarriage is intrinsically different from continuous first marriage in this aspect.

CHAPTER 5

CONCLUSION

In the 60 years since Bernard's seminal work, there have been many excellent studies of remarriage (e.g., Furstenberg and Spanier 1987; Ganong and Coleman 1994). On the other hand, with the explosive growth in journal article publications, many studies are inevitably limited in their scope. In addition, because a remarriage often involves the establishment of a stepfamily, the well-being of children in a non-intact family has received the lion's share of attention in family sociology since the mid-1990s. Hence, the number of remarriage studies has consistently been overshadowed by that of stepfamily research in the last three decades (Coleman and Ganong 1990; Coleman and Ganong 2000; Sweeney 2010). This dissertation seeks to provide a holistic view of remarriage by providing a socio-demographic profile, analyzing its internal dynamics, and depicting its social embeddedness. Moreover, it attempts to bring remarriage back into the limelight by focusing solely on remarriage to the exclusion of stepfamily. The following paragraphs summarize the basic findings of this dissertation.

Chapter 2 provides a socio-demographic profile of remarriage in contemporary US society based on the National Survey of Family Growth and the National Longitudinal Survey of Youth 1979 (NLSY79). Descriptive statistics suggest that, while remarriage has become less popular in the US compared to four decades ago, close to 60% of divorced individuals remarried, and remarriages comprised one-third of all marriages. Consequently, this part confirms that the US still has the highest level of remarriage among all developed countries (Coleman and Ganong 1990), much higher than those in Northern or Western Europe or even Canada, where cohabitation has largely replaced remarriage as the union of choice after marital disruption. Event history analysis results suggest that certain attained status variables (such as socioeconomic status and labor market

activities), ascribed status variables that shape an individual's marriage market position (such as race, ethnicity, gender, and age), and life course variables that reflect previous choices made in the domain of marriage and fertility (such as age at first marriage and first divorce and whether a person has a child from a previous relationship) are all strongly related to the pace of entering into a remarriage. On the other hand, with respect to exit from remarriage, few factors traditionally associated with the dissolution of a first marriage were related to a second divorce, likely reflecting the heterogeneous environment where individuals found themselves in midlife. More importantly, results of this essay indicate remarriages were not more fragile than continuous first marriages, contrary to received wisdom from previous literature. Furthermore, among those who dissolved a second marriage, the duration of remarriage was significantly longer than that of the first marriage.

Chapter 3 paints a portrait of the dyadic environment and interaction patterns of remarried couples. Drawing from adult development literature of the life course perspective and Kiecolt's model of self-change (1994) in social psychology and employing the fixed-effects models on the NLSY79, I found that remarried couples actually enjoyed significantly higher marital happiness, reported significantly more frequent positive interactions and less frequent conflict, contrary to findings from previous studies. While the evidence supports the hypothesis of learning to choose a more compatible spouse in remarriage, as represented in highly significant intercepts in all regressions, there is no evidence supporting the notion that remarried couples learned to improve their interaction patterns—both positive and negative—over the course of marriage. What happened instead is that marriages became bland over time: the frequency of both positive interactions and conflict greatly diminished over marital duration. While results of the interaction terms of remarriage and marital duration suggest the frequency of positive interactions declined faster and that of

conflict increased faster over time, the effect sizes are too small to wipe out the real gain from making a better choice of spouse in remarriage in the first place.

Chapter 4 characterizes the social environment of older remarried couples both cross-sectionally and longitudinally. Based on Kahn and Antonucci's convoy model (1980) from the life course tradition and using the National Social Life, Health, and Aging Project, I found remarried couples differed from their continuously married counterparts in many important ways. They were less embedded in their social milieu in that they had smaller networks; they had more friends but fewer kin in networks; they reported a lower frequency of contact with their associates and were less close to them; and, their discussion partners were less likely to talk among themselves. Similarly, spouses of remarried older adults were less likely to talk to these discussion partners, and even if they did, the frequency of contact was lower than in the first marriage. As a result, a spouse in remarriage was significantly less likely to stand between a respondent and his or her other alters, and a remarried person was more likely to have spouse-independent ties in network. Less integration into the immediate social environment of remarried couples at a given point in time translates into a significantly higher turnover of peripheral alters—friends—in a network, compared to the continuously married. Remarried individuals, however, are less likely to lose consanguines as discussion partners of important matters than their first-married counterparts. With respect to other aspects, such as emotional closeness and contact frequency, individuals appeared to have changed their inner circles in an incremental way, thereby preserving the structural characteristics of their networks.

While these three essays may appear to be disparate and touch distinct dimensions of remarriage, their findings are interconnected. That remarried couples enjoy significantly greater marital happiness as shown in chapter 3 not only explains the continuing popularity of remarriage in

the US, but also the lower likelihood that a remarriage would end in divorce than a first marriage. Further, as illustrated in chapter 2, among those who dissolved a second marriage, it took them a significantly longer time to reach that end than in the first marriage. Better marital happiness, more frequent positive interactions, and less frequent conflict also strengthen remarried couples' dependence on each other for essential social support, perhaps at the expense of tighter connectedness to their immediate social environment as found in chapter 4. On the other hand, remarried couples' lower social embeddedness, as represented in a lower proportion of kin in network, implies remarried couples are actually less likely to argue over each other's relatives as found in chapter 3. These findings likely explain why Cherlin's hypothesis (1978) that remarriage and stepfamily are incompletely institutionalized has received scant and only intermittent empirical support over the last four decades, despite its being a concise and elegant metaphor.

In addition to interconnected empirical findings, there are four broad themes running through these three essays. First and foremost, these studies suggest that remarriages are qualitatively distinct from continuous first marriages. With respect to marital happiness, dyadic interaction patterns, and a couple's social embeddedness, remarried individuals are different from their continuously married counterparts. In other words, remarriage is not a mere repeat of a first marriage, and these two should not be considered equivalent. Consequently, family scholars should make an appropriate distinction between remarriage and first marriage in future analyses should the situation require. Second, parallel to the previous point, this dissertation attempts to consider remarriage in and of itself and avoid the deficit-comparison approach that marred much of the previous literature (Coleman and Ganong 1990; Coleman and Ganong 2000). Both chapters 2 and 3 involved comparing remarried individuals to themselves in first marriage, and chapter 3 also focused on positive outcomes of remarriage. While chapter 4 may be redolent of the deficit-comparison

approach due to its use of cross-sectional data in providing a snapshot of network characteristics, the overall findings are much more nuanced. Being less integrated to a couple's immediate social environment does not necessarily bode ill for their well-being: social embeddedness is a double-edged sword, and social control often comes with social support.

Third, in response to scholars' call for greater attention to selectivity and more reliance on longitudinal datasets (Coleman and Ganong 2000; Sweeney 2010), this dissertation employed longitudinal datasets for all analyses and attempted to address the issue of selection bias. As early as 1956, Jessie Bernard discussed extensively the various "sieves" through which individuals had to pass through to reach the decision to remarry: first marriage, first divorce or spousal death, and then remarriage. Bernard's insights, however, came two decades before Heckman invented his first method to tackle selection bias. Now, in the second decade of the 21st century, scholars have the duty to properly account for selection bias in their studies. Although the event history method used in chapter 2 may be descriptive in nature and less qualified as a means to correct for selection bias, chapter 3 employed a fixed-effects model to eliminate the influence of time-invariant factors from analysis. In addition, chapter 4 applied a two-stage procedure to account for sample attrition (a form of selection) between two waves of interviews. These efforts to minimize the impact of selection bias are a vital component of this dissertation, and they may have contributed to the literature of remarriage research. Finally, much of the literature on marital satisfaction and other aspects of remarriage amounts to hypothesis testing and are hence atheoretical (Coleman and Ganong 1990), thereby contributing to the scholarship of family sociology in a less systematic manner. This dissertation (except for chapter 2) attempts to rectify the situation by drawing more heavily from the theories of social psychology (such as Kiecolt's model of self-change) and the life course literature

(such as Kahn and Antonucci's convoy model). In so doing, I hope my dissertation helps other scholars recognize the possibility of introducing sociological theories into research on the family.

In the future, this research program can be extended into the following directions: First, findings from chapters 3 and 4 are indicative of stronger social support and control provided by a remarried spouse, due perhaps to remarried couples' weaker integration into their social environment. As a result, it would be fruitful to examine remarried individuals' health behaviors and substance use (alcohol and tobacco) to see whether a remarried spouse exerts stronger social control in regulating health behaviors. Second, since individuals intending to remarry face a thinner marriage market because of their life course position, they may resort to information technology—especially the Internet—to cast a wider net (Rosenfeld and Thomas 2012). Consequently, this project could be expanded to how people meet their spouse of remarriage and whether the use of such a medium has any adverse consequence for the longevity of a remarriage.¹ Finally, while couples could have drastically different views of the same marriage (Vaughan 1987), most studies on research have relied on data gathered from only one family member (Coleman and Ganong 1990), as did all three studies in this dissertation. As a result, researchers may not be able to detect bias inherent in such data. In the future, this project could be extended by using data that made inquiries of both spouses (e.g., the National Survey of Families and Households).

¹ An earlier study of mine (2013) explored certain aspects of how people met their spouse of remarriage, as did Hollingshead (1952). However, data used in these studies are too old to reflect the remarriage experience in contemporary US society.

APPENDIX A: DATA FOR CHAPTER 2

**Table A2.1: Competing-Risk Regression Results of Entry into Remarriage
2006-2010 NSFG Female**

	Model 1	Model 2	Model 3	Model 4	Model 5
N observation	1579	1565	1565	1565	1565
N failed	713	707	707	707	707
N competing	364	362	362	362	362
N censored	502	496	496	496	496
	Subhazard Ratio (Robust Standard Error)				
	1.04** (0.01)	1.03** (0.01)	1.03** (0.01)	1.06*** (0.01)	1.06*** (0.01)
Age	0.51*** (0.09)	0.49*** (0.09)	0.51*** (0.09)	0.56** (0.11)	0.56** (0.11)
African American	1.04 (0.16)	1.09 (0.18)	1.15 (0.18)	1.06 (0.17)	1.05 (0.17)
Hispanic	0.87 (0.16)	0.91 (0.16)	0.96 (0.17)	0.93 (0.17)	0.93 (0.16)
No High School	0.99 (0.14)	0.97 (0.13)	0.93 (0.13)	0.89 (0.12)	0.89 (0.12)
Some College	1.01 (0.16)	1.05 (0.16)	0.95 (0.16)	1.10 (0.18)	1.11 (0.18)
BA or more	1.04 (0.26)	0.97 (0.25)	0.96 (0.24)	0.87 (0.21)	0.85 (0.21)
No Religious Affiliation	1.68** (0.30)	1.67** (0.29)	1.62** (0.28)	1.37† (0.22)	1.36† (0.22)
Type II Protestant	1.06 (0.20)	0.97 (0.19)	0.95 (0.18)	0.92 (0.16)	0.92 (0.16)
Catholic		1.25† (0.14)	1.26* (0.15)	1.38** (0.16)	1.38** (0.16)
Intact Family @ 14		1.10 (0.12)	1.12 (0.13)	1.17 (0.13)	1.17 (0.13)
Mother Gave Birth in Teens		0.81 (0.12)	0.80 (0.12)	0.83 (0.12)	0.83 (0.12)
Maternal Edu: No HS		0.95 (0.14)	0.94 (0.13)	0.98 (0.14)	0.97 (0.14)
Maternal Edu: Some College		0.64* (0.12)	0.64* (0.12)	0.71* (0.12)	0.71* (0.12)
Maternal Edu: BA or more			0.62** (0.10)	0.62** (0.09)	0.61** (0.09)
Poor			0.99 (0.14)	0.97 (0.14)	0.97 (0.14)
Near Poor				0.94 (0.13)	0.94 (0.13)
Cause of Prev. Mar. Disruption				1.00 (0.02)	1.00 (0.02)
Age at 1st Marriage				0.92*** (0.01)	0.92*** (0.01)
Age at 1st Divorce					1.06 (0.12)
Children from Previous Rel.					

***: p<0.001; **: p<0.01; *: p<0.05; †: p<0.10

**Table A2.2: Competing-Risk Regression Results of Entry into Remarriage
NLSY79**

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
N Observations	11648	9987	9188	7647	6316	6316
N Subjects	3131	2684	2469	2094	1786	1786
N Failed N.	1432	1234	1152	1027	904	904
Competing N. Censored	283	246	218	182	153	153
	1416	1204	1099	885	729	729
	Subhazard Ratio (Robust Standard Error)					
162 Female	0.96 (0.05)	0.97 (0.06)	0.99 (0.07)	1.05 (0.08)	0.87 (0.08)	0.84† (0.08)
Age	0.99 (0.01)	1.00 (0.01)	1.00 (0.02)	1.00 (0.02)	1.03 (0.02)	1.01 (0.02)
African American	0.55*** (0.04)	0.50*** (0.04)	0.49*** (0.04)	0.49*** (0.05)	0.60*** (0.06)	0.62*** (0.06)
Hispanic	0.84† (0.08)	0.79* (0.08)	0.77** (0.08)	0.77** (0.08)	0.76* (0.08)	0.75** (0.08)
No High School	0.83† (0.08)	0.83 (0.09)	0.83 (0.10)	0.88 (0.11)	0.92 (0.12)	0.95 (0.13)
Some College	0.97 (0.07)	0.94 (0.08)	0.90 (0.08)	0.88 (0.08)	0.93 (0.09)	0.95 (0.09)
BA or more	0.89 (0.09)	0.95 (0.10)	0.90 (0.10)	0.87 (0.10)	1.17 (0.15)	1.15 (0.14)

**Table A2.2: Competing-Risk Regression Results of Entry into Remarriage
NLSY79 (continued)**

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
No Religious Affiliation	0.82† (0.08)	0.79* (0.09)	0.82† (0.09)	0.73** (0.09)	0.71** (0.09)	0.72** (0.09)
Type II Protestant	0.89 (0.09)	0.85 (0.10)	0.85 (0.10)	0.80† (0.10)	0.73* (0.09)	0.74* (0.10)
Catholic	0.74** (0.08)	0.74** (0.08)	0.73** (0.09)	0.67** (0.08)	0.67** (0.08)	0.69** (0.09)
South @ 14	1.17** (0.06)	1.19** (0.07)	1.19** (0.07)	1.16* (0.07)	1.08 (0.07)	1.07 (0.07)
Intact Family @ 14		0.92 (0.07)	0.88† (0.07)	0.84* (0.07)	0.84* (0.07)	0.84* (0.07)
Mother Gave Birth in Teens		1.06 (0.09)	1.03 (0.10)	1.03 (0.10)	1.12 (0.12)	1.11 (0.12)
Sociability as Adult			1.08† (0.05)	1.07 (0.05)	1.06 (0.05)	1.07 (0.05)
Rotter Locus of Control in 1979			0.98 (0.01)	0.97† (0.02)	0.98 (0.02)	0.98 (0.02)
Rosenberg Self-Esteem in 1987			1.00 (0.01)	1.00 (0.01)	1.00 (0.01)	0.99 (0.01)
Gender Role Attitude			1.13 (0.09)	1.17* (0.09)	1.09 (0.10)	1.09 (0.10)

**Table A2.2: Competing-Risk Regression Results of Entry into Remarriage
NLSY79 (continued)**

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Women						
Work Fin. Needs			1.17* (0.07)	1.22** (0.08)	1.12 (0.08)	1.12† (0.08)
Poverty				0.98 (0.12)	0.91 (0.11)	0.92 (0.12)
Near Poverty				0.97(0.13)	0.82(0.11)	0.83(0.11)
Full-Time Employment				1.57** (0.23)	1.49** (0.22)	1.44* (0.22)
Part-Time Employment				1.43* (0.21)	1.13 (0.17)	1.09 (0.16)
Cause of Prev. Mar. Disruption					1.01 (0.09)	0.99 (0.09)
Age at 1st Marriage					0.96** (0.01)	0.95*** (0.01)
Age at 1st Divorce					0.95*** (0.01)	0.96*** (0.01)
Age at 1st Birth					1.00† (0.00)	1.00 (0.00)
Children from First Marriage						0.62*** (0.07)
Biological Child @ Household						1.07 (0.12)

**Table A2.3: Generalized Gamma Regression Results of Entry into Third Marriage
NLSY79**

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
N						
Observations	2659	2182	1997	1671	1448	1448
N Subjects	812	678	613	521	465	465
	Time Ratio (Robust Standard Error)					
Female	1.31† (0.19)	1.34† (0.20)	1.37† (0.23)	1.36 (0.30)	1.71 (0.92)	1.56 (0.98)
Age	1.00 (0.03)	1.03 (0.03)	1.01 (0.04)	1.04 (0.04)	1.13 (0.14)	1.12 (0.10)
African American	1.37† (0.23)	1.29 (0.24)	1.29 (0.26)	0.96 (0.23)	0.47 (0.55)	0.50 (0.50)
Hispanic	0.75 (0.16)	0.79 (0.20)	0.82 (0.20)	0.73 (0.19)	0.68 (0.46)	0.69 (0.41)
No High School	0.95 (0.18)	1.08 (0.23)	1.06 (0.26)	1.00 (0.27)	1.35 (0.33)	1.35 (0.37)
Some College	1.31 (0.21)	1.36† (0.23)	1.24 (0.23)	1.20 (0.22)	1.22 (0.27)	1.19 (0.26)
BA or more	0.76 (0.21)	0.78 (0.24)	0.75 (0.23)	0.61 (0.23)	0.45 (0.27)	0.46 (0.22)
No Religious Affiliation	1.26 (0.31)	1.36 (0.35)	1.47 (0.41)	1.44 (0.44)	0.77 (0.47)	0.79 (0.38)
Type II Protestant	1.06 (0.28)	1.17 (0.33)	1.34 (0.40)	1.60 (0.53)	1.18 (0.31)	1.20 (0.30)

**Table A2.3: Generalized Gamma Regression Results of Entry into Third Marriage
NLSY79 (continued)**

	<u>Model 1</u>	<u>Model 2</u>	<u>Model 3</u>	<u>Model 4</u>	<u>Model 5</u>	<u>Model 6</u>
Catholic	1.60† (0.41)	1.71† (0.47)	1.85* (0.55)	1.84* (0.57)	1.02 (0.35)	1.06 (0.30)
South @ 14	0.93 (0.10)	0.91 (0.11)	0.93 (0.12)	0.92 (0.12)	0.93 (0.31)	0.95 (0.23)
Intact Family @ 14		1.00 (0.16)	0.98 (0.16)	0.98 (0.18)	1.25 (0.32)	1.26 (0.32)
Mother Gave Birth in Teens		0.94 (0.16)	0.89 (0.16)	0.82 (0.17)	0.78 (0.19)	0.80 (0.17)
Sociability as Adult			0.82 (0.10)	0.85 (0.10)	0.91 (0.24)	0.90 (0.20)
Rotter Locus of Control in 1979			0.98 (0.03)	0.98 (0.03)	1.05 (0.08)	1.05 (0.07)
Rosenberg Self-Esteem in 1987			1.01 (0.02)	1.02 (0.02)	1.02 (0.05)	1.02 (0.04)
Gender Role Attitude			1.11 (0.18)	1.16 (0.19)	1.30 (0.21)	1.32 (0.23)
Women Work Fin. Needs			0.93 (0.12)	0.95 (0.13)	0.96 (0.14)	0.97 (0.13)
Poverty				0.61† (0.18)	0.47 (0.43)	0.49 (0.37)
Near Poverty				0.71 (0.23)	0.64 (0.24)	0.66 (0.25)

**Table A2.3: Generalized Gamma Regression Results of Entry into Third Marriage
NLSY79 (continued)**

	<u>Model 1</u>	<u>Model 2</u>	<u>Model 3</u>	<u>Model 4</u>	<u>Model 5</u>	<u>Model 6</u>
Full-Time Employment				0.54*(0.16)	0.38(0.25)	0.40†(0.21)
Part-Time Employment				0.73 (0.23)	0.67 (0.34)	0.67 (0.30)
Disruption Cause, Marr #1					0.79† (0.11)	0.79† (0.11)
Disruption Cause, Marr #2					1.35† (0.24)	1.35 (0.25)
Age at 1st Marr.					1.00 (0.04)	1.01 (0.03)
Age at 1st Disr.					0.97 (0.05)	0.97 (0.05)
Age at 2nd Marr.					1.05† (0.03)	1.05† (0.03)
Age at 2nd Disr.					1.07** (0.02)	1.07** (0.02)
Age at 1st Birth					1.00† (0.00)	1.00 (0.00)
Children from First Marriage						1.01 (0.31)
Biological Child @ Household						1.16 (0.31)

**Table A2.3: Generalized Gamma Regression Results of Entry into Third Marriage
NLSY79 (continued)**

	<u>Model 1</u>	<u>Model 2</u>	<u>Model 3</u>	<u>Model 4</u>	<u>Model 5</u>	<u>Model 6</u>
/ln_sig	0.44*** (0.05)	0.41*** (0.05)	0.42*** (0.06)	0.40*** (0.05)	0.18 (0.53)	0.21 (0.39)
/kappa	-1.02*** (0.28)	-0.84** (0.29)	-0.80* (0.32)	-1.10* (0.44)	-1.66 (2.80)	-1.50 (2.29)
sigma	1.55 (0.07)	1.51 (0.08)	1.52 (0.08)	1.49 (0.08)	1.20 (0.63)	1.23 (0.48)

***: $p < 0.001$; **: $p < 0.01$; *: $p < 0.05$; †: $p < 0.10$

APPENDIX B: Data for Chapter 3

Table B1.1: Distribution of NLSY79 women by Number of Marriage and Remarriage Status

Number of Marriages	1992	1994	1996	1998	2000	2002	2004	2006	2008	2010
0	1115	974	862	759	674	617	597	578	567	544
1	2848	2842	2739	2700	2539	2416	2399	2319	2331	2260
2	494	562	634	697	735	741	794	812	851	847
3	61	80	100	110	127	143	149	161	175	187
4	13	14	16	21	25	25	31	30	38	45
5	1	5	5	6	7	7	8	10	10	9
6	-	-	2	2	2	2	2	2	2	4
7	-	-	-	1	1	1	1	1	1	-
Total N	4532	4477	4358	4296	4110	3952	3981	3913	3975	3896

*: Includes women who are not currently married.

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Currently in:	1992	1994	1996	1998	2000	2002	2004	2006	2008	2010	Total N
First Marriage	2085	2033	1927	1888	1726	1622	1586	1503	1460	1383	17213
Remarriage	436	508	580	633	670	682	694	711	709	712	6335
Total N	2521	2541	2507	2521	2396	2304	2280	2214	2169	2095	23548

Currently in Marriage #:	1992	1994	1996	1998	2000	2002	2004	2006	2008	2010	Total N
3	44	62	74	85	91	104	104	109	110	117	900
4	5	9	10	15	16	15	17	18	23	27	155
5	0	2	4	5	6	5	6	7	6	5	46
6	0	0	2	2	2	2	1	1	1	2	13
7	0	0	0	1	1	1	1	1	1	0	6
Total N	49	73	90	108	116	127	129	136	141	151	1120

Table B2.1: Distribution of NLSY79 Married Women by Marital Happiness

<u>Year</u>	<u>Not Very Happy</u>	<u>Fairly Happy</u>	<u>Very Happy</u>
1992	1.55%	21.10%	77.35%
1994	2.65%	20.81%	76.54%
1996	3.31%	23.40%	73.29%
1998	2.96%	24.18%	72.86%
2000	2.99%	25.35%	71.66%
2002	4.73%	25.42%	69.85%
2004	3.17%	27.73%	69.10%
2006	4.38%	29.02%	66.60%
2008	3.53%	29.73%	66.74%
2010	4.60%	28.99%	66.41%

Table B2.2: Factor Analysis of Positive Interactions Frequency by Year

<u>Year</u>	<u>Factor Loadings</u>			<u>Eigenvalue</u>	<u>Cronbach's Alpha</u>
	<u>Calm Discussion</u>	<u>Laugh Together</u>	<u>Tell Each Other About Day</u>		
1992	0.6411	0.6719	0.6232	1.2510	0.7321
1994	0.6728	0.6696	0.6553	1.3304	0.7784
1996	0.6788	0.7522	0.6563	1.4574	0.7804
1998	0.7003	0.7071	0.6544	1.4186	0.7915
2000	0.6990	0.7159	0.7123	1.5086	0.8037
2002	0.7293	0.7457	0.6891	1.5629	0.8021
2004	0.6614	0.7055	0.6602	1.3710	0.7905
2006	0.6664	0.7604	0.7349	1.5624	0.7862
2008	0.6906	0.7277	0.6582	1.4396	0.8003
2010	0.7216	0.7380	0.6858	1.5357	0.8065

Table B2.3: Factor Analysis of Negative Interactions Frequency

Year	Factor Loadings of Argument Frequency About:				Eigenvalue	Cronbach's Alpha
	Household Tasks	Children	Money	Showing Affection		
1992	0.6547	0.5869	0.6263	0.5018	1.4171	0.7125
1994	0.6269	0.5198	0.6121	0.5152	1.3034	0.6980
1996	0.6295	0.5518	0.6173	0.5090	1.3409	0.7111
1998	0.6619	0.5732	0.6376	0.5037	1.4269	0.7160
2000	0.6626	0.5698	0.6443	0.5227	1.4520	0.7270
2002	0.6764	0.5367	0.6713	0.5384	1.4862	0.7210
2004	0.6770	0.5850	0.6613	0.5545	1.5453	0.7270
2006	0.6601	0.5581	0.6277	0.4486	1.3424	0.6863
2008	0.6518	0.5513	0.6264	0.4699	1.3421	0.7070
2010	0.6835	0.5911	0.6831	0.4957	1.5289	0.7202

Year	Factor Loadings		Eigenvalue	Cronbach's Alpha
	Spouse's Relatives	Own Relatives		
1992	0.6885	0.6885	0.9481	0.7236
1994	0.6471	0.6471	0.8375	0.7122
1996	0.6731	0.6731	0.9061	0.7127
1998	0.6560	0.6560	0.8608	0.7069
2000	0.6820	0.6820	0.9302	0.7320
2002	0.6484	0.6484	0.8410	0.7029
2004	0.6897	0.6897	0.9513	0.7392
2006	0.6703	0.6703	0.8986	0.7427
2008	0.7088	0.7088	1.0048	0.7384
2010	0.6822	0.6822	0.9308	0.7352

Year	Factor Loadings of Argument Frequency About:				Eigenvalue	Cronbach's Alpha
	Religion	Drinking	Other Women	Free Time		
1992	0.4244	0.3468	0.2587	0.4411	0.8777	0.5720
1994	0.3482	0.4319	0.3534	0.4235	0.6121	0.5176
1996	0.4062	0.4820	0.4559	0.4496	0.8072	0.5424
1998	0.4593	0.4448	0.4452	0.4721	0.8299	0.5716
2000	0.3477	0.4457	0.4216	0.3104	0.8448	0.5513
2002	0.4191	0.5183	0.4792	0.5150	0.9391	0.5843
2004	0.2416	0.4390	0.4335	0.2902	0.8681	0.5893
2006	0.4744	0.5332	0.4712	0.4432	0.9278	0.5707
2008	0.4514	0.4061	0.3637	0.4343	0.8744	0.5991
2010	0.4749	0.4836	0.3918	0.5446	0.9095	0.5823

Table B3.1: Cross-Sectional Logistic Regressions of Marital Happiness by Interview Year

	1992	1994	1996	1998	2000	2002	2004	2006	2008	2010
Simple Model										
Remarried	-0.040	-0.212	-0.214	-0.059	0.341*	0.143	0.060	0.110	0.172	0.161
Plus Duration										
Remarried	-0.126	-0.335*	-0.284†	-0.082	0.286†	0.140	0.097	0.120	0.240	0.109
Marital Duration	-0.002	-0.002†	-0.001	-0.000	-0.001	-0.000	0.000	0.000	0.001	-0.000
Plus Interaction										
Remarried	-0.184	-0.476†	-0.189	-0.260	0.444	0.108	-0.041	0.534†	0.603†	0.644*
Marital Duration	-0.002	-0.002†	-0.001	-0.001	-0.003	-0.000	-0.000	0.001	0.001	0.001
Remarr*Duration	0.001	0.002	-0.001	0.002	-0.001	0.000	0.001	-0.003	-0.002	-0.003†
Full Model										
Remarried	-0.149	-0.867*	-0.471	-0.624	-0.548	0.034	-0.495	0.635	0.318	0.085
Marital Duration	-0.002	-0.005*	-0.002	-0.002	-0.004*	-0.000	-0.001	0.002	0.000	-0.001
Remarr*Duration	0.000	0.003	-0.001	0.003	0.002	0.000	0.002	-0.003	-0.002	-0.002
Biological Children	-0.391*	-0.462*	-0.715**	-0.405*	-0.218	-0.237	-0.399*	-0.389*	-0.323*	-0.329*
Stepchildren	0.101	0.051	-0.040	-0.491	0.284	0.416	0.095	-0.083	-0.561	-0.422
Age at 1st Marr	-0.219†	-0.007	-0.179†	-0.094	-0.315**	-0.098	-0.048	-0.090	-0.124	-0.147*
Age at 1st Marr Sq.	0.004	-0.001	0.003	0.001	0.005**	0.002	0.000	0.002	0.002	0.002
African American	-0.519*	-0.286	-0.240	-0.480*	-0.188	-0.252	-0.336	-0.166	-0.043	-0.139
Latina	0.006	-0.213	-0.076	-0.191	-0.413	-0.115	-0.556*	-0.155	-0.166	-0.885**
No HS Diploma	0.012	0.204	-0.221	-0.066	0.186	0.037	0.100	-0.351	0.387	0.469
Some College	0.101	0.361*	0.205	0.148	0.275†	0.058	-0.056	0.095	0.216	0.173
BA Plus	0.367**	0.379*	0.333†	0.350*	0.273†	0.068	-0.044	-0.073	0.262	0.220
No Religion	-0.732**	-0.299	-0.058	-0.117	0.051	-0.024	-0.243	-0.057	-0.107	-0.019
Protestant II	-0.486*	-0.178	-0.219	0.177	-0.179	-0.197	-0.344†	-0.163	-0.300	-0.238
Catholic	-0.103	0.329	-0.068	0.062	0.016	0.073	0.019	0.092	-0.130	0.232
South @ 17 y.o.	0.115	0.158	0.134	0.003	0.037	0.158	0.264†	0.168	0.136	0.226

***: $p < 0.001$; **: $p < 0.01$; *: $p < 0.05$; †: $p < 0.10$

Table B3.2: Cross-Sectional Logistic Regressions of Marital Happiness by Interview Year, Using Number of Marriages

	1992	1994	1996	1998	2000	2002	2004	2006	2008	2010
Simple Model										
Marr. Number	-0.005	-0.119	-0.124	-0.067	0.155	0.026	-0.042	0.074	0.119	0.078
Plus Duration										
Marr. Number	-0.079	-0.204†	-0.195†	-0.091	0.124	0.016	-0.033	0.094	0.133	0.038
Marital Duration	-0.002	-0.002†	-0.001	-0.000	-0.001	-0.000	-0.000	0.000	0.000	-0.001
Plus Interaction										
Marr. Number	-0.139	-0.240	-0.034	-0.136	0.018	-0.062	-0.171	0.320	0.281	0.246
Marital Duration	-0.003	-0.003	0.002	-0.001	-0.002	-0.001	-0.002	0.002	0.002	0.001
MarNum*Duration	0.001	0.001	-0.003	0.001	0.001	0.001	0.001	-0.002	-0.001	-0.001
Full Model										
Marr. Number	-0.072	-0.221	-0.135	-0.302	-0.455*	-0.255	-0.540*	0.246	0.031	-0.088
Marital Duration	-0.002	-0.002	0.003	-0.002	-0.006*	-0.003	-0.004†	0.003	0.000	-0.001
MarNum*Duration	0.001	-0.000	-0.003	0.001	0.002	0.001	0.002	-0.002	-0.001	-0.001
Biological Children	-0.398*	-0.465*	-0.715***	-0.409*	-0.239	-0.249	-0.423*	-0.398**	-0.334*	-0.334*
Stepchildren	0.081	0.033	-0.048	-0.493†	0.187	0.402	0.075	-0.090	-0.572	-0.419
Age at 1st Marr	-0.194	0.038	-0.181†	-0.108	-0.326***	-0.132	-0.077	-0.093	-0.139†	-0.164*
Age at 1st Marr Sq.	0.004	-0.002	0.003	0.001	0.005**	0.002	0.001	0.002	0.002	0.002†
African American	-0.513*	-0.269	-0.232	-0.489*	-0.227	-0.288	-0.345	-0.169	-0.041	-0.137
Latina	0.010	-0.170	-0.053	-0.182	-0.409	-0.111	-0.544*	-0.143	-0.161	-0.883**
No HS Diploma	0.021	0.133	-0.183	-0.036	0.128	0.038	0.081	-0.362	0.394	0.467
Some College	0.101	0.344*	0.189	0.150	0.276†	0.060	-0.071	0.084	0.219	0.171
BA Plus	0.367†	0.391*	0.341*	0.362*	0.278†	0.070	-0.054	-0.082	0.258	0.218
No Religion	-0.733**	-0.332	-0.034	-0.109	0.054	-0.020	-0.223	-0.053	-0.102	-0.007
Protestant II	-0.501*	-0.165	-0.202	0.199	-0.170	-0.208	-0.307	-0.167	-0.298	-0.232
Catholic	-0.103	0.326	-0.076	0.067	0.003	0.078	0.031	0.082	-0.130	0.237
South @ 17 y.o.	0.114	0.177	0.130	0.008	0.040	0.178	0.256†	0.173	0.138	0.230

***: p<0.001; **: p<0.01; *: p<0.05; †: p<0.10

Table B3.3: Random-Effects Estimation Results of Dichotomous Marital Happiness Regressions

	<u>Zero-Order</u>	<u>+Duration</u>	<u>+Interaction</u>	<u>+Children</u>	<u>+Socio-Demogr.</u>	<u>+Personality</u>
Number of Observations	23062	23039	23039	23039	20891	18705
Number of Groups	3512	3507	3507	3507	2990	2729
Average Obs. per Group	6.6	6.6	6.6	6.6	7.0	6.9
Currently Remarried	0.354***	-0.065	0.066	0.045	-0.295*	-0.371**
Current Marital Duration		-0.006***	-0.006***	-0.006***	-0.007***	-0.007***
Remarried*Mar. Duration			-0.001†	-0.002*	-0.001	-0.001†
Biological Children				-0.585***	-0.649***	-0.646***
Stepchildren				-0.188	-0.212	-0.209
Foster Children				0.646	0.673†	0.587
Biological Grandchildren				-0.012	0.073	0.127
Step Grandchildren				0.526	0.564	0.457
Age at First Marriage					-0.132*	-0.185**
Age at First Marriage Sq.					0.001	0.002*
African American					-0.996***	-1.032***
Latina					-0.443***	-0.323*
No High School Diploma					0.074	0.448*
Some College					0.157	0.102
BA Plus					0.361*	0.066
No Religious Affiliation					-0.513*	-0.420†
Type II Protestant					-0.415*	-0.192
Catholic					-0.185	-0.139
South @ 17 y.o.					0.176	0.207†
Rotter's Locus of Control						-0.035
Pearlin's Mastery						0.136***
Rosenberg Self-Esteem						0.069***
Sociability (1985)						0.106
Risk Aversion						-0.036
Sigma u	2.085	2.293	2.292	2.309	2.226	2.125
Rho	0.569	0.615	0.615	0.618	0.601	0.579

***: p<0.001; **: p<0.01; *: p<0.05; †: p<0.10

Table B3.4: Fixed-Effects Estimation Results of Dichotomous Marital Happiness

	Zero-Order	+Duration	+Interaction	+Children	+Socio-Demogr.	+Personality
Number of Observations	14070	14054	14054	14054	12944	11555
Number of Groups	1903	1901	1901	1901	1700	1544
Average Obs. per Group	7.4	7.4	7.4	7.4	7.6	7.5
Currently Remarried	1.097***	0.573***	0.576***	0.529**	0.896**	0.921**
Current Marital Duration		-0.008***	-0.008***	-0.009***	-0.007***	-0.007***
Remarried*Mar. Duration			-0.000***	-0.001	-0.002*	-0.002*
Biological Children				-0.699***	-0.559***	-0.573***
Stepchildren				-0.338†	-0.395*	-0.390*
Foster Children				0.547	0.517	0.551
Biological Grandchildren				0.255†	0.031	0.077
Step Grandchildren				0.078	0.102	0.123
Age at First Marriage					0.004*	0.016***
Age at First Marriage Sq.					-0.000***	-0.000***
African American					0.030**	0.041**
Latina					0.015	0.016
No High School Diploma					0.023	0.019
Some College					-0.010	-0.019
BA Plus					-0.021†	-0.015
No Religious Affiliation					0.004	0.003
Type II Protestant					0.011	0.018
Catholic					-0.010	-0.002
South @ 17 y.o.					-0.007	-0.012
Rotter's Locus of Control						0.000
Pearlin's Mastery						-0.009***
Rosenberg Self-Esteem						0.002†
Sociability (1985)						-0.001
Risk Aversion						-0.000
***: p<0.001; **: p<0.01; *: p<0.05; †: p<0.10						

Table B3.5: Fixed-Effects Estimation Results of Three-Category Marital Happiness

	<u>Zero-Order</u>	<u>+Duration</u>	<u>+Interaction</u>	<u>+Children</u>	<u>+Socio-Demogr.</u>	<u>+Personality</u>
Number of Observations	23062	23039	23039	23039	20891	18705
Number of Groups	3512	3507	3507	3507	2990	2729
Average Obs. per Group	6.6	6.6	6.6	6.6	7.0	6.9
Currently Remarried	0.213***	0.126***	0.138***	0.129***	0.115**	0.088
Current Marital Duration		-0.001***	-0.001***	-0.001***	-0.001***	-0.001***
Remarried*Mar. Duration			-0.000	-0.000*	-0.000***	-0.000***
Biological Children				-0.083***	-0.062***	-0.060***
Stepchildren				-0.035	-0.045†	-0.047†
Foster Children				0.049	0.043	0.054
Biological Grandchildren				0.007	-0.013	-0.001
Step Grandchildren				0.101	0.117	0.103
Age at First Marriage					0.001***	0.001*
Age at First Marriage Sq.					-0.000***	-0.000***
African American					0.002	0.003
Latina					0.002	0.002
No High School Diploma					0.002	0.002
Some College					0.000	-0.000
BA Plus					0.000	-0.001
No Religious Affiliation					-0.002	-0.001
Type II Protestant					-0.002	-0.000
Catholic					-0.003	-0.002
South @ 17 y.o.					0.002	0.000
Rotter's Locus of Control						-0.000
Pearlin's Mastery						-0.000*
Rosenberg Self-Esteem						0.000**
Sociability (1985)						-0.001
Risk Aversion						-0.000
sigma u	0.438	0.454	0.453	0.453	0.852	0.911
sigma e	0.423	0.416	0.416	0.416	0.414	0.415
rho	0.518	0.543	0.543	0.544	0.808	0.828
***: p<0.001; **: p<0.01; *: p<0.05; †: p<0.10						

Table B3.6: Fixed-Effects Estimation Results of Dichotomous Marital Happiness, Using Number of Marriages

	Zero-Order	+Duration	+Interaction	+Children	+Socio-Demogr.	+Personality
Number of Observations	14337	14105	14105	14105	12987	11596
Number of Groups	1946	1911	1911	1911	1709	1552
Average Obs. per Group	7.4	7.4	7.4	7.4	7.6	7.5
Number of Marriages	0.945***	0.666***	0.669***	0.594***	1.753***	1.971***
Current Marital Duration		-0.008***	-0.008***	-0.008***	0.000	0.001
Marr. Num*Mar. Duration			-0.000	-0.000	-0.002*	-0.002**
Biological Children				-0.668***	-0.555***	-0.573***
Stepchildren				-0.338†	-0.359*	-0.380*
Foster Children				0.549	0.487	0.521
Biological Grandchildren				0.246	0.048	0.089
Step Grandchildren				0.090	0.100	0.151
Age at First Marriage					-0.001	0.011**
Age at First Marriage Sq.					-0.000*	-0.000***
African American					0.031**	0.042***
Latina					0.016	0.017
No High School Diploma					0.017	0.012
Some College					-0.009	-0.018
BA Plus					-0.019†	-0.014
No Religious Affiliation					-0.002	-0.003
Type II Protestant					0.007	0.015
Catholic					-0.012	-0.004
South @ 17 y.o.					-0.009	-0.014
Rotter's Locus of Control						0.000
Pearlin's Mastery						-0.009***
Rosenberg Self-Esteem						0.002
Sociability (1985)						-0.002
Risk Aversion						-0.000
***: p<0.001; **: p<0.01; *: p<0.05; †: p<0.10						

Table B3.7: Fixed-Effects Estimation Results of Three-Category Marital Happiness, Using Number of Marriages

	Zero-Order	+Duration	+Interaction	+Children	+Socio-Demogr.	+Personality
Number of Observations	23346	23088	23088	23088	20931	18744
Number of Groups	3574	3509	3509	3509	2991	2730
Average Obs. per Group	6.5	6.6	6.6	6.6	7.0	6.9
Number of Marriages	0.198***	0.146***	0.154***	0.142***	0.294***	0.293***
Current Marital Duration		-0.001***	-0.004***	-0.001***	0.000	0.001
Marr. Num*Mar. Duration			-0.000†	-0.000*	-0.000***	-0.000***
Biological Children				-0.077***	-0.061***	-0.060***
Stepchildren				-0.035	-0.041†	-0.044†
Foster Children				0.047	0.040	0.052
Biological Grandchildren				0.006	-0.009	0.003
Step Grandchildren				0.114	0.134	0.121
Age at First Marriage					0.000	0.000
Age at First Marriage Sq.					-0.000**	-0.000**
African American					0.002	0.002
Latina					0.002	0.002
No High School Diploma					0.002	0.001
Some College					0.001	0.000
BA Plus					0.001	-0.000
No Religious Affiliation					-0.003	-0.002
Type II Protestant					-0.002	-0.001
Catholic					-0.003	-0.002
South @ 17 y.o.					0.001	0.000
Rotter's Locus of Control						-0.000
Pearlin's Mastery						-0.000*
Rosenberg Self-Esteem						0.000**
Sociability (1985)						-0.001
Risk Aversion						-0.000
Sigma u	0.453	0.466	0.465	0.464	0.894	0.967
Sigma e	0.429	0.417	0.417	0.417	0.416	0.416
Rho	0.528	0.555	0.554	0.554	0.822	0.843
***: p<0.001; **: p<0.01; *: p<0.05; †: p<0.10						

Table B4.1: Durbin-Wu-Hausman Test Results of Three-Category Marital Happiness

Marital Happiness	Fixed	Random	Difference	S.E.
Currently Remarried	0.129	0.015	0.114	0.019
Current Marital Duration	-0.001	-0.001	0.000	0.000
Remarried*Mar. Duration	0.000	0.000	0.000	0.000
Biological Children	-0.083	-0.068	-0.015	0.006
Stepchildren	-0.035	-0.024	-0.011	0.010
chi2(5) = 347.10	Prob>chi2 = 0.0000			

Table B4.2: Durbin-Wu-Hausman Test Results of Marital Happiness Regressions Using Number of Marriages

Marital Happiness				
(Dichotomous)	Fixed	Random	Difference	S.E.
Number of Marriage	0.600	0.021	0.579	0.097
Current Marital Duration	-0.008	-0.004	-0.004	0.000
Num. Marriage*Duration	0.000	-0.001	0.001	0.000
Biological Children	-0.663	-0.584	-0.079	0.049
Stepchildren	-0.336	-0.185	-0.151	0.088
chi2(5) = 307.86	Prob>chi2 = 0.0000			
Marital Happiness				
(Three Categories)	Fixed	Random	Difference	S.E.
Number of Marriage	0.142	0.009	0.133	0.015
Current Marital Duration	-0.001	-0.001	0.000	0.000
Num. Marriage*Duration	0.000	0.000	0.000	0.000
Biological Children	-0.077	-0.068	-0.010	0.006
Stepchildren	-0.035	-0.024	-0.011	0.010
chi2(5) = 384.24	Prob>chi2 = 0.0000			

Table B5.1: Random-Effects Estimation Results of Positive Interactions

	<u>Zero-Order</u>	<u>+Duration</u>	<u>+Interaction</u>	<u>+Children</u>	<u>+Soc-Dmgr</u>	<u>+Persoanlity</u>
Number of Observations	23049	23026	23026	23026	20878	18691
Number of Groups	3512	3507	3507	3507	2990	2730
Observation per Group	6.6	6.6	6.6	6.6	7.0	6.8
Currently Remarried	0.094***	0.057***	0.080***	0.080***	0.075***	0.061**
Current Marital Duration		-0.000***	-0.000***	-0.000***	-0.000***	-0.000***
Remarried*Marr. Duration			-0.000*	-0.000**	-0.000**	-0.000**
Biological Children				-0.062***	-0.070***	-0.068***
Stepchildren				-0.042*	-0.043*	-0.046*
Age at First Marriage					-0.009	-0.018**
Age at First Marriage Sq.					0.000	0.000
African American					-0.162***	-0.167***
Latina					-0.060**	-0.052*
No High School Diploma					-0.058*	-0.019
Some College					0.043*	0.039*
BA Plus					0.095***	0.061*
No Religious Affiliation					-0.012	-0.018
Type II Protestant					-0.030	-0.012
Catholic					0.011	0.001
South @ 17 y.o.					-0.025	-0.027
Rotter's Locus of Control						-0.002
Pearlin's Mastery						0.017***
Rosenberg Self-Esteem						0.007***
Sociability (1985)						0.002
Risk Aversion						-0.005
Sigma u	0.381	0.378	0.378	0.377	0.375	0.362
Sigma e	0.396	0.394	0.394	0.393	0.389	0.388
Rho	0.482	0.498	0.479	0.478	0.481	0.467
***: p<0.001; **: p<0.01; *: p<0.05; †: p<0.10						

**Table B5.2: Fixed-Effects Estimation Results of Positive Interactions
Using Number of Marriages**

	<u>Zero-Order</u>	<u>+Duration</u>	<u>+Interaction</u>	<u>+Children</u>
Number of Observations	23326	23073	23073	23073
Number of Groups	3573	3509	3509	3509
Observation per Group	6.5	6.6	6.6	6.6
Number of Marriages	0.217***	0.192***	0.197***	0.190***
Current Marital Duration		-0.001***	-0.001***	-0.000***
Num. Marriage*Duration			0.000	-0.000†
Biological Children				-0.064***
Stepchildren				-0.048*
Sigma u	0.463	0.460	0.459	0.458
Sigma e	0.405	0.396	0.396	0.396
Rho	0.566	0.574	0.573	0.572
***: p<0.001; **: p<0.01; *: p<0.05; †: p<0.10				

**Table B5.3: Random-Effects Estimation Results of Positive Interactions
Using Number of Marriages**

	Zero-Order	+Duration	+Interaction	+Children	+Soc-Dmgr	+Personality
Number of Observations	23326	23073	23073	23073	20916	18728
Number of Groups	3573	3509	3509	3509	2991	2731
Observation per Group	6.5	6.6	6.6	6.6	7.0	6.9
Number of Marriages	0.064***	0.037***	0.050***	0.048***	0.043***	0.035*
Current Marital Duration		-0.000***	-0.000**	-0.000*	-0.000*	-0.000*
Num. Marriage*Duration			-0.000*	-0.000*	-0.000**	-0.000*
Biological Children				-0.060***	-0.069***	-0.067***
Stepchildren				-0.038†	-0.039†	-0.043†
Age at First Marriage					-0.022	-0.019*
Age at First Marriage Sq.					0.000	0.000†
African American					-0.164***	-0.169***
Latina					-0.063**	-0.056*
No High School Diploma					-0.061*	-0.020
Some College					0.041*	0.037*
BA Plus					0.094***	0.059*
No Religious Affiliation					-0.017	-0.021
Type II Protestant					-0.031	-0.012
Catholic					0.010	-0.000
South @ 17 y.o.					-0.026	-0.027
Rotter's Locus of Control						-0.002
Pearlin's Mastery						0.017***
Rosenberg Self-Esteem						0.007***
Sociability (1985)						0.002
Risk Aversion						-0.004
Sigma u	0.391	0.382	0.382	0.380	0.377	0.364
Sigma e	0.405	0.396	0.396	0.396	0.392	0.391
Rho	0.483	0.482	0.481	0.480	0.480	0.465
***: p<0.001; **: p<0.01; *: p<0.05; †: p<0.10						

Table B6.1: Random-Effects Estimation Results of Core Grievances Frequency

	<u>Zero-Order</u>	<u>+Duration</u>	<u>+Interaction</u>	<u>+Children</u>	<u>+Soc-Dmgr</u>	<u>+Persoanlity</u>
Number of Observations	23049	23027	23027	23027	20879	18692
Number of Groups	3511	3506	3506	3506	2990	2730
Observation per Group	6.6	6.6	6.6	6.6	7.0	6.8
Currently Remarried	-0.250***	-0.275***	-0.296***	-0.279***	-0.338***	-0.326***
Current Marital Duration		-0.000***	-0.000***	-0.000***	-0.001***	-0.001***
Remarried*Marr. Duration			0.000*	0.000***	0.000***	0.001***
Biological Children				0.282***	0.273***	0.276***
Stepchildren				0.120***	0.127***	0.132***
Age at First Marriage					0.016	0.031**
Age at First Marriage Sq.					-0.001**	-0.001***
African American					0.088***	0.108***
Latina					0.109***	0.100***
No High School Diploma					0.015	-0.077*
Some College					-0.014	-0.007
BA Plus					-0.116***	-0.060*
No Religious Affiliation					0.052	0.242
Type II Protestant					0.103**	0.061†
Catholic					0.008	0.008
South @ 17 y.o.					-0.020	-0.032
Rotter's Locus of Control						0.009*
Pearlin's Mastery						-0.029***
Rosenberg Self-Esteem						-0.013***
Sociability (1985)						0.001
Risk Aversion						0.007†
Sigma u	0.504	0.504	0.504	0.484	0.476	0.459
Sigma e	0.471	0.470	0.470	0.465	0.462	0.459
Rho	0.535	0.536	0.536	0.520	0.516	0.500
***: p<0.001; **: p<0.01; *: p<0.05; †: p<0.10						

Table B6.2: Fixed-Effects Estimation Results of Core Grievances Scale without Conflicts over Children

	Using "Currently Remarried"		
	Zero-Order	+Duration	+Interaction
Number of Observations	23044	23022	23022
Number of Groups	3511	3506	3506
Observation per Group	6.6	6.6	6.6
Currently Remarried	-0.531***	-0.559***	-0.577***
Current Marital Duration		-0.000***	-0.001***
Remarried*Marr. Duration			0.000*
Sigma u	0.604	0.602	0.600
Sigma e	0.506	0.505	0.505
Rho	0.587	0.586	0.585
	Using "Number of Marriage"		
	Zero-Order	+Duration	+Interaction
Number of Observations	23325	23070	23070
Number of Groups	3573	3508	3508
Observation per Group	6.5	6.6	6.6
Number of Marriages	-0.437***	-0.485***	-0.495***
Current Marital Duration		-0.000***	-0.001***
Num. Marriage*Duration			0.000†
Sigma u	0.621	0.622	0.621
Sigma e	0.508	0.504	0.504
Rho	0.599	0.603	0.603
***: p<0.001; **: p<0.01; *: p<0.05; †: p<0.10			

**Table B6.3: Fixed-Effects Estimation Results of Core Grievances Frequency
Using Number of Marriages**

	Zero-Order	+Duration	+Interaction	+Children
Number of Observations	23330	23075	23075	23075
Number of Groups	3573	3508	3508	3508
Observation per Group	6.5	6.6	6.6	6.6
Number of Marriages	-0.398***	-0.447***	-0.447***	-0.412***
Current Marital Duration		-0.000***	-0.000**	-0.001***
Num. Marriage*Duration			0.000	0.000
Biological Children				0.231***
Stepchildren				0.118***
Sigma u	0.597	0.599	0.599	0.577
Sigma e	0.472	0.469	0.469	0.465
Rho	0.616	0.620	0.620	0.607
***: p<0.001; **: p<0.01; *: p<0.05; †: p<0.10				

**Table B6.4: Random-Effects Estimation Results of Core Grievances Frequency
Using Number of Marriages**

	<u>Zero-Order</u>	<u>+Duration</u>	<u>+Interaction</u>	<u>+Children</u>	<u>+Soc-Dmgr</u>	<u>+Persoanlity</u>
Number of Observations	23330	23075	23075	23075	20918	18730
Number of Groups	3573	3508	3508	3508	2991	2731
Observation per Group	6.5	6.6	6.6	6.6	7.0	6.9
Number of Marriages	-0.178***	-0.211***	-0.220***	-0.198***	-0.238***	-0.226***
Current Marital Duration		-0.000***	-0.000***	-0.001***	-0.001***	-0.001***
Num. Marriages*Duration			0.000	0.000**	0.000**	0.000**
Biological Children				0.278***	0.269***	0.273***
Stepchildren				0.114***	0.117***	0.123***
Age at First Marriage					0.011	0.027*
Age at First Marriage Sq.					-0.000*	-0.001**
African American					0.084**	0.104***
Latina					0.110***	0.100***
No High School Diploma					0.016	-0.076*
Some College					-0.016	-0.009
BA Plus					-0.115***	-0.058†
No Religious Affiliation					0.063	0.035
Type II Protestant					0.113**	0.070*
Catholic					0.014	0.013
South @ 17 y.o.					-0.017	-0.029
Rotter's Locus of Control						0.009*
Pearlin's Mastery						-0.029***
Rosenberg Self-Esteem						-0.013***
Sociability (1985)						0.001
Risk Aversion						0.007†
Sigma u	0.504	0.504	0.504	0.484	0.478	0.461
Sigma e	0.472	0.469	0.469	0.465	0.461	0.459
Rho	0.533	0.537	0.537	0.521	0.518	0.502

***: p<0.001; **: p<0.01; *: p<0.05; †: p<0.10

Table B7.1: Random-Effects Estimation Results of In-Law Grievances Frequency

	Zero-Order	+Duration	+Interaction	+Children	+Soc-Dmgr	+Persoanlity
Number of Observations	22998	22977	22977	22977	20840	18663
Number of Groups	3510	3505	3505	3505	2989	2730
Observation per Group	6.6	6.6	6.6	6.6	7.0	6.8
Currently Remarried	-0.206***	-0.248***	-0.326***	-0.320***	-0.384***	-0.379***
Current Marital Duration		-0.001***	-0.001***	-0.001***	-0.001***	-0.001***
Remarried*Marr. Duration			0.001***	0.001***	0.001***	0.001***
Biological Children				0.081***	0.074***	0.078***
Stepchildren				-0.026	-0.014	-0.010
Age at First Marriage					0.003	0.013
Age at First Marriage Sq.					-0.000	-0.000*
African American					-0.084**	-0.074*
Latina					0.001	0.015
No High School Diploma					0.025	-0.018
Some College					0.002	0.019
BA Plus					-0.070*	-0.029
No Religious Affiliation					-0.039	-0.065
Type II Protestant					-0.016	-0.059
Catholic					-0.015	-0.034
South @ 17 y.o.					-0.004	-0.005
Rotter's Locus of Control						0.010*
Pearlin's Mastery						-0.020***
Rosenberg Self-Esteem						-0.008**
Sociability (1985)						-0.010
Risk Aversion						0.010†
Sigma u	0.502	0.503	0.503	0.501	0.493	0.481
Sigma e	0.602	0.601	0.600	0.600	0.597	0.598
Rho	0.410	0.412	0.412	0.411	0.406	0.393
***: p<0.001; **: p<0.01; *: p<0.05; †: p<0.10						

**Table B7.2: Incomplete Institutionalization Estimation Results
(Frequency of Arguments about Children and Relatives)**

	Fixed-Effects Models		
	Zero-Order	+Duration	+Interaction
Number of Observations	23048	23026	23026
Number of Groups	3511	3506	3506
Observation per Group	6.6	6.6	6.6
Currently Remarried	-0.352***	-0.385***	-0.407***
Current Marital Duration		-0.000***	-0.001***
Remarried*Marr. Duration			0.000**
Sigma u	0.543	0.546	0.545
Sigma e	0.499	0.498	0.498
Rho	0.542	0.546	0.545
	Random-Effects Models		
	Zero-Order	+Duration	+Interaction
Number of Observations	23048	23026	23026
Number of Groups	3511	3506	3506
Observation per Group	6.6	6.6	6.6
Currently Remarried	-0.183***	-0.207***	-0.243***
Current Marital Duration		-0.000***	-0.000***
Remarried*Marr. Duration			0.000**
Sigma u	0.470	0.468	0.469
Sigma e	0.500	0.498	0.498
Rho	0.469	0.469	0.469
***: p<0.001; **: p<0.01; *: p<0.05; †: p<0.10			

Table B7.3: Fixed-Effects Estimation Results of In-Law Grievances Frequency Using Number of Marriages

	Zero-Order	+Duration	+Interaction	+Children
Number of Observations	23278	23025	23025	23025
Number of Groups	3572	3507	3507	3507
Observation per Group	6.5	6.6	6.6	6.6
Number of Marriages	-0.325***	-0.379***	-0.410***	-0.399***
Current Marital Duration		-0.001***	-0.001***	-0.001***
Num. Marriage*Duration			0.001***	0.001***
Biological Children				0.052**
Stepchildren				-0.007
Sigma u	0.608	0.608	0.606	0.603
Sigma e	0.604	0.600	0.600	0.600
Rho	0.503	0.507	0.505	0.503
***: p<0.001; **: p<0.01; *: p<0.05; †: p<0.10				

**Table B7.4: Random-Effects Estimation Results of In-Law Grievances Frequency
Using Number of Marriages**

	Zero-Order	+Duration	+Interaction	+Children	+Soc-Dmgr	+Persoanlity
Number of Observations	23278	23025	23025	23025	20879	18701
Number of Groups	3572	3507	3507	3507	2990	2731
Observation per Group	6.5	6.6	6.6	6.6	7.0	6.8
Number of Marriages	-0.145***	-0.181***	-0.227***	-0.219***	-0.256***	-0.249***
Current Marital Duration		-0.001***	-0.001***	-0.001***	-0.001***	-0.001***
Num. Marriages*Duration			0.001***	0.001***	0.001***	0.001***
Biological Children				0.078***	0.070***	0.074***
Stepchildren				-0.035	-0.028	-0.024
Age at First Marriage					-0.001	0.010
Age at First Marriage Sq.					-0.000	-0.000†
African American					-0.090**	-0.080**
Latina					0.002	0.015
No High School Diploma					0.032	-0.013
Some College					-0.001	0.016
BA Plus					-0.067*	-0.025
No Religious Affiliation					-0.030	-0.060
Type II Protestant					-0.007	-0.050
Catholic					-0.011	-0.031
South @ 17 y.o.					-0.002	-0.002
Rotter's Locus of Control						0.011*
Pearlin's Mastery						-0.019***
Rosenberg Self-Esteem						-0.008**
Sociability (1985)						-0.011
Risk Aversion						0.009†
Sigma u	0.502	0.502	0.502	0.500	0.493	0.480
Sigma e	0.604	0.600	0.600	0.600	0.597	0.597
Rho	0.409	0.411	0.412	0.410	0.406	0.393
***: p<0.001; **: p<0.01; *: p<0.05; †: p<0.10						

Table B8.1: Random-Effects Estimation Results of Outside Entertainment Grievances Frequency

	<u>Zero-Order</u>	<u>+Duration</u>	<u>+Interaction</u>	<u>+Children</u>	<u>+Soc-Dmgr</u>	<u>+Persoanlity</u>
Number of Observations	23028	23006	23006	23006	20861	18678
Number of Groups	3511	3506	3506	3506	2990	2730
Observation per Group	6.6	6.6	6.6	6.6	7.0	6.8
Currently Remarried	-0.106***	-0.117***	-0.137***	-0.135***	-0.146***	-0.145***
Current Marital Duration		-0.000***	-0.000***	-0.000***	-0.000***	-0.000***
Remarried*Marr. Duration			0.000*	0.000**	0.000*	0.000**
Biological Children				0.048***	0.043***	0.045***
Stepchildren				0.030	0.038†	0.052*
Age at First Marriage					0.013†	0.022**
Age at First Marriage Sq.					-0.000*	-0.000**
African American					0.098***	0.102***
Latina					0.067***	0.067**
No High School Diploma					0.030	-0.011
Some College					-0.010	-0.002
BA Plus					-0.045*	-0.024
No Religious Affiliation					-0.030	-0.052†
Type II Protestant					0.032	0.009
Catholic					0.000	-0.005
South @ 17 y.o.					0.012	0.005
Rotter's Locus of Control						0.006†
Pearlin's Mastery						-0.016***
Rosenberg Self-Esteem						-0.006**
Sociability (1985)						-0.011
Risk Aversion						0.010**
Sigma u	0.324	0.322	0.322	0.320	0.317	0.315
Sigma e	0.371	0.371	0.371	0.371	0.368	0.366
Rho	0.432	0.430	0.430	0.427	0.426	0.425
***: p<0.001; **: p<0.01; *: p<0.05; †: p<0.10						

Table B8.2: Fixed-Effects Estimation Results of Outside Entertainment Grievances Frequency, Excluding Arguments about Religion

	<u>Zero-Order</u>	<u>+Duration</u>	<u>+Interaction</u>	<u>+Children</u>
Number of Observations	23020	22998	22998	22998
Number of Groups	3511	3506	3506	3506
Observation per Group	6.6	6.6	6.6	6.6
Currently Remarried	-0.261***	-0.272***	-0.286***	-0.282***
Current Marital Duration		-0.000**	-0.000***	-0.000***
Remarried*Marr. Duration			0.000†	0.000*
Biological Children				0.041***
Stepchildren				0.045†
Sigma u	0.425	0.424	0.426	0.423
Sigma e	0.399	0.399	0.399	0.399
Rho	0.532	0.531	0.530	0.530
***: p<0.001; **: p<0.01; *: p<0.05; †: p<0.10				

Table B8.3: Fixed-Effects Estimation Results of Outside Entertainment Grievances Frequency Using Number of Marriages

	<u>Zero-Order</u>	<u>+Duration</u>	<u>+Interaction</u>	<u>+Children</u>
Number of Observations	23308	23054	23054	23054
Number of Groups	3573	3508	3508	3508
Observation per Group	6.5	6.6	6.6	6.6
Number of Marriages	-0.234***	-0.249***	-0.259***	-0.254***
Current Marital Duration		-0.000*	-0.000**	-0.000**
Num. Marriage*Duration			0.000*	0.000**
Biological Children				0.029**
Stepchildren				0.038†
Sigma u	0.398	0.396	0.394	0.393
Sigma e	0.373	0.371	0.371	0.371
Rho	0.533	0.532	0.531	0.530
***: p<0.001; **: p<0.01; *: p<0.05; †: p<0.10				

**Table B8.4: Random-Effects Estimation Results of Outside Entertainment Grievances Frequency
Using Number of Marriages**

	<u>Zero-Order</u>	<u>+Duration</u>	<u>+Interaction</u>	<u>+Children</u>	<u>+Soc-Dmgr</u>	<u>+Persoanlity</u>
Number of Observations	23308	23054	23054	23054	20900	18716
Number of Groups	3573	3508	3508	3508	2991	2731
Observation per Group	6.5	6.6	6.6	6.6	7.0	6.9
Number of Marriages	-0.084***	-0.094***	-0.113***	-0.110***	-0.116***	-0.114***
Current Marital Duration		-0.000***	-0.000***	-0.000***	-0.000***	-0.000***
Num. Marriages*Duration			0.000**	0.000***	0.000**	0.000**
Biological Children				0.047***	0.042***	0.044***
Stepchildren				0.029	0.035†	0.049*
Age at First Marriage					0.010	0.020*
Age at First Marriage Sq.					-0.000†	-0.000**
African American					0.098***	0.103***
Latina					0.067***	0.066**
No High School Diploma					0.031	-0.011
Some College					-0.012	-0.004
BA Plus					-0.046*	-0.025
No Religious Affiliation					-0.028	-0.050†
Type II Protestant					0.034	0.010
Catholic					0.002	-0.003
South @ 17 y.o.					0.013	0.007
Rotter's Locus of Control						0.006†
Pearlin's Mastery						-0.016***
Rosenberg Self-Esteem						-0.006**
Sociability (1985)						-0.010
Risk Aversion						0.010**
Sigma u	0.326	0.323	0.323	0.321	0.318	0.315
Sigma e	0.373	0.371	0.371	0.371	0.368	0.366
Rho	0.433	0.431	0.431	0.428	0.428	0.425

***: p<0.001; **: p<0.01; *: p<0.05; †: p<0.10

Table B9: End Causes of Marriage by Marriage Order from 1992 to 2010

	1992	1994	1996	1998	2000	2002	2004	2006	2008	2010
First Marriage										
Total N	3417	3503	3496	3537	3436	3335	3384	3335	3408	3352
Weighted % of:										
Intact	64.18%	61.35%	58.87%	57.00%	54.44%	52.75%	50.68%	48.99%	46.80%	45.40%
Divorced & Separated	34.22%	37.10%	39.34%	41.20%	43.50%	45.11%	46.75%	48.13%	49.71%	50.61%
Widowed	0.76%	0.72%	1.02%	1.02%	1.14%	1.37%	1.81%	2.00%	2.68%	3.07%
Second Marriage										
Total N	569	661	757	837	897	919	985	1016	1077	1092
Weighted % of:										
Intact	66.59%	64.37%	64.60%	62.91%	60.72%	59.60%	57.04%	56.40%	53.05%	51.55%
Divorced & Separated	32.23%	34.13%	33.91%	35.55%	37.82%	39.02%	41.27%	41.79%	44.48%	45.79%
Widowed	0.64%	1.03%	1.28%	1.17%	1.28%	1.44%	1.51%	1.65%	1.96%	2.17%
Third Marriage										
Total N	75	99	123	140	162	178	191	204	226	245
Weighted % of:										
Intact	58.05%	64.63%	63.37%	62.75%	56.54%	58.67%	54.48%	53.63%	51.16%	49.92%
Divorced & Separated	41.96%	35.37%	36.63%	36.28%	42.45%	39.78%	43.27%	43.20%	44.96%	45.48%
Widowed	0.00%	0.00%	0.00%	0.00%	0.00%	0.61%	1.37%	2.31%	2.29%	3.09%

**Table B10.1: Fixed-Effects Estimations Using Respondents
Interviewed Until the Last Wave - Part A**

	Dichotomous Marital Happiness			
	Zero-Order	+Duration	+Interaction	+Children
Number of Observations	12789	12773	12773	12773
Number of Groups	1671	1669	1669	1669
Observation per Group	7.7	7.7	7.7	7.7
Currently Remarried	1.023***	0.510**	0.514**	0.458**
Current Marital Duration		-0.008***	-0.008***	-0.009***
Remarried*Marr. Duration			-0.000	-0.001
Biological Children				-0.741***
Stepchildren				-0.448*
	Frequency of Positive Interactions			
	Zero-Order	+Duration	+Interaction	+Children
Number of Observations	20506	20485	20485	20485
Number of Groups	2930	2925	2925	2925
Observation per Group	7.0	7.0	7.0	7.0
Currently Remarried	0.267***	0.223***	0.231***	-0.226***
Current Marital Duration		-0.001***	-0.001***	-0.001***
Remarried*Marr. Duration			-0.000	-0.000†
Biological Children				-0.075***
Stepchildren				-0.071**
***: p<0.001; **: p<0.01; *: p<0.05; †: p<0.10				

**Table B10.2: Fixed-Effects Estimations Using Respondents
Interviewed Until the Last Wave - Part B**

	Core Grievances Frequency			
	Zero-Order	+Duration	+Interaction	+Children
Number of Observations	20508	20488	20488	20488
Number of Groups	2930	2925	2925	2925
Observation per Group	7.0	7.0	7.0	7.0
Currently Remarried	-0.480***	-0.506***	-0.511***	-0.484***
Current Marital Duration		-0.000***	-0.000***	-0.000***
Remarried*Marr. Duration			0.000	0.000*
Biological Children				0.238***
Stepchildren				0.130***
	In-Law Grievances Frequency			
	Zero-Order	+Duration	+Interaction	+Children
Number of Observations	20462	20443	20443	20443
Number of Groups	2929	2924	2924	2924
Observation per Group	7.0	7.0	7.0	7.0
Currently Remarried	-0.383***	-0.430***	-0.490***	-0.478***
Current Marital Duration		-0.001***	-0.001***	-0.001***
Remarried*Marr. Duration			0.001***	0.001***
Biological Children				0.063***
Stepchildren				0.023
	Outside Entertainment Grievances Frequency			
	Zero-Order	+Duration	+Interaction	+Children
Number of Observations	20489	20469	20469	20469
Number of Groups	2930	2925	2925	2925
Observation per Group	7.0	7.0	7.0	7.0
Currently Remarried	-0.243***	-0.249***	-0.260***	-0.257***
Current Marital Duration		-0.000*	-0.000**	-0.000*
Remarried*Marr. Duration			0.000	0.000†
Biological Children				0.032**
Stepchildren				0.037
***: p<0.001; **: p<0.01; *: p<0.05; †: p<0.10				

APPENDIX C: DATA FOR CHAPTER 4

Table C1: Multinomial Logistic Regression Results Used to Generate Inverse Mills Ratio for Sample Attrition

Refusal to Participate	Coefficient	Std. Err.	z	P> z
Olfactory Dysfunction	0.034	0.441	0.080	0.939
Stroke	-0.389	0.432	-0.900	0.368
Heart Attack/Failure	-0.088	0.273	-0.320	0.747
Hypertension	-0.078	0.179	-0.440	0.663
Diabetes	0.124	0.218	0.570	0.568
Cirrhosis	0.733	0.761	0.960	0.335
Cancer	-0.424	0.323	-1.310	0.190
Current Smoker	-0.141	0.264	-0.530	0.593
Use Alternative Meds	-0.139	0.178	-0.780	0.433
Room Dirtiness	-0.227	0.095	-2.390	0.017
Candidness	-0.199	0.099	-2.010	0.045
Case Difficulty	-0.411	0.083	-4.940	0.000

Poor Health/Death	Coefficient	Std. Err.	z	P> z
Olfactory Dysfunction	2.059	0.221	9.300	0.000
Stroke	0.644	0.156	4.130	0.000
Heart Attack/Failure	0.932	0.124	7.530	0.000
Hypertension	-0.050	0.111	-0.460	0.648
Diabetes	0.368	0.121	3.050	0.002
Cirrhosis	0.949	0.403	2.360	0.018
Cancer	0.489	0.148	3.310	0.001
Current Smoker	0.216	0.138	1.560	0.119
Use Alternative Meds	-0.473	0.112	-4.210	0.000
Room Dirtiness	0.134	0.045	2.970	0.003
Candidness	-0.018	0.067	-0.270	0.787
Case Difficulty	-0.062	0.050	-1.250	0.213

**Table C2: Probit Results for Non-Interview (All Causes Combined)
Used to Generate Heckman's Lambda**

	<u>Coefficient</u>	<u>Std. Err.</u>	<u>z</u>	<u>P> z </u>
Olfactory Dysfunction	-0.97	0.12	-8.02	0.00
Current Smoker	-0.08	0.07	-1.10	0.27
Use Alternative Meds	0.22	0.06	3.86	0.00
Stroke	-0.31	0.09	-3.49	0.00
Heart Attack/Failure	-0.45	0.07	-6.47	0.00
Hypertension	0.03	0.06	0.61	0.54
Diabetes	-0.18	0.06	-2.81	0.01
Cirrhosis	-0.53	0.23	-2.28	0.02
Cancer	-0.18	0.08	-2.16	0.03
Room Dirtiness	-0.04	0.02	-1.49	0.14
Candidness	0.04	0.03	1.16	0.25
Case Difficulty	0.08	0.03	3.27	0.00

Table C3: Network Characteristics of Remarried and Divorced NSHAP1 Respondents

	<u>Remarried</u>	<u>Divorced</u>
Average Volume to R	6.32	6.69
Average Volume among Alters	3.03	3.33
Average Density	72.56%	74.07%
Average Emotional Closeness	2.94	3.10

Table C4.1: Regression Results of NSHAP1 Respondents' Network Size

	Model 1, N=1,801		Model 2, N=1,795		Model 3, N=1,448		Model 4, N=1,434	
	Coeff.	Std. Err.	Coeff.	Std. Err.	Coeff.	Std. Err.	Coeff.	Std. Err.
Remarriage	-0.17	0.11	-0.15	0.10	-0.26	0.07	-0.28	0.07
Male			-0.57	0.07	-0.52	0.07	-0.46	0.06
Age at Wave 1			-0.01	0.01	0.00	0.01	0.00	0.01
African American			-0.41	0.17	-0.28	0.19	-0.19	0.21
Hispanic			-0.63	0.15	-0.68	0.17	-0.61	0.17
Others			-0.44	0.23	-0.50	0.27	-0.31	0.29
No High School			-0.17	0.12	-0.07	0.13	-0.08	0.12
Some College			0.26	0.11	0.36	0.10	0.30	0.10
BA Plus			0.55	0.13	0.62	0.14	0.58	0.14
Retired			0.01	0.08	0.00	0.08	-0.04	0.09
Self-Rated Physical Health					0.08	0.05	0.08	0.05
Any Functional Limitation					0.14	0.10	0.12	0.10
Self-Rated Mental Health					-0.05	0.05	-0.04	0.05
CES-D					0.00	0.01	0.00	0.01
UCLA Loneliness Scale					-0.05	0.04	-0.04	0.04
Ratio of Friends							0.83	0.16
Constant	3.60	0.06	4.23	0.43	3.94	0.46	3.59	0.43

Table C4.2: Regression Results of NSHAP1 Respondents' Ratio of Friends

	Model 1, N=1,774		Model 2, N=1,768		Model 3, N=1,434		Model 4, N=1,434	
	Coeff.	Std. Err.						
Remarriage	0.05	0.01	0.05	0.01	0.04	0.01	0.05	0.01
Male			-0.06	0.02	-0.06	0.02	-0.05	0.02
Age at Wave 1			0.00	0.00	0.00	0.00	0.00	0.00
African American			-0.03	0.02	-0.02	0.02	-0.01	0.03
Hispanic			-0.08	0.02	-0.08	0.03	-0.06	0.03
Others			-0.04	0.05	-0.03	0.06	-0.02	0.06
No High School			0.01	0.03	0.01	0.03	0.01	0.03
Some College			0.03	0.02	0.05	0.02	0.04	0.02
BA Plus			0.01	0.02	0.03	0.02	0.01	0.02
Retired			0.04	0.02	0.04	0.01	0.04	0.01
Self-Rated Physical Health					0.01	0.01	0.00	0.01
Any Functional Limitation					0.02	0.02	0.01	0.02
Self-Rated Mental Health					-0.01	0.01	-0.01	0.01
CES-D					0.00	0.00	0.00	0.00
UCLA Loneliness Scale					-0.01	0.01	-0.01	0.01
Ratio of Friends							0.03	0.01
Constant	0.20	0.01	0.27	0.09	0.27	0.12	0.14	0.12

Table C.3: Regression Results of NSHAP1 Respondents' Average Frequency of Contacts to Rest-of-Network Alters

	Model 1, N=1,600		Model 2, N=1,596		Model 3, N=1,313		Model 4, N=1,313	
	Coeff.	Std. Err.						
Remarriage	-0.18	0.07	-0.18	0.06	-0.14	0.06	-0.14	0.06
Male			-0.21	0.05	-0.25	0.05	-0.29	0.06
Age at Wave 1			-0.01	0.00	-0.01	0.01	-0.01	0.01
African American			0.11	0.12	0.06	0.14	0.02	0.14
Hispanic			0.39	0.09	0.34	0.12	0.26	0.12
Others			0.20	0.16	0.33	0.15	0.29	0.15
No High School			0.09	0.08	0.13	0.08	0.13	0.08
Some College			-0.19	0.07	-0.20	0.08	-0.15	0.07
BA Plus			-0.49	0.08	-0.51	0.08	-0.44	0.09
Retired			-0.15	0.06	-0.16	0.08	-0.13	0.08
Self-Rated Physical Health					-0.06	0.05	-0.05	0.04
Any Functional Limitation					-0.07	0.08	-0.05	0.07
Self-Rated Mental Health					0.04	0.04	0.03	0.04
CES-D					0.00	0.01	0.00	0.01
UCLA Loneliness Scale					-0.04	0.03	-0.04	0.03
Roster A Network Size							-0.10	0.03
Ratio of Friends							-0.33	0.12
Constant	6.50	0.05	7.64	0.34	7.93	0.39	8.41	0.44

Table C4.4: Regression Results of NSHAP1 Respondents' Average Emotional Closeness to Rest-of-Network Alters

	Model 1, N=1,600		Model 2, N=1,596		Model 3, N=1,313		Model 4, N=1,313	
	Coeff.	Std. Err.	Coeff.	Std. Err.	Coeff.	Std. Err.	Coeff.	Std. Err.
Remarriage	-0.07	0.04	-0.06	0.04	-0.08	0.04	-0.07	0.04
Male			-0.25	0.03	-0.31	0.03	-0.33	0.03
Age at Wave 1			-0.01	0.00	-0.01	0.00	-0.01	0.00
African American			0.09	0.05	0.11	0.06	0.09	0.06
Hispanic			0.04	0.06	0.07	0.06	0.03	0.06
Others			0.02	0.08	0.14	0.10	0.12	0.08
No High School			-0.05	0.06	-0.07	0.07	-0.07	0.07
Some College			-0.04	0.04	-0.08	0.05	-0.05	0.04
BA Plus			-0.04	0.05	-0.11	0.06	-0.08	0.06
Retired			0.04	0.03	0.06	0.04	0.08	0.04
Self-Rated Physical Health					0.00	0.02	0.01	0.02
Any Functional Limitation					-0.05	0.04	-0.04	0.04
Self-Rated Mental Health					0.07	0.03	0.06	0.03
CES-D					0.00	0.00	0.00	0.00
UCLA Loneliness Scale					-0.05	0.01	-0.05	0.02
Roster A Network Size							-0.03	0.01
Ratio of Friends							-0.34	0.06
Constant	3.01	0.02	3.56	0.17	3.50	0.23	3.72	0.25

Table C4.5: Regression Results of Average Density of Rest-of-Network Alters to NSHAP1 Respondent's Spouse

	Model 1, N=1,259		Model 2, N=1,257		Model 3, N=1,045		Model 4, N=1,045	
	Coeff.	Std. Err.						
Remarriage	-0.02	0.01	-0.02	0.01	-0.02	0.01	-0.02	0.01
Male			0.00	0.01	0.00	0.01	0.00	0.01
Age at Wave 1			0.00	0.00	0.00	0.00	0.00	0.00
African American			0.00	0.01	0.00	0.01	0.00	0.01
Hispanic			0.01	0.01	0.01	0.01	0.01	0.01
Others			0.02	0.01	0.02	0.01	0.02	0.01
No High School			0.00	0.01	0.01	0.01	0.01	0.01
Some College			-0.02	0.01	-0.02	0.01	-0.02	0.01
BA Plus			-0.01	0.01	0.00	0.01	0.00	0.01
Retired			0.01	0.01	0.01	0.01	0.02	0.01
Self-Rated Physical Health					0.00	0.00	0.00	0.00
Any Functional Limitation					0.02	0.01	0.02	0.01
Self-Rated Mental Health					0.01	0.01	0.01	0.01
CES-D					0.00	0.00	0.00	0.00
UCLA Loneliness Scale					-0.01	0.00	-0.01	0.00
Roster A Network Size							0.00	0.00
Ratio of Friends							-0.03	0.02
Constant	0.98	0.00	1.01	0.03	0.99	0.06	0.99	0.06

Table C4.6: Regression Results of Average Frequency of Contacts of Rest-of-Network Alters to NSHAP1 Respondent's Spouse

	Model 1, N=1,258		Model 2, N=1,256		Model 3, N=1,044		Model 4, N=1,044	
	Coeff.	Std. Err.						
Remarriage	-0.59	0.11	-0.59	0.10	-0.55	0.11	-0.49	0.11
Male			0.16	0.08	0.17	0.09	0.11	0.08
Age at Wave 1			0.00	0.01	0.00	0.01	0.00	0.01
African American			0.25	0.18	0.30	0.20	0.20	0.21
Hispanic			0.86	0.14	0.82	0.19	0.67	0.18
Others			0.74	0.24	0.80	0.27	0.65	0.24
No High School			0.33	0.16	0.32	0.16	0.35	0.16
Some College			-0.28	0.12	-0.42	0.13	-0.27	0.13
BA Plus			-0.61	0.14	-0.71	0.11	-0.53	0.12
Retired			0.24	0.08	0.25	0.09	0.30	0.09
Self-Rated Physical Health					-0.05	0.06	-0.02	0.05
Any Functional Limitation					0.06	0.13	0.11	0.11
Self-Rated Mental Health					0.07	0.07	0.03	0.07
CES-D					0.01	0.02	0.01	0.01
UCLA Loneliness Scale					-0.10	0.05	-0.12	0.05
Roster A Network Size							-0.06	0.05
Ratio of Friends							-1.75	0.20
Constant	5.71	0.08	5.66	0.52	5.97	0.59	6.64	0.69

Table C4.7: Regression Results of Average Density Among Rest-of-Network Alters

	Model 1, N=1,347		Model 2, N=1,343		Model 3, N=1,112		Model 4, N=1,112	
	Coeff.	Std. Err.						
Remarriage	-0.09	0.02	-0.09	0.02	-0.11	0.03	-0.08	0.02
Male			0.00	0.02	-0.02	0.02	-0.04	0.02
Age at Wave 1			0.00	0.00	0.00	0.00	0.00	0.00
African American			-0.01	0.05	-0.03	0.06	-0.03	0.06
Hispanic			0.10	0.03	0.11	0.03	0.07	0.03
Others			0.08	0.06	0.05	0.07	0.04	0.07
No High School			-0.02	0.03	-0.01	0.03	-0.01	0.03
Some College			-0.11	0.03	-0.11	0.03	-0.08	0.03
BA Plus			-0.12	0.03	-0.12	0.03	-0.11	0.03
Retired			0.03	0.02	0.04	0.02	0.06	0.02
Self-Rated Physical Health					-0.01	0.01	-0.01	0.01
Any Functional Limitation					-0.05	0.03	-0.05	0.03
Self-Rated Mental Health					0.02	0.01	0.02	0.01
CES-D					-0.01	0.00	-0.01	0.00
UCLA Loneliness Scale					0.01	0.01	0.00	0.01
Roster A Network Size							-0.03	0.01
Ratio of Friends							-0.37	0.04
Constant	0.82	0.01	1.01	0.07	1.02	0.12	1.25	0.13

Table C4.8: Regression Results of Frequency of Contacts Among Rest-of-Network Alters

	Model 1, N=1,347		Model 2, N=1,343		Model 3, N=1,112		Model 4, N=1,112	
	Coeff.	Std. Err.						
Remarriage	-0.63	0.12	-0.63	0.13	-0.65	0.16	-0.46	0.16
Male			0.42	0.12	0.34	0.12	0.19	0.12
Age at Wave 1			-0.01	0.01	0.00	0.01	0.00	0.01
African American			0.10	0.35	-0.05	0.42	-0.03	0.39
Hispanic			1.33	0.30	1.42	0.37	1.08	0.33
Others			0.81	0.39	0.79	0.41	0.70	0.33
No High School			0.16	0.19	0.11	0.21	0.12	0.19
Some College			-0.86	0.15	-0.94	0.17	-0.73	0.16
BA Plus			-1.04	0.16	-1.21	0.17	-1.08	0.19
Retired			0.00	0.12	0.01	0.12	0.18	0.11
Self-Rated Physical Health					-0.14	0.07	-0.13	0.07
Any Functional Limitation					-0.22	0.19	-0.22	0.17
Self-Rated Mental Health					0.18	0.10	0.13	0.10
CES-D					-0.04	0.02	-0.04	0.02
UCLA Loneliness Scale					-0.03	0.05	-0.09	0.05
Roster A Network Size							-0.20	0.08
Ratio of Friends							-3.03	0.32
Constant	3.67	0.09	4.40	0.55	4.68	0.79	6.50	0.78

Table C4.9: Regression Results of Any Spouse-Between Tie in Network of NSHAP1 Respondents

	Model 1, N=1,259		Model 2, N=1,257		Model 3, N=1,045		Model 4, N=1,045	
	Odds Ratio	Std. Err.						
Remarriage	0.74	0.10	0.70	0.09	0.77	0.13	0.85	0.14
Male			2.64	0.46	2.80	0.53	3.43	0.71
Age at Wave 1			1.02	0.01	1.02	0.01	1.02	0.01
African American			1.26	0.32	1.44	0.48	1.47	0.47
Hispanic			1.13	0.35	1.30	0.44	1.40	0.46
Others			1.50	0.80	0.59	0.40	0.52	0.36
No High School			1.15	0.25	0.95	0.27	1.00	0.31
Some College			1.18	0.22	1.12	0.23	1.13	0.25
BA Plus			0.90	0.16	0.89	0.20	0.82	0.21
Retired			1.13	0.22	1.06	0.21	1.11	0.20
Self-Rated Physical Health					1.09	0.12	1.09	0.12
Any Functional Limitation					0.87	0.18	0.85	0.19
Self-Rated Mental Health					0.89	0.11	0.88	0.11
CES-D					1.04	0.02	1.04	0.03
UCLA Loneliness Scale					0.85	0.08	0.86	0.08
Roster A Network Size							1.78	0.15
Ratio of Friends							0.19	0.07

Table C4.10: Regression Results of Proportion of Spouse-Between Ties in Network of NSHAP1 Respondents

	Model 1, N=1,258		Model 2, N=1,256		Model 3, N=1,044		Model 4, N=1,044	
	Coeff.	Std. Err.						
Remarriage	-0.03	0.01	-0.03	0.01	-0.02	0.01	-0.02	0.01
Male			0.10	0.01	0.10	0.01	0.10	0.01
Age at Wave 1			0.00	0.00	0.00	0.00	0.00	0.00
African American			0.03	0.03	0.05	0.03	0.04	0.03
Hispanic			0.02	0.03	0.02	0.03	0.02	0.03
Others			0.03	0.06	-0.03	0.04	-0.04	0.04
No High School			0.02	0.02	0.01	0.03	0.01	0.03
Some College			0.01	0.02	0.01	0.02	0.01	0.02
BA Plus			-0.01	0.02	-0.01	0.02	0.00	0.02
Retired			0.00	0.01	0.00	0.01	0.00	0.01
Self-Rated Physical Health					0.01	0.01	0.01	0.01
Any Functional Limitation					-0.02	0.02	-0.02	0.02
Self-Rated Mental Health					-0.01	0.01	-0.01	0.01
CES-D					0.00	0.00	0.00	0.00
UCLA Loneliness Scale					-0.01	0.01	-0.01	0.01
Roster A Network Size							0.01	0.01
Ratio of Friends							-0.14	0.03
Constant	0.12	0.01	-0.10	0.07	-0.14	0.10	-0.15	0.09

Table C4.11: Regression Results of Any Spouse Independent Tie in Network of NSHAP1 Respondents

	Model 1, N=1,259		Model 2, N=1,257		Model 3, N=1,045		Model 4, N=1,045	
	Odds Ratio	Std. Err.						
Remarriage	1.54	0.20	1.60	0.23	1.59	0.26	1.54	0.29
Male			0.79	0.11	0.83	0.12	0.94	0.15
Age at Wave 1			1.00	0.01	1.00	0.01	1.00	0.01
African American			0.69	0.19	0.71	0.24	0.82	0.24
Hispanic			0.33	0.10	0.39	0.14	0.50	0.17
Others			0.38	0.20	0.47	0.24	0.56	0.31
No High School			0.70	0.18	0.83	0.21	0.78	0.22
Some College			1.40	0.30	1.91	0.45	1.55	0.38
BA Plus			1.93	0.41	2.32	0.45	1.75	0.36
Retired			0.75	0.13	0.73	0.13	0.64	0.11
Self-Rated Physical Health					1.20	0.11	1.16	0.12
Any Functional Limitation					0.98	0.18	0.89	0.17
Self-Rated Mental Health					0.76	0.08	0.81	0.09
CES-D					0.99	0.02	0.98	0.02
UCLA Loneliness Scale					1.01	0.07	1.07	0.08
Roster A Network Size							1.35	0.11
Ratio of Friends							11.36	4.09

Table C4.12: Regression Results of Proportion of Spouse Independent Ties in Network of NSHAP1 Respondents

	Model 1, N=1,258		Model 2, N=1,256		Model 3, N=1,044		Model 4, N=1,044	
	Coeff.	Std. Err.						
Remarriage	0.07	0.02	0.07	0.02	0.07	0.02	0.06	0.02
Male			0.01	0.02	0.01	0.02	0.01	0.02
Age at Wave 1			0.00	0.00	0.00	0.00	0.00	0.00
African American			-0.03	0.04	-0.04	0.04	-0.02	0.04
Hispanic			-0.09	0.03	-0.08	0.03	-0.07	0.03
Others			-0.09	0.04	-0.09	0.04	-0.07	0.04
No High School			-0.02	0.03	-0.01	0.03	-0.01	0.03
Some College			0.04	0.02	0.08	0.03	0.06	0.03
BA Plus			0.06	0.03	0.08	0.02	0.06	0.02
Retired			-0.05	0.02	-0.06	0.02	-0.07	0.02
Self-Rated Physical Health					0.01	0.01	0.01	0.01
Any Functional Limitation					-0.02	0.02	-0.03	0.02
Self-Rated Mental Health					-0.04	0.01	-0.03	0.01
CES-D					0.00	0.00	0.00	0.00
UCLA Loneliness Scale					0.01	0.01	0.02	0.01
Roster A Network Size							-0.01	0.01
Ratio of Friends							0.26	0.04
Constant	0.14	0.01	0.16	0.09	0.25	0.13	0.22	0.15

Table C5: Coefficient Estimates of Remarriage in Regressions of Network Characteristics Comparing Remarried and Divorced NSHAP Respondents at Wave 1

	Model 1	Model 2	Model 3	Model 4
	Coefficient (Standard Error)			
Frequency of Contacts with Non-Spouse Alters	-0.37*** (0.07)	-0.25** (0.07)	-0.27** (0.08)	-0.25** (0.07)
Frequency of Contacts among Non-Spouse Alters	-0.30* (0.15)	-0.29* (0.14)	-0.37† (0.19)	-0.57** (0.18)
Average Emotional Closeness to Non-Spouse Alters	-0.16** (0.04)	-0.11** (0.04)	-0.17*** (0.04)	-0.22*** (0.04)
Density of Non-Spouse Alters	-0.02 (0.03)	-0.01 (0.02)	-0.02 (0.03)	-0.05† (0.03)

Table C6: Coefficient Estimates of Remarriage in Network Change Regressions Using Aggregate Measures

	Coeff.	Std. Err.	t	P> t
Net Change in Network Size	0.15	0.09	1.60	0.12
Net Change in Kin Number	0.15	0.10	1.52	0.14
Net Change in Friend Number	0.05	0.10	0.51	0.61
Net Change in Closeness to Alters	-0.01	0.05	-0.21	0.83
Net Change in Frequency of Contacts	-0.01	0.07	-0.17	0.87
Net Change in Network Density	0.02	0.02	0.70	0.49

Table C7.1: Regression Results Comparing Remarried and Continuously Married NSHAP Respondents in the Number of Alters Lost

	Model 1, N=1,250		Model 2, N=1,244		Model 3, N=1,037		Model 4, N=1,036		Model 5, N=999	
	Coeff.	Std. Err.	Coeff.	Std. Err.	Coeff.	Std. Err.	Coeff.	Std. Err.	Coeff.	Std. Err.
Remarriage	0.09	0.07	0.09	0.07	0.09	0.07	0.03	0.07	0.03	0.08
Male			0.01	0.05	0.10	0.07	0.06	0.06	0.04	0.07
Age			0.02	0.01	0.02	0.01	0.01	0.01	0.01	0.01
African American			0.03	0.07	0.07	0.10	0.13	0.10	0.15	0.11
Hispanics			-0.24	0.12	-0.30	0.12	-0.13	0.10	-0.11	0.10
Others			0.18	0.29	0.17	0.28	0.23	0.26	0.24	0.26
No High School			0.01	0.15	0.05	0.14	0.07	0.15	0.04	0.14
Some College			0.17	0.10	0.29	0.10	0.15	0.09	0.13	0.09
BA Plus			0.15	0.11	0.22	0.11	0.05	0.11	0.06	0.11
Retired			-0.13	0.09	-0.14	0.10	-0.18	0.10	-0.16	0.10
Self-Rated Physical Health					0.10	0.04	0.05	0.04	0.05	0.04
Any Functional Limitations					0.04	0.09	-0.01	0.09	-0.02	0.09
Self-Rated Mental Health					-0.02	0.05	0.05	0.05	0.05	0.05
HADS					0.03	0.01	0.02	0.02	0.03	0.02
Loneliness					-0.08	0.03	-0.12	0.03	-0.12	0.04
Ratio of Friends							0.49	0.18	0.47	0.19
Avg. Closeness							-0.47	0.08	-0.48	0.09
Avg. Contact Frequency							-0.39	0.04	-0.38	0.04
Inverse Mills Ratio									0.00	0.07
Constant	1.43	0.05	0.36	0.40	-0.24	0.45	4.54	0.62	4.55	0.63

Table C7.2 Regression Results Comparing Remarried and Continuously Married NSHAP Respondents in the Number of Alters Gained

	Model 1, N=1,259		Model 2, N=1,253		Model 3, N=1,042		Model 4, N=1,036		Model 5, N=999	
Remarriage	0.20	0.09	0.21	0.09	0.23	0.10	0.19	0.09	0.18	0.09
Male			0.07	0.08	0.16	0.10	0.19	0.10	0.25	0.10
Age			0.01	0.01	0.00	0.01	0.00	0.01	0.00	0.01
African American			0.07	0.14	0.03	0.14	0.00	0.15	0.02	0.15
Hispanics			0.15	0.15	0.07	0.17	0.13	0.17	0.10	0.17
Others			0.53	0.36	0.55	0.36	0.57	0.34	0.55	0.34
No High School			0.04	0.14	0.04	0.16	0.03	0.16	0.14	0.16
Some College			0.06	0.11	0.07	0.12	0.02	0.13	0.11	0.13
BA Plus			-0.10	0.11	-0.17	0.14	-0.19	0.15	-0.11	0.14
Retired			0.05	0.09	0.08	0.10	0.08	0.10	0.09	0.10
Self-Rated Physical Health					0.10	0.04	0.09	0.04	0.09	0.04
Any Functional Limitations					0.03	0.11	0.02	0.11	0.02	0.11
Self-Rated Mental Health					-0.06	0.06	-0.04	0.06	-0.06	0.06
HADS					0.03	0.02	0.03	0.02	0.03	0.02
Loneliness					-0.01	0.05	-0.02	0.05	-0.01	0.05
Ratio of Friends							0.69	0.20	0.63	0.18
Avg. Closeness							-0.11	0.10	-0.08	0.10
Avg. Contact Frequency							0.03	0.08	0.02	0.07
Inverse Mills Ratio									0.09	0.08
Constant	1.76	0.05	1.26	0.52	0.96	0.62	0.94	0.93	0.95	0.92

Table C7.3: Regression Results Comparing Remarried and Continuously Married NSHAP Respondents in the Number of Kin Lost

	Model 1, N=1,250		Model 2, N=1,244		Model 3, N=1,242		Model 4, N=1,240		Model 5, N=1,183	
Remarriage	-0.16	0.06	-0.15	0.06	-0.15	0.06	-0.17	0.06	-0.14	0.07
Male			-0.02	0.06	-0.01	0.06	-0.02	0.06	-0.02	0.06
Age			0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
African American			0.09	0.10	0.10	0.10	0.12	0.10	0.08	0.10
Hispanics			0.09	0.10	0.10	0.11	0.15	0.10	0.16	0.10
Others			-0.07	0.16	-0.06	0.15	-0.04	0.15	-0.04	0.15
No High School			0.02	0.11	0.03	0.11	0.05	0.10	0.08	0.11
Some College			0.01	0.08	0.00	0.08	-0.03	0.08	-0.02	0.08
BA Plus			-0.06	0.09	-0.07	0.09	-0.13	0.09	-0.11	0.09
Retired			-0.08	0.08	-0.08	0.07	-0.10	0.07	-0.09	0.07
Self-Rated Physical Health					0.04	0.04	0.03	0.04	0.03	0.04
Any Functional Limitations					0.02	0.08	0.01	0.08	0.04	0.08
Self-Rated Mental Health					0.01	0.04	0.02	0.04	0.03	0.04
Avg. Closeness							-0.02	0.06	-0.02	0.06
Avg. Contact Frequency							-0.18	0.03	-0.17	0.04
Inverse Mills Ratio									-0.02	0.05
Constant	0.83	0.04	-0.05	0.34	-0.22	0.38	1.26	0.45	1.16	0.47

Table C7.4: Regression Results Comparing Remarried and Continuously Married NSHAP Respondents in the Number of Kin Gained

	Model 1, N=1,259		Model 2, N=1,253		Model 3, N=1,252		Model 4, N=1,238		Model 5, N=1,181	
Remarriage	0.03	0.08	0.04	0.08	0.05	0.08	0.06	0.08	0.01	0.07
Male			-0.01	0.06	-0.01	0.07	-0.03	0.07	0.01	0.07
Age			0.00	0.01	0.00	0.01	0.00	0.01	0.00	0.01
African American			0.19	0.11	0.19	0.11	0.18	0.12	0.17	0.12
Hispanics			0.22	0.13	0.20	0.13	0.18	0.12	0.15	0.12
Others			0.33	0.29	0.31	0.29	0.32	0.29	0.31	0.29
No High School			0.14	0.12	0.13	0.13	0.11	0.12	0.22	0.13
Some College			-0.15	0.09	-0.14	0.09	-0.13	0.09	-0.01	0.09
BA Plus			-0.26	0.09	-0.24	0.09	-0.22	0.10	-0.12	0.09
Retired			0.05	0.07	0.05	0.07	0.05	0.07	0.07	0.06
Self-Rated Physical Health					0.00	0.03	-0.01	0.03	0.01	0.04
Any Functional Limitations					-0.04	0.07	-0.05	0.07	-0.05	0.07
Self-Rated Mental Health					-0.06	0.04	-0.05	0.05	-0.07	0.05
Avg. Closeness							-0.12	0.06	-0.11	0.06
Avg. Contact Frequency							0.03	0.04	0.01	0.04
Inverse Mills Ratio									0.02	0.06
Constant	0.97	0.04	0.87	0.50	1.11	0.51	1.33	0.61	1.40	0.60

Table C7.5: Regression Results Comparing Remarried and Continuously Married NSHAP Respondents in the Number of Friends Lost

	Model 1, N=1,250		Model 2, N=1,244		Model 3, N=1,054		Model 4, N=1,053		Model 5, N=1,015	
Remarriage	0.18	0.05	0.18	0.05	0.18	0.06	0.15	0.06	0.14	0.06
Male			-0.06	0.06	-0.05	0.06	-0.10	0.06	-0.10	0.06
Age			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
African American			-0.10	0.06	-0.06	0.06	-0.02	0.08	-0.03	0.08
Hispanics			-0.19	0.08	-0.19	0.08	-0.12	0.08	-0.13	0.09
Others			0.08	0.15	0.11	0.18	0.13	0.15	0.13	0.15
No High School			0.02	0.11	0.00	0.08	0.00	0.09	-0.01	0.09
Some College			0.07	0.07	0.15	0.06	0.09	0.06	0.08	0.06
BA Plus			0.05	0.08	0.11	0.07	0.05	0.07	0.05	0.07
Retired			0.02	0.05	0.03	0.04	0.02	0.04	0.02	0.04
Self-Rated Physical Health					0.06	0.03	0.04	0.03	0.04	0.04
Any Functional Limitations					-0.04	0.06	-0.07	0.06	-0.08	0.06
Self-Rated Mental Health					-0.08	0.04	-0.05	0.04	-0.05	0.04
Loneliness					-0.02	0.02	-0.05	0.02	-0.05	0.02
Avg. Closeness							-0.32	0.05	-0.31	0.06
Avg. Contact Frequency							-0.16	0.03	-0.17	0.03
Inverse Mills Ratio									0.02	0.05
Constant	0.42	0.03	0.20	0.24	0.26	0.33	2.73	0.44	2.74	0.45

Table C7.6: Regression Results Comparing Remarried and Continuously Married NSHAP Respondents in the Number of Friends Gained

	Model 1, N=1,259		Model 2, N=1,253		Model 3, N=1,059		Model 4, N=1,053		Model 5, N=1,015	
Remarriage	0.17	0.07	0.17	0.07	0.17	0.07	0.18	0.07	0.19	0.07
Male			-0.05	0.06	-0.02	0.06	-0.01	0.06	-0.03	0.06
Age			-0.01	0.00	-0.01	0.00	-0.01	0.00	-0.01	0.00
African American			-0.14	0.09	-0.14	0.10	-0.13	0.10	-0.18	0.10
Hispanics			-0.01	0.12	0.05	0.17	0.07	0.17	0.06	0.19
Others			0.06	0.29	0.05	0.30	0.08	0.30	0.08	0.30
No High School			-0.03	0.11	-0.04	0.12	-0.05	0.12	-0.07	0.12
Some College			0.18	0.07	0.21	0.07	0.18	0.07	0.16	0.08
BA Plus			0.09	0.06	0.08	0.07	0.05	0.07	0.03	0.07
Retired			0.12	0.07	0.15	0.08	0.16	0.09	0.16	0.09
Self-Rated Physical Health					0.06	0.03	0.06	0.03	0.06	0.03
Any Functional Limitations					0.08	0.07	0.09	0.07	0.09	0.07
Self-Rated Mental Health					-0.03	0.04	-0.02	0.04	-0.02	0.04
Loneliness					0.00	0.03	0.00	0.03	-0.01	0.03
Avg. Closeness							-0.04	0.08	-0.04	0.07
Avg. Contact Frequency							-0.06	0.04	-0.05	0.05
Inverse Mills Ratio									-0.03	0.06
Constant	0.60	0.03	0.94	0.27	0.88	0.37	1.46	0.49	1.43	0.49

Table C7.7: Regression Results Comparing Remarried and Continuously Married NSHAP Respondents in Emotional Closeness to Alters Lost

	Model 1, N=908		Model 2, N=904		Model 3, N=773		Model 4, N=773		Model 5, N=754	
Remarriage	-0.08	0.07	-0.07	0.07	-0.08	0.07	-0.01	0.07	-0.01	0.07
Male			-0.21	0.06	-0.24	0.06	-0.24	0.06	-0.26	0.06
Age			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
African American			0.08	0.09	0.08	0.09	0.08	0.09	0.04	0.09
Hispanics			0.01	0.09	0.06	0.09	-0.05	0.08	-0.06	0.08
Others			-0.06	0.15	0.02	0.15	0.00	0.12	0.01	0.11
No High School			0.06	0.10	0.03	0.11	0.00	0.10	-0.01	0.10
Some College			-0.01	0.06	-0.01	0.06	0.05	0.06	0.05	0.06
BA Plus			0.00	0.07	-0.05	0.07	0.03	0.07	0.05	0.07
Retired			0.01	0.05	0.01	0.06	0.03	0.06	0.04	0.06
Self-Rated Physical Health					-0.03	0.04	-0.01	0.04	0.00	0.04
Any Functional Limitations					-0.04	0.05	-0.02	0.06	-0.02	0.06
Self-Rated Mental Health					0.06	0.04	0.05	0.04	0.05	0.04
Loneliness					-0.07	0.02	-0.06	0.02	-0.06	0.02
Ratio of Kin							0.53	0.11	0.55	0.10
Avg. Contact Frequency							0.15	0.03	0.15	0.03
Inverse Mills Ratio									-0.10	0.05
Constant	2.92	0.03	2.95	0.23	3.08	0.31	1.55	0.41	1.47	0.40

Table C7.8: Regression Results Comparing Remarried and Continuously Married NSHAP Respondents in Emotional Closeness to Alters Gained

Remarriage	-0.07	0.04	-0.05	0.04	-0.03	0.05	-0.05	0.05	-0.04	0.04
Male			-0.23	0.05	-0.24	0.06	-0.24	0.06	-0.24	0.06
Age			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
African American			0.21	0.08	0.21	0.09	0.20	0.09	0.21	0.08
Hispanics			-0.09	0.08	-0.06	0.10	-0.04	0.10	-0.05	0.09
Others			-0.04	0.15	0.00	0.15	0.00	0.15	0.01	0.14
No High School			0.11	0.08	0.07	0.08	0.08	0.08	0.10	0.08
Some College			-0.08	0.04	-0.11	0.05	-0.11	0.04	-0.14	0.05
BA Plus			-0.10	0.08	-0.16	0.08	-0.15	0.08	-0.15	0.07
Retired			-0.06	0.06	-0.09	0.06	-0.09	0.06	-0.08	0.05
Self-Rated Physical Health					-0.01	0.03	0.00	0.03	-0.01	0.03
Any Functional Limitations					-0.04	0.05	-0.04	0.05	-0.03	0.05
Self-Rated Mental Health					0.06	0.04	0.06	0.04	0.05	0.04
Loneliness					-0.05	0.03	-0.04	0.03	-0.04	0.03
Ratio of Kin							-0.19	0.08	-0.20	0.09
Avg. Contact Frequency							0.04	0.03	0.04	0.03
Inverse Mills Ratio									0.08	0.06
Constant	2.85	0.03	3.04	0.22	3.07	0.28	2.89	0.37	2.99	0.39

Table C7.9: Regression Results Comparing Remarried and Continuously Married NSHAP Respondents in Frequency of Contacts with Alters Lost

	Model 1, N=909		Model 2, N=905		Model 3, N=774		Model 4, N=773		Model 5, N=754	
Remarriage	-0.10	0.09	-0.11	0.09	-0.01	0.08	-0.01	0.08	-0.01	0.08
Male			-0.02	0.10	0.00	0.10	-0.02	0.10	-0.02	0.10
Age			-0.01	0.01	-0.01	0.01	-0.01	0.01	-0.01	0.01
African American			0.07	0.20	0.06	0.20	0.03	0.19	-0.01	0.19
Hispanics			0.43	0.13	0.40	0.14	0.30	0.15	0.30	0.15
Others			0.15	0.23	0.15	0.24	0.04	0.22	0.04	0.22
No High School			0.17	0.13	0.15	0.15	0.12	0.14	0.11	0.15
Some College			-0.18	0.12	-0.19	0.13	-0.12	0.11	-0.10	0.12
BA Plus			-0.55	0.11	-0.57	0.11	-0.45	0.11	-0.44	0.11
Retired			-0.19	0.10	-0.15	0.11	-0.13	0.10	-0.15	0.11
Self-Rated Physical Health					-0.09	0.04	-0.06	0.04	-0.06	0.04
Any Functional Limitations					-0.14	0.10	-0.06	0.11	-0.07	0.11
Self-Rated Mental Health					-0.05	0.05	-0.08	0.05	-0.10	0.05
Loneliness					-0.05	0.04	-0.04	0.04	-0.04	0.04
Roster A Network Size							-0.19	0.04	-0.18	0.04
Ratio of Friends							-0.25	0.17	-0.28	0.17
Avg. Closeness							0.26	0.09	0.25	0.10
Inverse Mills Ratio									-0.03	0.11
Constant	6.39	0.08	7.36	0.52	8.08	0.70	7.97	0.78	7.91	0.78

Table C7.10: Regression Results Comparing Remarried and Continuously Married NSHAP Respondents in Frequency of Contacts with Alters Gained

	Model 1, N=1,011		Model 2, N=1007		Model 3, N=1,006		Model 4, N=1,006		Model 5, N=961	
Remarriage	-0.16	0.16	-0.13	0.14	-0.14	0.14	-0.14	0.14	-0.15	0.14
Male			-0.19	0.08	-0.20	0.08	-0.24	0.09	-0.27	0.09
Age			0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
African American			0.45	0.16	0.43	0.16	0.41	0.16	0.41	0.17
Hispanics			0.47	0.14	0.48	0.15	0.42	0.15	0.37	0.16
Others			-0.05	0.38	-0.04	0.37	-0.06	0.37	-0.07	0.36
No High School			0.15	0.23	0.14	0.23	0.13	0.22	0.11	0.23
Some College			-0.04	0.15	-0.05	0.15	-0.04	0.15	-0.06	0.15
BA Plus			-0.31	0.19	-0.32	0.18	-0.28	0.19	-0.27	0.19
Retired			-0.05	0.09	-0.05	0.09	-0.05	0.09	-0.06	0.09
Self-Rated Physical Health					-0.07	0.08	-0.06	0.08	-0.07	0.08
Any Functional Limitations					-0.01	0.10	-0.01	0.10	-0.02	0.11
Self-Rated Mental Health					0.08	0.09	0.07	0.08	0.08	0.09
Roster A Network Size							-0.06	0.04	-0.07	0.04
Inverse Mills Ratio									-0.04	0.10
Constant	6.35	0.06	5.78	0.55	5.75	0.50	6.02	0.49	5.95	0.54

Table C7.11: Regression Results Comparing Remarried and Continuously Married NSHAP Respondents in Lost Alters' Connectedness to Other Alters

	Model 1, N=881		Model 2, N=878		Model 3, N=876		Model 4, N=876		Model 5, N=847	
Remarriage	-0.07	0.02	-0.07	0.02	-0.07	0.02	-0.05	0.02	-0.06	0.02
Male			0.02	0.02	0.02	0.02	0.03	0.02	0.03	0.02
Age			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
African American			0.05	0.03	0.06	0.03	0.04	0.03	0.04	0.03
Hispanics			0.09	0.03	0.10	0.03	0.07	0.03	0.07	0.03
Others			0.08	0.06	0.08	0.05	0.05	0.06	0.05	0.06
No High School			0.00	0.03	0.02	0.03	0.00	0.03	0.01	0.03
Some College			-0.09	0.03	-0.10	0.03	-0.07	0.03	-0.06	0.03
BA Plus			-0.08	0.04	-0.09	0.03	-0.05	0.04	-0.05	0.04
Retired			0.00	0.02	0.00	0.02	0.02	0.02	0.01	0.02
Self-Rated Physical Health					0.01	0.01	0.03	0.01	0.03	0.01
Any Functional Limitations					-0.02	0.03	-0.01	0.03	-0.02	0.03
Self-Rated Mental Health					0.02	0.01	0.01	0.01	0.00	0.01
Roster A Network Size							-0.02	0.01	-0.02	0.01
Ratio of Friends							-0.18	0.04	-0.18	0.05
Avg. Closeness							0.09	0.02	0.10	0.02
Avg. Contact Frequency							0.07	0.01	0.07	0.01
Inverse Mills Ratio									0.02	0.02
Constant	0.84	0.01	0.98	0.07	0.83	0.08	0.10	0.17	0.10	0.17

Table C7.12: Regression Results Comparing Remarried and Continuously Married NSHAP Respondents in Gained Alters' Connectedness to Other Alters

	Model 1, N=996		Model 2, N=992		Model 3, N=931		Model 4, N=922		Model 5, N=886	
Remarriage	-0.03	0.02	-0.03	0.02	-0.05	0.02	-0.04	0.02	-0.04	0.02
Male			0.03	0.02	0.03	0.02	0.03	0.02	0.03	0.02
Age			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
African American			0.09	0.02	0.08	0.02	0.08	0.02	0.08	0.03
Hispanics			0.05	0.05	0.05	0.05	0.04	0.05	0.03	0.05
Others			0.04	0.03	0.04	0.04	0.04	0.04	0.03	0.04
No High School			0.05	0.03	0.02	0.03	0.01	0.03	0.02	0.03
Some College			-0.02	0.03	-0.04	0.03	-0.04	0.03	-0.03	0.03
BA Plus			-0.01	0.03	-0.03	0.03	-0.03	0.03	-0.01	0.03
Retired			0.01	0.02	0.01	0.02	0.01	0.02	0.02	0.02
Self-Rated Physical Health					-0.03	0.01	-0.03	0.01	-0.03	0.01
Any Functional Limitations					0.01	0.02	0.01	0.02	0.01	0.03
Self-Rated Mental Health					0.03	0.01	0.02	0.01	0.02	0.01
HADS					0.00	0.00	0.00	0.00	0.00	0.00
Roster A Network Size							0.00	0.01	0.00	0.01
Ratio of Friends							-0.13	0.03	-0.13	0.03
Inverse Mills Ratio									-0.01	0.02
Constant	0.83	0.01	0.80	0.11	0.83	0.12	0.86	0.12	0.83	0.12

Table C8: Coefficient Estimates of Remarriage in Regressions Comparing the Characteristics of Alters Lost and Gained by Remarried and Divorced (Reference Group) NSHAP Respondents

	Model 1	Model 2	Model 3	Model 4	Model 5
	Coefficient (Standard Error)				
Number of Alters Lost	-0.23* (0.08)	-0.20* (0.10)	-0.31* (0.12)	-0.21† (0.12)	-0.16 (0.12)
Number of Alters Gained	-0.22† (0.12)	-0.21 (0.13)	-0.23 (0.16)	-0.23 (0.15)	-0.24 (0.15)
Number of Kin Lost	-0.05 (0.08)	-0.03 (0.08)	-0.05 (0.10)	0.00 (0.10)	0.03 (0.10)
Number of Kin Gained	0.05 (0.11)	0.09 (0.12)	0.16 (0.13)	0.15 (0.13)	0.12 (0.12)
Number of Friends Lost	-0.21** (0.06)	-0.18* (0.07)	-0.24** (0.08)	-0.20* (0.08)	-0.20* (0.09)
Number of Friends Gained	-0.13 (0.15)	-0.13 (0.14)	-0.23 (0.16)	-0.21 (0.16)	-0.20 (0.16)
Closeness to Alters Lost	-0.06 (0.08)	-0.02 (0.08)	-0.11 (0.09)	-0.16† (0.00)	-0.15 (0.10)
Closeness to Alters Gained	0.01 (0.05)	0.07 (0.06)	0.11 (0.07)	0.13† (0.07)	0.12† (0.07)
Volume to Alters Lost	-0.01 (0.13)	0.05 (0.13)	-0.02 (0.15)	-0.02 (0.14)	-0.01 (0.14)
Volume to Alters Gained	-0.16 (0.17)	-0.07 (0.16)	-0.02 (0.16)	0.01 (0.16)	0.02 (0.17)
Density of Alters Lost	0.07* (0.03)	0.07* (0.03)	0.07* (0.03)	0.05 (0.03)	0.04 (0.03)
Density of Alters Gained	0.08** (0.03)	0.08* (0.03)	0.10** (0.03)	0.10** (0.03)	0.10** (0.03)

Table C9: Multinomial Logit Results for Alternative Inverse Mills Ratios

Refusal to Participate	Coefficient	Std. Err.	z	P> z
Olfactory Dysfunction	-0.25	0.47	-0.52	0.60
Stroke	-0.31	0.44	-0.72	0.47
Heart Attack/Faiure	-0.14	0.29	-0.47	0.64
Hypertension	-0.06	0.19	-0.31	0.76
Diabetes	0.07	0.23	0.28	0.78
Cirrhosis	0.71	0.76	0.93	0.35
Cancer	-0.36	0.32	-1.10	0.27
Current Smoker	-0.40	0.30	-1.34	0.18
Use Alternative Meds	-0.13	0.18	-0.68	0.50
BMI	-0.01	0.02	-0.90	0.37
Functional Limitations	0.05	0.19	0.28	0.78
CES-D	0.01	0.02	0.73	0.47
Room Dirtiness	-0.21	0.10	-2.07	0.04
Candidness	-0.19	0.10	-1.81	0.07
Case Difficulty	-0.38	0.09	-4.43	0.00

Poor Health/Death	Coefficient	Std. Err.	z	P> z
Olfactory Dysfunction	1.88	0.24	7.95	0.00
Stroke	0.41	0.17	2.40	0.02
Heart Attack/Faiure	0.87	0.13	6.54	0.00
Hypertension	-0.06	0.12	-0.49	0.62
Diabetes	0.32	0.13	2.42	0.02
Cirrhosis	0.75	0.42	1.80	0.07
Cancer	0.42	0.16	2.67	0.01
Current Smoker	0.13	0.15	0.84	0.40
Use Alternative Meds	-0.48	0.12	-4.04	0.00
BMI	-0.04	0.01	-3.94	0.00
Functional Limitations	0.70	0.12	5.85	0.00
CES-D	0.04	0.01	3.50	0.00
Room Dirtiness	0.11	0.05	2.26	0.02
Candidness	0.04	0.07	0.49	0.62
Case Difficulty	-0.06	0.05	-1.16	0.25

APPENDIX D: NETWORK CHANGES FOR RESPONDENTS WITH MARITAL CHANGES BETWEEN INTERVIEWS

Among the 2,261 respondents who made it to wave 2 interview, 2,061 had no change in marital status, 193 reported one change, and 7 had two. The majority (N=153, about 80% unweighted) of those with one marital change experienced a spouse's death between interviews, and the rest are fairly scattered (see Table B1 for distribution). The same applies to those with two marital changes. In addition, 29 respondents remarried between interviews (one of the nine cohabiting people at wave 1 had never been married).

Table D3 shows that, on average, respondents becoming widowed in the interim are not more likely to lose discussion partners, either in total or in various components. Differences are larger in the number of affines lost for the remarried-widowed and the number of friends lost for the first married-widowed. Due to small cell sizes, none of the differences are significant. Table D4 shows that, on average, respondents bereaved between interview waves gain more discussion partners in all components: the total number of alters added, the number of kin, consanguines, affines, and friends. However, only the difference between married-widowed and first married in the number of all alters gained and that between married-widowed and divorced in the number of affines gained are significant. Other differences are insignificant (or only marginally so) due to small cell sizes.

Table D5 presents results pertaining to remarried respondents at wave 2, both with and without marital changes in the interim. Since those remarried between interview waves automatically added one more discussion partner, aggregate measures (total number of alters or kin) are misleading and hence excluded. Recently remarried respondents added fewer consanguines but more affines as their discussion partners than their long-time remarried counterparts, consistent with their newlywed status. On the other hand, recently remarried individuals rotated in fewer friends, which is in line

with previous findings that contact with friends tend to revert to pre-divorce level once people remarry (Kalmijn and Broese van Groenou 2005). While recently remarried respondents are significantly closer to their alters than those who remarried before baseline interviews, there are virtually no differences in such traits as average contact frequency or density, suggesting that when these individuals take in a new associate, they rotate out someone with similar structural properties (e.g., density). In addition, closeness to and frequency of contact with new associates are also higher for recently remarried respondents. Taken together, results from Table D3 to Table D5 suggest that although it is highly plausible that marital status change is the only meaningful change in social circumstances responsible for network turnover (Wellman, Wong, Tindall, and Nazer 1997), this line of inquiry is only partially supported, due largely to the small number of people experiencing marital change in five years.

Table D1: Marital Changes for NSHAP Respondents with One Marital Change

Wave 1 Marital Status	Married	Divorced/ Separated	Widowed	Total
Cohabiting	9	0	0	9
Married	0	6	113	119
Remarried	0	9	40	49
Separater/Divorced	10	0	0	10
Widowed	6	0	0	6
Total	25	15	153	193

Table D2: Marital Changes for NSHAP Respondents with Two Marital Changes

Type of Marital Change #1	Type of Marital Change #2			Total
	Married	Divorced	Widowed	
Married	0	1	1	2
Divorced	1	0	0	1
Widowed	4	0	0	4
Total	5	1	1	7

Table D3: Compositional Characteristics of Alters Lost

Total Number of Alters Lost (not through death)									
No Marital Change	Mean	Std. Err.	95% Conf. Interval						
Married	1.43	0.05	1.34	1.52					
Remarried	1.52	0.06	1.40	1.63					
Divorced/Separated	1.74	0.07	1.60	1.89					
Widowed	1.43	0.06	1.30	1.55					
One Marital Change									
Married-Widowed	1.43	0.13	1.17	1.68					
Remarried-Widowed	1.53	0.17	1.19	1.87					
Total Number of Kin Lost (not through death)									
No Marital Change	Mean	Std. Err.	95% Conf. Interval						
Married	0.83	0.04	0.74	0.91					
Remarried	0.67	0.05	0.58	0.76					
Divorced/Separated	0.72	0.05	0.61	0.83					
Widowed	0.79	0.05	0.69	0.88					
One Marital Change									
Married-Widowed	0.69	0.11	0.46	0.91					
Remarried-Widowed	0.71	0.14	0.41	1.00					
Total Number of Consanguines Lost (not through death)					Total Number of Affines Lost				
No Marital Change	Mean	Std. Err.	95% Conf. Interval		Mean	Std. Err.	95% Conf. Interval		
Married	0.56	0.03	0.49	0.62	0.11	0.01	0.08	0.14	
Remarried	0.45	0.03	0.38	0.52	0.09	0.01	0.06	0.12	
Divorced/Separated	0.65	0.05	0.55	0.76	0.06	0.02	0.03	0.10	
Widowed	0.71	0.05	0.62	0.80	0.08	0.02	0.04	0.11	
One Marital Change									
Married-Widowed	0.56	0.11	0.33	0.79	0.13	0.03	0.06	0.20	
Remarried-Widowed	0.48	0.08	0.32	0.64	0.23	0.08	0.06	0.40	
Total Number of Friends Lost (not through death)									
No Marital Change	Mean	Std. Err.	95% Conf. Interval						
Married	0.42	0.03	0.35	0.49					
Remarried	0.60	0.04	0.51	0.69					
Divorced/Separated	0.81	0.06	0.69	0.93					
Widowed	0.47	0.04	0.39	0.55					
One Marital Change									
Married-Widowed	0.51	0.09	0.32	0.70					
Remarried-Widowed	0.55	0.12	0.30	0.81					

Table D4: Compositional Characteristics of Alters Gained

Total Number of Alters Gained																		
No Marital Change	Mean	Std. Err.	95% Conf. Interval															
Married	1.76	0.05	1.66	1.86														
Remarried	1.97	0.09	1.80	2.14														
Divorced/Separated	2.18	0.10	1.98	2.38														
Widowed	1.96	0.07	1.82	2.10														
One Marital Change																		
Married-Widowed	2.23	0.13	1.97	2.49														
Remarried-Widowed	2.34	0.28	1.76	2.92														
Total Number of Kin Gained																		
No Marital Change	Mean	Std. Err.	95% Conf. Interval															
Married	0.97	0.04	0.90	1.05														
Remarried	1.00	0.07	0.86	1.14														
Divorced/Separated	0.95	0.09	0.77	1.13														
Widowed	1.01	0.06	0.88	1.14														
One Marital Change																		
Married-Widowed	1.16	0.13	0.90	1.42														
Remarried-Widowed	1.20	0.17	0.85	1.55														
Total Number of Consanguines Gained					Total Number of Affines Gained													
No Marital Change	Mean	Std. Err.	95% Conf. Interval		Mean	Std. Err.	95% Conf. Interval											
Married	0.77	0.03	0.70	0.84	0.12	0.01	0.09	0.15										
Remarried	0.76	0.06	0.64	0.87	0.16	0.03	0.10	0.22										
Divorced/Separated	0.86	0.09	0.67	1.04	0.08	0.02	0.04	0.12										
Widowed	0.87	0.06	0.74	1.00	0.14	0.02	0.10	0.18										
One Marital Change																		
Married-Widowed	0.88	0.10	0.67	1.10	0.28	0.08	0.12	0.44										
Remarried-Widowed	1.00	0.14	0.71	1.30	0.19	0.07	0.05	0.34										
Total Number of Friends Gained																		
No Marital Change	Mean	Std. Err.	95% Conf. Interval															
Married	0.60	0.03	0.53	0.67														
Remarried	0.77	0.07	0.64	0.91														
Divorced/Separated	0.91	0.12	0.67	1.15														
Widowed	0.72	0.05	0.62	0.83														
One Marital Change																		
Married-Widowed	0.73	0.12	0.50	0.97														
Remarried-Widowed	0.78	0.14	0.50	1.05														

**Table D5: Network Characteristics of Remarried Respondents
With or Without Marital Changes**

Total Number of Consanguines Gained									
	Mean	Std. Err.	95% Conf. Interval						
Remarried, No Change	0.76	0.05	0.65	0.86					
Recently Remarried	0.58	0.16	0.25	0.90					
Total Number of Affines Gained									
	Mean	Std. Err.	95% Conf. Interval						
Remarried, No Change	0.16	0.03	0.10	0.22					
Recently Remarried	0.23	0.11	0.02	0.45					
Total Number of Friends Gained									
	Mean	Std. Err.	95% Conf. Interval						
Remarried, No Change	0.77	0.07	0.64	0.91					
Recently Remarried	0.57	0.18	0.22	0.92					
Average Emotional Closeness					Average Closeness to Alters Gained				
	Mean	Std. Err.	95% Conf. Interval		Mean	Std. Err.	95% Conf. Interval		
Remarried, No Change	3.08	0.03	3.03	3.14	2.77	0.03	2.72	2.83	
Recently Remarried	3.30	0.10	3.11	3.50	3.01	0.17	2.66	3.36	
Average Frequency of Contacts					Average Frequency of Contacts with Alters Gained				
	Mean	Std. Err.	95% Conf. Interval		Mean	Std. Err.	95% Conf. Interval		
Remarried, No Change	6.72	0.07	6.58	6.85	6.19	0.15	5.90	6.49	
Recently Remarried	6.73	0.14	6.45	7.02	6.43	0.16	6.10	6.75	
Density at Wave 2					Density of Alters Gained				
	Mean	Std. Err.	95% Conf. Interval		Mean	Std. Err.	95% Conf. Interval		
Remarried, No Change	84.19%	1.17%	81.83%	86.55%	79.63%	1.58%	76.43%	82.83%	
Recently Remarried	85.81%	4.10%	77.55%	94.07%	81.96%	4.86%	72.15%	91.77%	

APPENDIX E: WAVE 2 RESULTS

Tables E1 and E2 present information on basic socio-demographics and network configurations by marital status groups at wave 2. Results closely resemble those of wave 1 in Tables E2 and E3. Table E3 mirrors Table E4 and compares the network characteristics of the remarried to those of the continuously married at wave 2, and Table E4 provides regression results of Table E3. Note that the analytical sample used in these tables contains only wave 1 married respondents who survived to wave 2 and did not have any marital change between interviews, thereby greatly reducing the number of cases to 1,264 at the maximum (875 continuously married and 389 remarried). Again, model 1 gives zero-order effect of remarriage at wave 2, and model 2 adds socio-demographics. Model 3 further incorporates physical and mental health issues at wave 2, and model 4 controls for network characteristics at wave 2. These wave 2 controls are identical to those used in regressions to generate earlier results so as to make Tables E5 and E4 comparable, and the only major difference is I further account for sample attrition in model 5 by adding inverse Mills ratio to the regressions.

Between waves, remarried individuals gained significantly more alters than the continuously married and did not lose significantly more. As a result, the gap in network size between these two shrank, and the difference at wave 2 is no longer significant. Another important change is in network density: while the density of ties lost and gained by the remarried is significantly lower than that of ties lost and gained by the first married, the density of ties lost is lower than that of ties gained. In other words, network density of remarried individuals is likely to increase as a result, making the once significant difference insignificant at wave 2. With respect to other network features (contact frequency and emotional closeness), the direction and magnitude of coefficient estimates are very close to those reported in Table E5. However, with the entire analytical samples often dropped to below 1,000 (with even fewer remarried individuals, about 300 in model 4), these coefficient estimates can sometimes become insignificant.

Table E1: NSHAP Sample Descriptive Statistics by Marital Status at Wave 2

	<u>Total</u>	<u>Never Married</u>	<u>Cohabiting</u>	<u>First Married</u>	<u>Remarried</u>	<u>Sepr/Divorced</u>	<u>Widowed</u>
Total N	2,261	70	47	867	423	259	595
Male	47.79%	41.33%	36.93%	55.29%	65.73%	38.09%	23.57%
<u>Age Groups:</u>							
62-69	44.34%	48.45%	55.61%	48.95%	56.27%	49.70%	20.23%
70-79	35.98%	31.10%	34.81%	35.60%	31.56%	38.14%	40.54%
80-91	19.69%	20.44%	9.58%	15.45%	12.17%	12.15%	39.23%
<u>Race/Ethnicity</u>							
white	81.15%	69.42%	82.90%	83.42%	85.30%	69.70%	79.72%
black	9.64%	20.12%	7.83%	6.55%	7.16%	20.42%	11.45%
hispanic	6.90%	5.81%	6.28%	7.71%	6.49%	7.29%	5.81%
other	2.32%	4.65%	2.99%	2.32%	1.05%	2.60%	3.03%
<u>Education</u>							
Less than HS	15.79%	17.75%	20.27%	13.83%	9.36%	15.53%	24.92%
High School	25.49%	16.21%	25.39%	24.21%	23.58%	24.24%	31.41%
Some College	31.96%	27.85%	22.74%	30.28%	37.52%	36.00%	29.38%
BA and More	26.76%	38.20%	31.59%	31.68%	29.54%	24.23%	14.29%

Table E2: Network Characteristics by Marital Status of NSHAP Respondents at Wave 2

Wave 2	Never Married	Cohabiting	First Married	Remarried	Separated/ Divorced	Widowed
Total N	70	47	867	423	259	595
Network Size (Roster A)	3.68	3.70	3.87	3.77	3.79	3.72
% Kin	41.82%	43.18%	71.75%	67.75%	53.92%	64.73%
% Consanguineal Kin	94.48%	95.18%	90.20%	86.30%	95.55%	90.53%
% Affinal Kin	5.52%	4.82%	9.80%	13.70%	4.45%	9.47%
% Friends	46.37%	31.09%	22.51%	25.82%	33.29%	26.98%
Avg. Density	73.96%	83.56%	87.56%	84.46%	78.60%	82.14%
Avg. Alter Volume to R	6.57	6.89	6.80	6.72	6.63	6.74
Avg. Emotional Closeness	2.89	3.03	3.13	3.10	2.98	3.07

**Table E3: Network Characteristics of the First Married and Remarried
NSHAP2 Respondents**

Part I: Comparing Network Characteristics With and Without a Spouse

	Spouse		Rest of Network	
	First Married	Remarried	First Married	Remarried
Average Volume to R	7.99	7.96	6.45	6.27
Average Volume from Spouse to Rest of Network	5.71	5.12		
Average Volume among Alters			3.73	3.22
Average Density	98.28%	98.57%	81.31%	77.89%
Average Emotional Closeness	3.64	3.66	2.98	2.88

Part II: Spouse Betweenness and Spouse-Independent Ties

	First Married	Remarried
Any Spouse Betweenness	30.27%	17.94%
Proportion of Spouse-Between Ties in Network	12.81%	7.60%
Any Spouse-Independent Tie	31.10%	41.17%
Proportion of Spouse- Independent Tie in Network	14.01%	23.19%

Table E4: Coefficient Estimates and Standard Errors of Remarriage at Wave 2

	Model 1	Model 2	Model 3	Model 4	Model 5
	Coefficient (Standard Error)				
<i>Compositional Characteristics</i>					
Average Network Size	-0.06 (0.11)	-0.04 (0.10)	0.03 (0.10)	-0.02 (0.09)	-0.02 (0.09)
Average Ratio of Friends in Network	0.03 (0.02)	0.03 (0.02)	0.05† (0.02)	0.05* (0.02)	0.05* (0.02)
<i>Connectedness between Respondent and Rest-of-Network Alters</i>					
Average Frequency of Contacts	-0.17† (0.09)	-0.14 (0.09)	-0.19† (0.10)	-0.16 (0.10)	-0.14 (0.10)
Average Emotional Closeness	-0.10** (0.04)	-0.08* (0.04)	-0.08* (0.03)	-0.06† (0.03)	-0.05 (0.03)
<i>Connectedness between Spouse and Rest-of-Network Alters</i>					
Average Density	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.01 (0.00)	0.01 (0.00)
Average Contact Frequency	-0.59*** (0.13)	-0.63*** (0.13)	-0.69*** (0.14)	-0.58*** (0.14)	-0.59*** (0.14)
<i>Connectedness among Rest-of-Network Alters</i>					
Average Density	-0.03† (0.02)	-0.03 (0.02)	-0.04* (0.02)	-0.02 (0.02)	-0.02 (0.02)
Average Frequency of Contacts	-0.51** (0.17)	-0.46** (0.16)	-0.62*** (0.14)	-0.43** (0.12)	-0.39** (0.12)
<i>Spouse Betweenness</i>					
Any Spouse-Between Tie in Network (Odds Ratios with 95% C.I.)	0.50** (0.33, 0.78)	0.46** (0.30, 0.71)	0.51** (0.32, 0.81)	0.51** (0.32, 0.81)	0.45** (0.28, 0.74)
Proportion of Spouse-Between Ties in Network	-0.05** (0.02)	-0.06** (0.02)	-0.05* (0.02)	-0.04* (0.02)	-0.04* (0.02)
<i>Spouse Independent Ties</i>					
Any Spouse-Independent Tie in Network (Odds Ratios with 95% C.I.)	1.55* (1.11, 2.16)	1.58** (1.14, 2.20)	1.76** (1.18, 2.62)	1.63* (1.00, 2.64)	1.67* (1.02, 2.74)
Proportion of Spouse-Independent Ties in Network	0.09** (0.03)	0.09** (0.03)	0.10** (0.03)	0.09** (0.03)	0.09** (0.03)

APPENDIX F: COMPARISONS BETWEEN THE DIVORCED-REMARRIED AND WIDOWED-REMARRIED

Table F1 presents socio-demographics and network characteristics of the continuously married, divorced-remarried, and widowed-remarried NSHAP respondents at wave 1. Table F2 compares the network changes of these groups.

Table F3 shows that in most measures, those remarried after age 50 are either similar to those remarried before age 50 or to the continuously married. In a small number of network characteristics those remarried after age 50 fare worse than the other groups, and the differences are never significant even in those cases. Instead, it is those who married before age 50 who have more fragmented networks, and they differ significantly from the continuously married in the following measures: ratios of kin, consanguines, affines, and friends in network, density of the entire network or of the networks without spouse, other alters' frequency of contact with the spouse, other alters' contact with respondents, the number of kin or friends lost, and density of alters lost. Respondents who remarried after age 50 differ from the continuously married in the following measures: density of the entire network or the part of network without spouse, other associates' frequency of contact with spouse or ego, any spouse-independent tie in network, number of friends gained, and closeness to alters gained. Only in the last three items are the differences between those who remarried before age 50 and continuously married insignificant.

Table F1: Socio-Demographics and Network Characteristics of Married and Remarried Respondents

Wave 1	Continuously Married	Remarried After Divorce	Remarried After Widowhood
Total N	1,245	455	101
Mean Age	67.25	65.57	69.59
Male	54.87%	62.26%	57.25%
Race/Ethnicity			
White	82.56%	84.28%	85.83%
African American	7.40%	8.28%	10.13%
Hispanic	7.57%	6.30%	4.04%
Education			
Less Than High School	15.47%	13.03%	16.44%
High School	26.22%	23.05%	39.26%
Some College	30.09%	36.70%	27.91%
BA and More	28.22%	27.22%	16.39%
Network Size (Roster A)	3.60	3.49	3.14
% Kin	73.48%	67.67%	67.48%
% Consanguineal Kin	89.94%	88.12%	82.73%
% Affinal Kin	10.06%	11.88%	17.27%
% Friends	19.86%	24.38%	26.53%
Avg. Density	89.23%	82.81%	82.47%
Avg. Alter Volume to R	6.92	6.85	6.71
Avg. Emotional Closeness	3.19	3.17	3.13
Avg. Vol. between R and Spouse	7.99	7.98	7.99
Avg. Vol. betw. R and Rest-of-Network	6.50	6.33	6.22
Avg. Vol. betw. Spouse and Rest-of-Network	5.71	5.09	5.25
Avg. Vol. among Alters	3.67	3.05	2.94
Avg. Closeness of Spouse	3.64	3.68	3.71
Avg. Closeness of Rest-of-Network Alters	3.01	2.95	2.91
Avg. Density of Ties to Sp.	98.28%	96.31%	96.93%
Avg. Density among Alters	82.04%	72.57%	72.48%
Any Spouse Betweenness	26.07%	20.89%	19.12%
% Spouse-Between Ties in Network	11.79%	9.58%	7.55%
Any Spouse Independent Tie	29.93%	41.30%	31.26%
% Spouse-Independent Ties in Network	14.08%	22.18%	17.44%

Table F2: Network Changes of Respondents Remarried After Divorce and Widowhood

	Continuously Married	Remarried After Divorce	Remarried After Widowhood
Alters Lost	1.43	1.55	1.34
Alters Gained	1.76	1.95	2.08
Kin Lost	0.83	0.66	0.71
Kin Gained	0.97	0.99	1.04
Consanguines Lost	0.56	0.45	0.43
Consanguines Gained	0.77	0.77	0.67
Affines Lost	0.11	0.08	0.14
Affines Gained	0.12	0.14	0.27
Friends Lost	0.42	0.63	0.44
Friends Gained	0.60	0.76	0.82
<u>Emotional Closeness to</u>			
Alters Lost	2.92	2.84	2.79
Alters Gained	2.85	2.81	2.57
<u>Volume of Contact to:</u>			
Alters Lost	6.39	6.35	5.98
Alters Gained	6.35	6.18	6.27
<u>Density of</u>			
Alters Lost	84.11%	76.87%	76.07%
Alters Gained	83.05%	79.15%	82.30%

Table F3: Network Characteristics of NSHAP Respondents Married Before and After 50

Network Statics	Continuously Married	Remarried Before 50	Remarried After 50
Network Size	3.60	3.47	3.38
% Kin	73.48%	67.15%	68.46%
% Consanguines	89.94%	86.22%	88.92%
% Affines	10.06%	13.78%	11.08%
% Friends	19.86%	24.03%	25.88%
Avg. Closeness	3.19	3.14	3.21
Avg. Contact Frequency	6.92	6.83	6.81
Avg. Density	89.23%	82.20%	83.66%
Avg. Vol. between R and Spouse	7.99	7.97	7.99
Avg. Vol. betw. R and Rest-of-Network	6.50	6.33	6.30
Avg. Vol. betw. R and Rest-of-Network	5.71	5.16	5.04
Avg. Vol. among Alters	3.67	3.00	3.10
Avg. Closeness of Spouse	3.64	3.67	3.70
Avg. Closeness of Rest-of-Network Alters	3.01	2.92	2.98
Avg. Density of Ties to Sp.	98.28%	96.24%	96.69%
Avg. Density among Alters	82.04%	71.42%	74.36%
Any Spouse Betweenness	26.07%	21.89%	18.55%
% Spouse-Between Ties in Network	11.79%	9.52%	8.84%
Any Spouse Independent Tie	29.93%	39.09%	40.75%
% Spouse-Independent Ties in Network	14.08%	19.13%	25.18%
Network Dynamics			
Number of Alters Lost	1.43	1.55	1.46
Number of Alters Gained	1.76	1.95	2.01
Number of Kin Lost	0.83	0.65	0.70
Number of Kin Gained	0.97	1.00	1.00
Number of Consanguines Lost	0.56	0.43	0.47
Number of Consanguines Gained	0.77	0.75	0.76
Number of Affines Lost	0.11	0.10	0.07
Number of Affines Gained	0.12	0.15	0.17
Number of Friends Lost	0.42	0.61	0.59
Number of Friends Gained	0.60	0.75	0.82
Closeness to Alters Lost	2.92	2.82	2.85
Closeness to Alters Gained	2.85	2.88	2.60
Frequency of Contact to Alters Lost	6.39	6.23	6.40
Frequency of Contact to Alters Gained	6.35	6.36	5.89
Density of Alters Lost	84.11%	73.87%	81.46%
Density of Alters Gained	83.05%	81.11%	77.14%

APPENDIX G: REGRESSION RESULTS OF LENGTH OF TIME RECENTLY ADDED ALTERS KNOWN TO REMARRIED AND CONTINUOUSLY MARRIED NSHAP RESPONDENTS

Table G1: Regression Results of Length of Time Recently Added Alters Known to Remarried and Continuously Married NSHAP Respondents

	Model 1, N=923		Model 2, N=919		Model 3, N=785		Model 4, N=779	
Remarriage	-0.05	0.03	-0.04	0.03	-0.07	0.04	-0.07	0.03
Male			-0.05	0.05	-0.06	0.04	-0.07	0.04
Age			0.00	0.00	0.00	0.00	0.00	0.00
African American			0.07	0.06	0.04	0.06	0.04	0.06
Hispanics			0.02	0.05	0.01	0.07	0.00	0.07
Others			-0.15	0.18	-0.15	0.19	-0.17	0.19
No High School			0.11	0.06	0.09	0.06	0.09	0.06
Some College			0.02	0.05	-0.02	0.06	-0.01	0.06
BA Plus			0.03	0.05	0.01	0.06	0.02	0.06
Retired			-0.03	0.04	0.00	0.04	0.01	0.04
Self-Rated Physical Health					-0.02	0.02	-0.02	0.02
Any Functional Limitations					0.00	0.04	0.00	0.04
Self-Rated Mental Health					0.04	0.03	0.03	0.03
Loneliness					0.01	0.02	0.01	0.02
Ratio of Friends							-0.08	0.09
Avg. Closeness							-0.01	0.04
Constant	3.76	0.02	3.62	0.17	3.70	0.21	3.77	0.28

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