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FUNCTIONAL IMPAIRMENT, MARITAL QUALITY, AND THEIR EFFECTS ON MARITAL DISSOLUTION

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Abstract

Numerous studies show evidence that personal health affects marital relationships, and therefore, marital dissolution. However, little work examines the effects of functional impairment on marital dissolution. Moreover, few studies examine functional impairment's impact on marital quality, a mechanism by which functional impairment may affect marital dissolution. Using three waves of publicly available, de-identified data from National Survey of Families and Households, I investigate the relationship between functional impairment, marital quality, and marital dissolution in both the short-term as well as the long-term. I also investigate whether this relationship differs between men and women, as functional impairment threatens gender roles differently within a marriage. I find that only in one instance does functional impairment increase the odds of divorce, and in some cases, functional impairment decreases the odds of divorce. I find that marital quality does not mediate the relationship between functional impairment and divorce, nor does the relationship between functional impairment and divorce differ between men and women.

CHAPTER I

Introduction

Nearly one in five Americans suffered from some form of disability in 2010 and of those, almost two thirds reported a severe disability, equating to approximately 38 million Americans (Brault 2012). With an aging American population, the number of Americans reporting disability has increased in the last decade, and just over 12 million Americans require assistance with their disability (Brault 2012). Disability, typically defined within three domains (communicative, physical, and mental), can encompass a variety of functional impairments such as difficulty seeing or hearing, physical limitations such as using a wheelchair or walking, as well as intellectual disabilities that hinder learning, concentrating, or affect mental capacities. Functional impairment can make everyday activities or interactions, such as going to work or holding a steady job, living alone, or taking care of oneself a challenge.

Failure or inability to complete daily tasks or activities due to functional impairments may induce personal stress which can lead to an increase in depressive symptoms and a decrease in positive emotions (Caputo and Simon 2013). The effects of functional impairment may be especially problematic for disabled individuals in marriages. Functional impairment may increase the risk of divorce by further stressing the marital relationship and not just the individual (Thoits 1995). Moreover, this relationship may be mediated by low levels of marital quality spurred by

changes in division of labor, caregiving responsibilities, reduction of household income, and other changes that might be the result of functional impairment.

A large body of literature links social support to health and wellbeing over the life course, evidencing that social support is positively related to physical and mental health and longevity (Thoits 2011; Umberson and Montez 2010). Furthermore, social supports have been shown to buffer harmful effects to mental and physical health of stress exposure (Thoits 2011). Although spouses may be a primary source of social support for married individuals generally, individuals with functional impairments may be especially dependent upon the social support that spouses provide, which in turn may influence psychological well-being, physical health, and longevity (Thoits 2011; Uchino, Cacioppo, and Kiecolt-Glaser 1996; Walen and Lachmann 2000). As persons with functional impairments can largely benefit from and are in particular need of social support systems, more research is needed examining the extent to which such functional impairments are associated with risk for divorce.

The effects of marriage and marital dissolution on health are well known, however, the reverse is not well documented. For example, health declines after divorce, especially in later ages, but little research focuses on the way that chronic illness and functional impairment affect the likelihood of divorce. To extend previous literature on functional impairment and marital dissolution, I will investigate the following research questions: (a) Does functional impairment directly affect the likelihood of divorce? (b) Does marital quality mediate the relationship between functional impairment and likelihood of divorce? (c) Does functional

impairment differentially affect men's and women's likelihood of divorce? I will estimate binary logistic regression models from three waves of the National Families and Households dataset to examine the relationship between functional impairment and the likelihood of marital dissolution.

CHAPTER II

Predictors of Divorce

Divorce rates, and aggregate risk of divorce, in the United States have declined since their peak in about 1980 (Cherlin 2010; Amato 2010). Rates of divorce vary considerably across socio-economic and racial-ethnic groups, however. This section briefly reviews the literature that investigates possible predictors of divorce.

A number of individual characteristics are associated with the likelihood of divorce. For example, individuals who marry at younger ages, particularly women who marry at younger ages, are more likely to divorce (Lehrer and Chen 2013; Rotz 2011). Similarly, an individual's educational attainment is associated with their odds of divorce. Since the steady decline in divorce rates in the 1980s, research shows that individuals with greater educational attainment are less likely to divorce, particularly when both spouses have college degrees, while couples with less than a college degree tend to be at a higher risk for divorce (Bramlett and Mosher 2002; Cherlin 2010; McLanahan 2004).

Divorce rates also vary across racial groups. African Americans have the highest rate of divorce across all groups, arguably due to a "complex set of historical, economic, structural, and cultural factors" (Amato 2010:651). Non-Hispanic whites,

such as Alaskan Natives, American Indians, and Asian or Pacific Islanders, and Hispanics have comparable overall divorce rates, however, there is considerable variation in divorce rates among Hispanic sub-groups with Puerto Ricans and Cubans with the highest rates and Mexican Americans with the lowest divorce rates (Amato 2010; American Community Survey 2007).

There is some evidence that the context of one's family of origin may affect adults' odds of divorce. For example, Amato and DeBoer (2001) find that children of divorced parents are twice as likely to experience a divorce themselves. Further, if the parents in the relationship reported low levels of discord prior to dissolution, the children were at a higher risk of intercepting the transmission of "intergenerational divorce" which includes weak commitment to marriage as an institution (Amato and DeBoer 2001). Amato and Cheadle (2005) also find that marital discord and likelihood of divorce in a grandparent generation, along with other problematic outcomes such as poor parental relationships and educational attainment, can be passed down to more than one generation (i.e., to their children's generation and to their grandchildren's generation).

Previous research shows that employment, particularly women's employment, has an effect on marital outcomes. Recent research shows that women's employment may increase the likelihood of divorce through two mechanisms: 1) increasing the tension over household division of labor (Frisco and Williams 2003; Amato, Booth, Johnson, and Rogers 2007) and 2) enabling wives to support themselves independently of their husband if they perceive their marriage as unhappy (Schoen, Astone, Rothert, Standish, and Kim 2002). Amato et al. (2007)

also found, however, that wives' earned income improved other aspects of the marital relationship, and therefore also had positive effects on marital outcomes.

Past research is mixed with respect to the effect of premarital cohabitation on divorce. Some researchers argue that there is a selection effect within cohabiting relationships, and couples that cohabit maintain traits, such as unstable employment patterns and financial problems, that increase the likelihood of unstable marriages and divorce (Lillard, Brien, and Waite 1995). Teachman (2003) also finds that premarital cohabitation with a non-spousal partner has a negative effect on one's marital outcome. Other research suggests that couples that cohabit prior to marriage already make "marriage-like" commitments to their partners, leading to greater marital stability, an increase in assets in the relationship, and a lower risk of divorce (Brown 2004; Stanley, Rhoades, and Markman 2006; Rhoades, Stanley, and Markman 2009). Lastly, some scholars have suggested that other family formation behaviors that may occur within a cohabiting context, such as non-marital births, may affect the relationship between premarital cohabitation and marital stability, increasing the odds of divorce (Tach and Halpern-Meekin 2009).

While studies document the impact of individual characteristics on likelihood of divorce, there are several interpersonal predictors of divorce that tend to be measured at the couple level rather than the individual level. For example, DeMarris (2000) finds that physical aggression and conflict management, which impact relationship stability and quality, ultimately affect a marital outcome. Previti and Amato (2004) find that infidelity also increases the likelihood of divorce, in part because extramarital affairs are associated with lower marital happiness. Researchers

Amato and Hohmann-Marriott (2007) examined clusters in two waves of data in which the respondents divorced by wave two. The researchers examined the frequencies of arguments, physical aggression, thoughts of divorce, levels of marital happiness, and marital interaction and found differences in each cluster. However, the researchers found two basic motivations for divorce across clusters: "poor relationship quality and a weak commitment to marriage" (2007:621).

In addition to looking at individual factors, some studies have focused on more structural predictors of divorce rates. For example, research has shown that the socio-economic status of a community affects divorce rates. Communities with high levels of SES, typically indicated by measures such as male unemployment rate, median family income, poverty rate, percentage of households receiving welfare benefits or public assistance, etc., tend to have lower divorce rates than communities with low levels of SES (Bramlett and Mosher 2002).

Impairment and Marital Quality

Past research has clearly established a link between health and marital status, although the direction of this relationship is less clearly understood. For example, some researchers posit that healthy individuals select themselves into marriage (Smith and Smith 2010), while other researchers suggest that declining health can also be a precursor for marital dissolution by decreasing marital quality (Daniel, Wolfe, Busch, and McKevitt 2009; Syse and Kravdal 2007).

A great deal of research on health and marital quality emphasizes that married individuals tend to be healthier than non-married individuals (Umberson, Williams, Powers, Liu, Needham 2006). However, the health benefits of marriage

depend – to some degree – on marital quality. For example, couples in distressed marriages tend to fare worse on health indicators than couples in happier marriages (Burman and Margolin 1992). In their study of marital quality and health, Umberson et al. (2006) find that marital quality significantly affects health trajectories, especially as age increases. In other words, negative marital experiences may "accelerate" health declines as time progresses. Similarly, in their study of marital conflict and depression, Choi and Marks (2008) find that "marital conflict is a significant risk factor for psychological and physical health" (377).

While some research focuses on marital quality and its effects on psychological and physical health, less research focuses on health as it relates to marital quality in opposite temporal order. In other words, there is less research that investigates how poor personal health or functional impairment affects levels of marital quality. Furthermore, the little extant research on this subject is somewhat dated. For example, analyzing national longitudinal data, Booth and Johnson (1994) conclude that declines in health were negatively associated with marital quality. Booth and Johnson (1994) suggest that this negative relationship may be explained by shifts in household earnings, shifts in the household division of labor, and declines in partner marital activities and their effects on marital quality. Some research suggests that there may be a non-recursive (i.e., simultaneous) relationship between health and marital quality. For example, Bookwala finds that "chronic health problems were associated with higher levels of negative spousal behaviors" (2004:96), which, in turn, predicted greater physical disability. Research focusing on couples in which one respondent has a chronic illness also indicates that individuals

with chronic pain experience decreases in marital quality by means of lower marital and sexual satisfaction, as well as increases in distress and physical symptoms (Flor, Turk, and Scholz 1987).

Numerous studies have also examined the ways in which functional impairment negatively affects emotional well-being and self-conceptions, which could plausibly affect marital quality (Caputo and Simon 2013; Redmond and Barrett 2015; Warner and Kelley-Moore 2012). For example, Caputo et al. (2013) find that respondents in their study who became physically limited showed an increase in depressive symptoms such as hopelessness, worthlessness, and nervousness, and a decrease in positive emotions such as extreme happiness, satisfaction, and peacefulness. Furthermore, these results were amplified for married men and women in their study compared to non-married men and women. Similarly, Warner et al. (2012) find that married respondents with functional impairments reported higher levels of loneliness, and neither negative nor positive marital quality mediated this relationship.

Impairment, Caregiver Burnout, and Marital Quality

In most marital relationships, the healthier spouse assumes the caregiving role when the other spouse experiences health problems, or an event that causes functional impairment (Wolff and Kasper 2006). This role transition often results in a shift in responsibilities different from the division of labor prior to the spouse's health problems. Role transitions into caregiving for one's sick spouse can have negative influences and consequences on the marital relationship (Karraker and

Latham 2015; Wolff and Kasper 2006). Caregiving can tax not only the caregiver, but also the marriage as a whole.

Previous research suggests that caregiving can have negative effects on the caregiver's emotional and physical health. Ybema, Kuijer, Hagedoorn, and Buunk (2002) suggest that caregivers can feel "under-benefited" when they feel they invest too much time into care for their impaired spouse and are not receiving a sufficient "return" on their investment. Similarly, the impaired spouse may also feel they cannot offer much in return to their caregiving spouse. In each situation, both partners may perceive inequity in the relationship (Walster, Walster, and Bersheid 1978; Ybema et al. 2002). Ybema et al. (2002) suggest that experiencing a lack of return on investment in the relationship results in "higher emotional exhaustion and higher depersonalization of the ill partner" meaning that the caregiver detaches his or herself personally and emotionally from the partner. Likewise, marital disagreements spurred by the impairment of a spouse are found to be psychologically harmful for the spousal caregiver and may result, for example, in an increase of depressive symptoms (Choi and Marks 2006). Furthermore, caregiving has been found to increase the risks of morbidity and mortality via psychological strain for caregivers (Schulz and Beach 1999).

In addition to fostering feelings of inequity and caregiver strain, previous research suggests that caregiving can negatively affect marital quality. As stated above, Choi and Marks (2006) found that marital disagreement led to negative psychological effects on the spousal caregiver, but also found that higher levels of marital disagreement led to lower levels of global marital happiness. Similarly, in a

study examining the impact of a wife's chronic illness on the husband and family, Lewis, Woods, Hough, and Bensley (1989) found that an increase in demands made by the sick wife increased depressive symptoms of the husband, thereby leading to the husband's poorer assessment of the marriage.

Functional Impairment and Divorce

Surprisingly, little research has examined the effects of functional impairment on the risk of divorce. However, given the literature that I have reviewed, there are several reasons to expect functional impairment to increase the risk of divorce. These reasons include the fact that functional impairment of a spouse is likely associated with caregiver burnout, and caregiving is in turn negatively associated with perceived marital quality. These factors, which may result from functional impairment, could lead to lower levels of marital quality, and heighten a couple's risk for marital dissolution via divorce. Functional impairment may also cause a loss of household income and a re-allocation of the household division of labor, both of which are known to have negative effects on marital quality (Booth and Johnson 1994). When a spouse faces functional impairment, this may also decrease the amount of shared activities enjoyed together (Booth and Johnson 1994), and increase negative feelings such as depression (Romano, Turner, and Clancy 1989), which have negative effects on marital quality. In turn, these factors spurred by functional impairment are likely to have an effect on the risk of marital dissolution.

One recent study used the Health and Retirement Study (HRS), which focuses on the experiences of elderly Americans, to examine the relationship

between specific chronic illnesses (i.e., cancer, heart problems, lung disease, and/or stroke, in particular) and marital dissolution via divorce or widowhood (Karraker and Latham 2015). They concluded that although widowhood was the more common pathway for marital dissolution, when divorce occurred, it was more frequently the case that the wife's onset of illness was associated with a higher risk of divorce, compared to the husband's onset of illness. Although this study is suggestive of a relationship between chronic illness and likelihood of divorce, additional research is needed to further clarify this relationship. Because Karraker and Latham (2015) investigated this relationship with an elderly sample, it is possible that the relationship between functional impairment and divorce is stronger among individuals who are elderly (when illness and impairment may be expected), compared to those who are in middle phases of the life course. Furthermore, Karraker and Latham (2015) minimally investigated the role that marital quality plays in the relationship between functional impairment and marital dissolution by using only a singular measure of marital satisfaction. Additional research is needed to investigate the extent to which marital quality mediates the relationship between functional impairment and marital dissolution.

CHAPTER III

Hypotheses

Based on prior research that focuses on the effects of functional impairment on marital quality and the effects of marital quality on divorce, I maintain three hypotheses. First, I hypothesize that functional impairment directly increases the odds of divorce. Second, because the extant literature shows that decreases in health

can have negative effects on marital quality and that low levels of marital quality are a predictor for divorce, I hypothesize that at least part of the effect of functional impairment on divorce operates indirectly via lowered levels of marital quality. Third, because functional impairment is more likely to be disruptive of women's roles rather than men's (i.e., division of labor), and because extant literature shows that women's functional impairment is a higher risk factor for divorce than men's, I hypothesize that the effects of functional impairment will be greater for women than men.

CHAPTER IV

Data and Sample

The sample used for this study comes from the National Survey of Families and Households (NSFH) dataset. The NSFH collected data at three waves (T1-T3) in 1987-1988, 1992-1994, and 2001-2003, respectively, and collected information concerning life histories. The NSFH began with a national sample of 13,007 (Wave I) non-institutionalized adults, aged nineteen and older, with an over sampling of African-Americans, Puerto-Ricans, Mexican Americans, single-parent families, families with step-children, cohabiting couples, and recently married persons, who were recruited and interviewed in person. At Wave II, 10,007 of the original respondents from Wave I completed the personal follow-up interview. Due to budgetary constraints, select respondents from Wave I (N=4,600) were re-interviewed at Wave III: specifically, individuals who did not have a focal child but who were 45 years or older at Wave III, or individuals who had an eligible focal child at Wave III.

In order to investigate the effect of functional impairment on marital dissolution over time, all analyses begin with a sample of individuals who were married in Wave I, and who were followed up in at least Wave II (N=5,488). Of respondents who met this initial criteria, only 2,431 were re-interviewed in Wave III. This study draws on three sets of analyses, with three different samples. The first set of analyses investigate associations between functional impairment trajectories (Waves I and II) and odds of divorce by Wave II divorce (N=3,651). The second set of analyses investigate how functional impairment trajectories (Waves I and II) are associated with odds of divorce by Wave III (N=1,923). The final set of analyses investigate associations between functional impairment and odds of divorce by Wave III among respondents who stayed married to the same partner between Waves I and II (N=1,718).

Descriptive statistics are examined for the independent, dependent, and control variables for all three samples (see Table 1). I use binary logistic regression analysis to analyze the relationship between functional impairment and divorce. Due to the complex sampling design, the Wave I – II data and analyses are weighted using the total weight variable (*weight*) which accounts for differential probability of selection, and post-stratification and non-response adjustments (Johnson and Elliot 1998; Sweet, Bumpass, and Call 1988). No weight variables were constructed for Wave III due to the un-representative sample selection, and data guides for the NSFH recommend not weighting analyses using Wave III (Chou 2009). Therefore, data and analyses utilizing Wave III are not weighted.

Measurement

Dependent Variable

Divorce The dependent variable of interest in this study is whether or not respondents who were married in Wave I divorced. Because I am interested in the effects of functional impairment on marital dissolution over time, I investigate the odds of divorce in three different ways. First, I assess the effects of functional impairment on Wave I married respondents' odds of divorce by Wave II (divorce =1, still married=0). Second, I investigate the long-term effects of functional impairment on odds of divorce by examining Wave I married respondents' odds of divorce by Wave III (divorce between Wave I and III=1, still married to Wave I partner=0). Finally, in order to investigate the potential for changes in marital quality to mediate the relationship between functional impairment and divorce, I investigate the effects of functional impairment on divorce by Wave III among respondents who remained married to the same partner between Waves I and II (divorce between Waves II and III=1, still married to Wave I-II partner=0).

Independent Variable

Functional impairment The NSFH measures respondents' functional impairment in Wave I by asking respondents "Do you have a physical or mental condition that limits your ability to: (1) care for personal needs, such as dressing, eating or going to the bathroom, (2) moving about inside the house, (3) work for pay, (4) do day-to-day household tasks, (5) climb a flight of stairs, (6) walk six blocks?" with possible response categories of "*yes*" (1) or "*no*" (2). *In Wave II,* the NSFH measures respondents' functional impairment by asking respondents the same

question, but the possible response categories are "*does not limit at all"* (1), *"limits a little"* (2), or "*limits a lot"* (3). To maintain consistency across waves, for each item of functional impairment, response categories from both Waves I and II were recoded into a dichotomous variable where any functional impairment=1 and no functional impairment=0. Then, using these six dichotomous items in each wave, I created a mean-item scale of functional impairment for Wave I (Cronbach's alpha=.84) and Wave II (Cronbach's alpha=.86) that ranged from 0.0 to 1.0. Individuals who had values of 1.0 (e.g. all 6 items) in a given wave were coded as functionally impaired for that Wave. From these measures, I constructed four categories of respondent functional impairment: functionally impaired in Wave I only, functionally impaired in Wave II only, functionally impaired in both Waves I and II, and not functionally impaired in either Wave I or Wave II (reference category).

Mediating Variable

Marital quality In this study I use two measures of marital quality from both Waves I and Wave II. These measures are global happiness and an index that assesses frequency of marital disagreement composed of six items. The first measure is a single item measuring global happiness in the relationship. The NSFH measures this by asking respondents "Taking all things together, how would you describe your relationship with your partner?" Response categories range from "*very unhappy*" (1) to "*very happy*" (7). Response categories two through six are numeric values only and do not provide descriptions. Because nearly half of the sample reports that they are "very happy," this variable was recoded dichotomously into

"*very happy*" (=0, reference category) versus all other categories =1, which I label as "*not happy*".

The second measure of marital quality is frequency of disagreement. This measure asks respondents to report the frequency of disagreement on certain subjects that couples often disagree over. The NSFH asks respondents "The following is a list of subjects on which couples often have disagreements. How often, if at all, in the past year have you had open disagreements about each of the following: household tasks, money, spending time together, sex, and in-laws." I created an index that averaged these six items. The possible response categories for this measure are "*never*" (1), "*less than once a month*" (2), "*several times a month*" (3), "*about once a week*" (4), "*several times a week*" (5), and "*almost every day*" (6). In Wave I, this scale yields a Cronbach's alpha of .76 and in Wave II, the Cronbach's alpha is .77.

Wave I measures of marital quality are used as control variables in all three sets of analyses. By contrast, Wave II measures of marital quality are investigated as potential mediating variables between functional impairment and divorce only in analyses of respondents who were continuously married in Waves I and II, since respondents had to be married in Wave II to have measures of marital quality in Wave II.

Control Variables

In line with past research, I also include a number of additional control variables (beyond Wave I marital quality) that likely affect individuals' odds of divorce, including respondents' socio-demographic characteristics and educational attainment, household income, employment status, professional work status, parent's

marital history, age at marriage, parental status, presence of children in the household, difference in respondent and spouse age, difference in respondent and spouse religion, and difference in respondent and spouse education[1]. All control variables are measured at Wave I.

Respondent's *age* is measured in years. *Gender* is a dichotomous variable coded 1 if the respondent is female and 0 if the respondent is male. *Race* is a self-reported measure and response categories are "*Black*", "*White – not of Hispanic origin*", "*Mexican American, Chicano, Mexicano*", "*Puerto Rican*", "*Cuban*", "*American Indian*", "*Asian*", "*Other*", "*Other Hispanic*", and "*Caribbean Islands (West Indian)*". Due to sample size restrictions, these response categories are collapsed into a series of dummy variables: *non-Hispanic white, non-Hispanic black, Hispanic*, and *Other* where *non-Hispanic whites* are the reference category[2]. Respondents' *education* is measured using a series of dichotomous variables indicating the following educational levels: *less than high school diploma, high school diploma, some college,* and *college graduate or greater,* where less than high school diploma is the reference category. *Income* indicates the total household income including investments. Due to a large percentage of missing cases for this variable, I imputed missing income values. Using key characteristics that are

[1] An additional number of controls were originally proposed for this study, such as spouse functional impairment and usual number of work hours per week. A small number of spouses indicated having a functional impairment and thus were eliminated from analyses. Due to a large amount of missing data for the usual number of work hours measure, and because an employment variable was already included in the analyses, this variable was omitted from the analyses.

[2] Due to the limited number of respondents who indicate their racial identity as "Other" and "Asian", these two categories are combined into a single "Other" racial category for analyses.

predictive of income, such as employment status, age, and education, I imputed income using OLS regression[3]. I created dummy variables for these three characteristics. For example, employed=1, unemployed=0, 65 and over (retired)=1, under 65=0, college degree or greater=1, less than college degree=0[4]. For example:

Constant + *b*(over 65) + *b*(educated) + *b*(employed) = Imputed Value

Employment status is a dichotomous variable coded 1 if the respondent reported that he/she was currently working for pay and 0 if the respondent reported that he/she was not currently working. Respondents' occupation is a dichotomous variable indicating if the respondent is in a *professional line of work.* To determine respondents' line of work, the NSFH asks respondents "What kind of work are you doing in your current job? What is your job title?" Stevens and Cho (1985) developed thirteen occupational categories that house all 889 possible census occupational codes that could be given by respondents. Respondents who indicate occupation codes within the range of the "*professional specialty occupations*" (codes 043-199) and "*executive, administrative, and managerial occupations"* (codes 003-042) are coded 1. All other occupation codes are coded 0.

A dichotomous variable coded 1 indicates if the respondent's *parents are still married* and 0 if the respondent's parents are not still married. *Age at marriage* indicates the age at which the respondent married their first spouse. *Presence of children in the household* is represented by dummy variables. Respondents that have

[3] *Gender* was also investigated as a predictor of household income, however, it was found to be non-significant in the OLS regression.

[4] Using the coefficients from the OLS regression, I calculated the imputed value for each of the eight categories and replaced the missing value with this calculated value in the dataset (see Table 5).

any children in the household are coded 1 and respondents that do not have children in the household are coded 0. In addition, a separate dichotomous measure, *children under five*, indicates if respondents have children under the age of five in the household=1, while respondents who do not have children under the age of five residing with them=0.

A final set of control variables indicate differences between spouses in age, on religious affiliation, and educational attainment. *Difference in age* between spouses is a dichotomous variable that indicates whether a five-year age gap or greater exists between the husband and wife, coded 1 if yes and 0 if no. *Same religion as spouse* is a dichotomous variable coded 1 if the respondent in a reported marriage identifies with the same religion as his/her spouse and 0 if the respondent in the reported marriage identifies with a different religion. To create this measure, both respondent's and spouse's religious identification were first collapsed into the following categories discussed in Steensland, Park, Regnerus, Robinson, Wilcox, and Woodberry's (2000) study of traditional religious measures: *no religion, Catholic, Jewish, Evangelical Protestant, Mainline Protestant,* and *Other.* Differences in religion were then derived based on these broad categories. *Same education* is a dichotomous variable coded 1 if the respondent's education level is equal to the spouse's education level (*less than high school graduate, high school graduate, some college, and college degree or greater)* and 0 if the respondent's education level is different from the spouse's education level.

Analytic Strategy

Using logistic regression, I estimate three parallel sets of analyses that examine the effects of functional impairment trajectories (in Waves I and II) on respondents' odds of divorce. The first of these assesses the effects of respondents' functional impairment on odds of divorce by Wave II. The second set of analyses investigates how functional impairment (in Wave I and II) affects respondents' odds of divorce by Wave III. The final set of analyses investigates how functional impairment (in Wave I and II) affects respondents' odds of divorce by Wave III among respondents who stayed married to the same partner in Waves I and II. For each set of analyses there are three models: 1) bivariate association between functional impairment and divorce, 2) association between functional impairment and divorce, controlling for marital quality, and 3) association between functional impairment and divorce, controlling for marital quality, and all other covariates. Analyses that assess divorce in Wave II are weighted using NSFH sampling weights (Sweet, Bumpass and Call 1988; Johnson and Elliot 1998). Analyses that assess divorce in Wave III are not weighted because sampling weights were not constructed for this wave (see Chou 2009).

CHAPTER V

Characteristics of the Sample

The first set of analyses examines the Wave I – II sample (N=3,651) (see Table 1). Nearly seven percent of this sample experiences a divorce by Wave II. About five percent of respondents are functionally impaired in both Waves I and II, almost two percent of respondents are functionally impaired in Wave I only, and

approximately 20 percent of respondents are functionally impaired in Wave II only. Approximately 73 percent are not functionally impaired in either Wave I or II. Just under 45 percent of the sample reports being very happy with their marital relationship in Wave I, with approximately 55 percent giving a response other than very happy with their marriage. Respondents have an average of 1.8 on the frequency of disagreement scale in Wave I. About 16 percent of respondents in this sample have children under the age of five; over half have children of any age. The average household income for this sample is $44,678. About 72 percent of respondents are employed in Wave I and about 23 percent work in professional occupations. This sample is about 53 percent female with a mean age of 40.3 years old.

The second set of analyses examines the Wave I – III sample (N=1,923) (see Table 1). As expected with the passage of time, almost 11 percent of this sample experiences a divorce between Wave I and Wave III. About five percent of respondents are functionally impaired in Waves I and II, nearly 2 percent of respondents are impaired in Wave I only, and almost 20 percent of respondents are functionally impaired in Wave II only. Approximately 74 percent of respondents are not functionally impaired in either Wave I or II. Levels of Wave I marital quality in this sample are similar to levels in the Wave I – II sample. Approximately 43 percent of respondents report being very happy with their marriage in Wave I, compared to 57 percent of the sample who report some other level of satisfaction with their marital relationship. On average, respondents report a mean of 1.8 on the frequency of disagreement scale in Wave I. About eight percent of respondents in

this sample have children under the age of five and nearly 60 percent have children of any age. The average household income for this sample is $48,702. About 75 percent of respondents are employed in Wave I and about 27 percent work in professional occupations. This sample is about 56 percent female with a mean age of 43.5 years old.

The third set of analyses examines the Wave I – III: continuously married sample (N=1,718) (see Table 1). About six percent of respondents who were continuously married to the same partner between Waves I and II experience a divorce by Wave III. About five percent of respondents are functionally impaired in both Waves I and II, just under one and a half percent of respondents are impaired in Wave I only, and almost 20 percent of respondents are functionally impaired in Wave II only. Approximately 75 percent of respondents are not functionally impaired in either Wave I or II. Approximately 44 percent of respondents report being very happy in their marriage in Wave I, while 56 report some other level of marital satisfaction. Respondents who remained married to the same partner between Wave I and II reported a mean of 1.7 on the frequency of disagreement scale in Wave I. About eight percent of respondents in this sample have children under the age of five. The average household income for this sample is $49,614. About 75 percent of respondents are employed in Wave I and about 28 percent work in professional occupations. This sample is about 56 percent female with a mean age of 43.2 years old in Wave I.

In terms of other comparisons across these three samples, approximately 70 percent of respondents across all three samples identify with the same religion as

their spouse and about 50 percent of respondents have the same education level as their spouse. Nearly one-third of respondents in all three samples have a five or more-year age gap with their spouse. The average age at first marriage is around 23 years old across all three samples, and around 40 percent of respondents' parents are still married across all three samples. About 60 percent of respondents in all three waves have children of any age in the household. About 40 percent of all three samples holds a high school diploma, however, the percentage of college educated and greater increases from 24 to 29 percent across the three samples, with respondents who were continuously married between Waves I and II having the highest educational attainment. All three samples are comprised of about 85 to 90 percent non-Hispanic whites, with the sample who was continuously married between Waves I and II being slightly less racially and ethnically diverse.

Results

Binary logistic regression analyses were conducted using STATA 14 S/E. This section is comprised of three sets of analytical results. The first set of analyses investigate associations between functional impairment trajectories in Wave I and II and married respondents' odds of divorce by Wave II (see Table 2). The second set of results take a longer-term view, examining the association between functional impairment and odds of divorce by Wave III (see Table 3). Finally, the third set of results focus on how changes in marital quality may mediate the association between functional impairment and odds of divorce by Wave III for respondents who were continuously married to the same partner between Waves I and II (see Table 4). In

each set of analyses there are three models[5]. The first model examines the bivariate relationship between functional impairment trajectories and divorce. The second model examines the multivariate relationship between functional impairment, marital quality, and divorce. The third model examines the multivariate relationship between functional impairment, marital quality, additional control variables, and divorce.

Waves I – II: Divorce by Wave II

Table 2 assesses the effects of the functional impairment variables, marital quality measures, and control variables on the odds of divorce by Wave II. Model 1 shows the odds ratios for the bivariate analyses of the functional impairment measures on divorce. The odds ratio for respondents who are functionally impaired in both Waves I and II (.45) is marginally significant at the $p<.10$ level. This indicates that respondents who are functionally impaired in both Wave I and Wave II are 55 percent less likely to divorce than respondents who were not functionally impaired in either Wave, which runs counter to my hypothesis that functional impairment increases the odds of marital dissolution. The odds ratios for respondents who were functionally impaired in Wave I only (1.68), and respondents who were functionally impaired in Wave II only (1.08) are both not statistically significant. However, the odds ratios for these two variables are in the hypothesized direction.

Model 2 shows the odds ratios for multivariate analyses of the functional impairment measures, controlling for two measures of marital quality in Wave I (overall happiness and frequency of disagreement). The odds ratio for respondents

[5] A fourth model was analyzed for each sample to test the third hypothesis. No significant evidence was found to support this hypothesis and, therefore, results are not reported or tabled.

who are functionally impaired in both Waves I and II (.46) is significant at the p<.10 level, after controlling for marital quality in Wave I. This indicates that respondents who are functionally impaired in both Waves I and II remain 54 percent less likely to divorce than respondents who were not functionally impaired in either Wave, even accounting for variation in marital quality. The odds ratios for respondents who were functionally impaired in Wave I only (1.67), and respondents who were functionally impaired in Wave II only (1.04) are both not statistically significant, but are in the hypothesized direction. The global happiness measure of marital quality, *not happy*, has a significant odds ratio (1.53) at the p<.01 level indicating that respondents who reported that their marital satisfaction was anything other than very happy were 53 percent more likely to divorce than respondents who report being very happy. Furthermore, frequency of disagreement (1.62) was also significantly associated with odds of divorce at the p<.001 level, indicating that a one level increase on the disagreement scale increases the odds of divorce by 62 percent. I do not find evidence that differences in marital quality at Wave I mediate the relationship between functional impairment and the odds of divorce, however.

Model 3 introduces numerous control variables to determine the extent to which associations between functional impairment trajectories and odds of divorce change once controlling for marital quality, marital characteristics, socio-economic status, and social background measures. After including these controls, there is no longer a statistically significant association between functional impairment in Waves I and II and respondents' odds of divorce by Wave II. That is to say, that controlling for factors known to influence likelihood of divorce, respondents who were impaired

in both Waves I and II, thus the most functionally impaired group, had approximately the same odds of divorce compared to their non-impaired counterparts. After controlling for these additional covariates, respondents who were functionally impaired in Wave I only are over twice as likely to divorce as their non-impaired counterparts, although this relationship is significant at the $p<.10$ level. The functional impairment measure for respondents who were functionally impaired in Wave II only (1.22) remains statistically insignificant, although the odds ratio remains in the hypothesized direction with the addition of the control variables. Both measures of marital quality remain significant at the $p<.001$ level in Model 3, and several control variables in this model are statistically significant. For example, respondents who were married to spouses with a significant age difference (e.g., more than five years), were nearly three times more likely to divorce than respondents who were closer in age to their spouse. It is possible that this control may be absorbing some of the effects of functional impairment on odds of divorce, as such age differences may increase the risk of impairment among at least one person in the union. The odds ratio for female (.74) is significant at the $p<.05$ level indicating that females were 26 percent less likely than males to divorce. The odds ratio for age (.98) is significant at the $p<.001$ level, indicating that for each year increase in age, the odds of divorce decrease by two percent. The odds ratio for the variable measuring whether the respondent's parents are still married (.69) is significant at the $p<.01$ level indicating that respondents whose parents are still married are 31 percent less likely to divorce than respondents whose parents are divorced. The remaining control variables are not statistically significant.

Waves I – III: Divorce by Wave III

Table 3 assesses associations between functional impairment trajectories, marital quality, and other control variables on the odds of divorce by Wave III. Model 1 shows the odds ratios for the bivariate analyses of the functional impairment measures on divorce by Wave III. In this model, I do not observe significant statistical associations between any trajectory of functional impairment and odds of divorce in the longer term.

Model 2 introduces controls for marital quality at Wave I. Again, for most categories of functional impairment (impaired in Waves I and II, impaired in Wave I only) there is no statistically significant association between functional impairment and odds of divorce at Wave III. The odds ratio for respondents who are functionally impaired in Wave II only (.71) is statistically significant at the level $p<.10$, indicating that controlling for marital quality at Wave I, this group had actually 29 percent lower odds of divorce than their non-impaired counterparts, which is counter to the hypothesized direction of this relationship. Both measures of marital quality at Wave I are significantly associated with respondents' odds of divorce at Wave III, with respondents who indicated less marital satisfaction (than being very happy) and respondents who report more disagreement on the frequency scale having higher odds of divorce by Wave III. However, there is little evidence that differences in marital quality at Wave I mediate the relationship between functional impairment and odds of divorce.

Model 3 introduces numerous control variables to determine the extent to which associations between functional impairment trajectories and odds of divorce

change after controlling for additional covariates known to influence the odds of divorce. After including these controls, there is no longer a statistically significant effect of any functional impairment measure on the odds of divorce in Wave III. In other words, even after controlling for factors known to be associated with divorce, respondents who were impaired in both Waves I and II, respondents who were functionally impaired in Wave I only, and respondents who were functionally impaired in Wave II only, all had statistically similar odds of divorce compared to their non-impaired counterparts. Interestingly, the addition of the control variables shifts the direction of the odds ratio for respondents who are functionally impaired in both Wave I and II (1.01), and the direction of the odds ratio for respondents who were functionally impaired in Wave II only (1.22) to the hypothesized direction. Only one measure of marital quality, *not happy*, remains statistically associated with respondents' odds of divorce at Wave III, while frequency of disagreement is no longer statistically significant. Several control variables in this model are statistically significant. For example, respondents who work in a professional occupation are 31 percent less likely to divorce than their non-professional counterparts. It is possible that this control may be absorbing some of the effects of functional impairment on odds of divorce, as a professional occupation may carry additional benefits such as health care coverage and paid sick leave, which may reduce the spark of marital discord revolving around functional impairment. The odds ratio for respondents who have a high school diploma (.56) is significant at the $p<.05$ level indicating that respondents with a high school diploma are 44 percent less likely to divorce than respondents who have less than a high school diploma. The odds ratio for age (.92) is

significant at the p<.001 level indicating that for each year increase in age, the odds of divorce decrease by eight percent. The odds ratio for "Other" race (3.61) is marginally significant at the p<.10 level indicating that respondents in this racial category are approximately three and half times more likely to divorce than non-Hispanic whites. The odds ratio for the variable measuring whether the respondent's parents are still married (.59) is significant at the p<.01 level indicating that respondents whose parents are still married are 41 percent less likely to divorce than respondents whose parents are divorced. The remaining control variables are not statistically significant.

Waves I – III: Continuously Married

Table 4 assesses the effects of the functional impairment variables, marital quality measures, and control variables on the odds of divorce by Wave III among respondents who stayed married to the same partner between Waves I and II. Model 1 shows the odds ratios for the bivariate associations between categories of functional impairment measures and odds of divorce by Wave III. I do not observe statistically significant differences in the odds of divorce at Wave III between respondents who are functionally impaired in both Waves I and II (.66) and those who were not functionally impaired in either wave. Similarly, the odds ratio for respondents who are functionally impaired in Wave I only (.55) is not statistically significant, which does not support my hypothesis that functional impairment increases the odds of marital dissolution. However, the odds ratio for respondents who were functionally impaired in Wave II only (.43) is significant at the p<.01 level. In other words, among respondents who stayed married to the same partner

between Wave I and II, respondents who were functionally impaired in Wave II only were 57 percent less likely to divorce than their non-impaired counterparts. This finding runs counter to my hypothesis that functional impairment increases the odds of marital dissolution.

Model 2 shows the odds ratios for the multivariate analyses of the functional impairment measures, controlling for marital quality in both Waves I and II. The odds ratio for respondents who are functionally impaired in both Waves I and II (.55), and the odds ratio for respondents who were functionally impaired in Wave I only (.59) remain non-significant after controlling for marital quality. The odds ratio for respondents who were functionally impaired in Wave II only (.38) remains statistically significant at the $p<.01$ level. This indicates that respondents who were married to the same partner between Waves I and II, and who became functionally impaired in Wave II, were about 62 percent less likely to divorce by Wave III than their non-impaired counterparts, even accounting for variation in marital quality. Respondents who reported levels of marital happiness other than *very happy* in Wave I were 46 percent more likely to divorce by Wave III, although this relationship is significant at the $p<.10$ level. The odds ratio for the frequency of disagreement measure in Wave I is not statistically significant. However, the odds ratio for frequency of disagreement in Wave II (1.99) is statistically significant at the $p<.001$ level indicating that a one level increase on the disagreement scale in Wave II increases the odds of divorce by 99 percent. There is no evidence that differences in marital quality in Wave I or Wave II mediate the relationship between functional

impairment and the odds of divorce for respondents who were continuously married to the same partner between Waves I and II.

Model 3 introduces numerous control variables to determine how associations between functional impairment trajectories and odds of divorce by Wave III change once controlling for additional measures. My results in Model 3 indicate that after including these controls, there is little change in the statistically significant association between functional impairment in Wave II only and odds of divorce by Wave III. That is, respondents who remained married to the same partner between Waves I and II and who were functionally impaired in Wave II were approximately 59 percent less likely to divorce by Wave III, and this association is significant at the $p<.01$ level. However, controlling for these covariates, there remains no statistical difference in the odds of divorce for respondents who were functionally impaired in both Waves I and II compared to non-impaired respondents. Similarly, respondents who were functionally impaired in Wave I only had statistically similar odds of divorce by Wave III compared to their non-impaired counterparts. The global happiness measure of marital quality in Wave I remains significant at the $p<.10$ level. The frequency of disagreement measure of marital quality in Wave I remains non-significant. The frequency of disagreement measure of marital quality in Wave II remains statistically significant at the $p<.001$ level, although the magnitude of this effect declines considerably after including control variables. A one level increase on the disagreement scale in Wave II increases the odds of divorce by 59 percent. Several control variables in this model are statistically significant. For example, the odds ratio for age (.90) is significant at the $p<.001$

level, indicating that for each year increase in age, the odds of divorce decrease by 10 percent. The odds ratio for the variable measuring whether the respondent's parents are still married (.53) is significant at the $p<.01$ level indicating that respondents whose parents are still married are 47 percent less likely to divorce than respondents whose parents are divorced. The remaining control variables are not statistically significant.

CHAPTER VI

Discussion

Nearly 20 percent of Americans face some form of functional impairment that stands in the way of accomplishing day to day activities (Brault 2012). Individuals who live with functional impairment(s) simultaneously face prospects of increased hardship in doing instrumental activities with declining health, as well as other psychological effects of impairment including depression, anxiety, loneliness, and other symptoms of negative emotional affect (Caputo and Simon 2013; Redmond and Barrett 2015; Warner and Kelley-Moore 2012). For these and other reasons, resources of social support are critical to the wellbeing of individuals who have functional impairment(s). For many individuals, marriage is a critical source of social support, however past research suggests the possibility that functional impairment might threaten marital quality, and thus, increase the odds of divorce among individuals who face functional impairment. To date, however, few studies have examined this possibility.

This study used data from the National Survey of Families and Households to test three hypotheses regarding the association between functional impairment and

divorce. In general, these hypotheses suggested that functional impairment would increase the odds of divorce among married individuals, partly due to lowered levels of marital quality. Collectively, the results show little evidence to support my hypotheses. My first hypothesis was that functional impairment increased the odds of divorce. In bivariate analyses, I detected no evidence that functional impairment was associated with increased odds of divorce, either in the short-term (Wave II) or in the long term (Wave III). In models that took into account baseline marital quality, as well as an array of factors known to influence the likelihood of divorce, I found moderate evidence that one trajectory of functional impairment (impaired in Wave I only) doubled the odds of divorce in the short-term (Wave II). However, this was the only significant negative association between functional impairment and odds of divorce. Moreover, some of my findings actually ran counter to my hypothesized relationship between functional impairment and divorce. My results suggested that individuals who were continuously married to the same partner in Waves I and II, and who were impaired in only Wave II actually had lower odds of divorce in Wave III than their non-impaired counterparts. These associations were present in both bivariate models, as well as those that controlled for marital quality in Waves I and II, and other covariates known to influence divorce. Several possibilities for this association are possible. First, it may be the case that there is a selection effect of functionally impaired respondents into marriages, or that functionally impaired respondents' disability was present before marriage, which may partly explain their lower odds of divorce. Secondly, it is possible that this group of respondents has a stronger social network or support system in place, thereby allowing the quality of

their marital relationship to remain intact rather than weakening it, and thus lessening their odds of divorce. My second hypothesis is that part of the effect of functional impairment on divorce operates indirectly via lowered levels of marital quality. My results showed no evidence to support this hypothesis, and in additional analyses (not shown), I investigated levels of marital quality (happiness and disagreement across trajectories of functional impairment). Those results suggested that at both Waves I and II, marital quality did not significantly differ across these different trajectories of functional impairment, which also runs counter to my hypothesis. My third hypothesis was that the effects of functional impairment would be greater for women than men. Again, my results (in analyses not shown) did not support this hypothesis.

The findings of this study should be interpreted with caution given a few limitations regarding the data, sample, and measures. First, the dataset used for this study underwent budgetary difficulties that resulted in an extreme drop in sample size in Wave III. Due to the un-representativeness of the Wave III sample, no sample weights were constructed and, therefore, analyses are unweighted. Thus, the findings of the second and third analyses should be interpreted with caution as they are unweighted and not nationally representative. Additionally, although the original sample size in Wave I began with 13,007 respondents, a small percentage of respondents report functional impairment or disablement as evidenced by the data. It may be possible that respondents did not want to report their functional impairment if it was not visible, or they simply did not think their disability was considered an impairment that hindered their ability to care for personal needs, move about inside the house, work for pay, do day to day household tasks, climb a flight of stairs, or

walk six blocks. Moreover, defining disability becomes difficult considering the vast amount of contexts it is used in. For example, disability in a medical context may be defined differently than disability in a social context, and often times does not refer to a single definition (Brault 2012). Consequently, it is possible that my definition of functional impairment (by requiring impairment on all 6 activities) was too restrictive, and in future work, I intend to investigate this possibility further to determine the extent to which results remain robust to this more conservative definition. Lastly, the samples analyzed in this study had low levels on the frequency of disagreement measure of marital quality across all samples. It is possible that the retrospective nature of this measure skewed respondents' perceptions of global happiness, marital quality, and their overall marital relationship.

Despite these limitations, this study contributes to the literature on functional impairment and divorce in several important ways. First, little if any research examines the effects of functional impairment in marriages. The extant literature on functional impairment largely focuses on respondents who have functionally impaired children or parents and how functional impairment affects those relationships. Second, there is little research examining the effect of functional impairment on divorce using a non-specific measurement of functional impairment. Third, this study furthers previous research by extending the work of functional impairment and marital quality to their effects on divorce.

CHAPTER VII

Conclusion

In this study, I examined the direct effects of functional impairment on the odds of divorce using binary logistic regression. Additionally, I examined whether low levels of marital quality mediated this relationship. Unexpectedly, the results suggested that the odds of divorce for continuously functionally impaired persons are lower than the odds of divorce for non-functionally impaired persons. As such, further empirical analyses are needed to better understand the relationship between functional impairment and divorce, especially for persons whose functional impairment pre-dates their marriage. Additionally, future research examining specific functional impairments and their effects on divorce is needed utilizing the current dataset. Future research utilizing a dataset that focuses more closely on functional impairment may also be beneficial in order to analyze a larger sample.

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Appendix A: Tables

Table 1. Descriptive Statistics

	Wave I – II (N=3,651)		Wave I – III (N=1,923)		Wave I – III: Continuously Married (N=1,718)	
	(% or M)	(N or SD)	(% or M)	(N or SD)	(% or M)	(N or SD)
Divorce	6.6%	(240)	10.5%	(202)	6.3%	(109)
Functional impairment status						
Functionally impaired in both Waves I and II	5.3%	(195)	5.0%	(96)	4.7%	(81)
Functionally impaired in Wave I only	1.8%	(66)	1.6%	(30)	1.4%	(24)
Functionally impaired in Wave II only	19.7%	(718)	19.6%	(377)	19.4%	(334)
Not functionally impaired in either Wave I or Wave II	73.2%	(2,672)	73.8%	(1,420)	74.5%	(1,279)
Marital quality						
Not happy	55.4%	(2,024)	57.0%	(1,096)	56.0%	(962)
Frequency of disagreement	1.8	(.7)	1.8	(.7)	1.7	(.7)
Marital characteristics						
Same religion as spouse	69.8%	(2,550)	70.2%	(1,349)	70.8%	(1,217)
Same education as spouse	49.5%	(1,807)	49.0%	(943)	50.1%	(860)
Difference in age between R and spouse (5+ years)	30.8%	(1,123)	33.1%	(636)	32.1%	(551)
Age at first marriage	22.7	(4.4)	22.5	(4.3)	22.6	(4.4)
R has children under age of five	16.0%	(585)	7.6%	(147)	7.7%	(132)
R has children	58.0%	(2,117)	59.8%	(1,149)	60.2%	(1,035)
Socio-economic status						
Employed in Wave I	72.0%	2,629	74.5%	(1,433)	75.1%	(1,290)
Household income	44,678.2	(43,493.7)	48,702.4	(43,172.4)	49,614.2	(44,363.8)
Professional occupation	23.3%	(849)	26.9%	(518)	27.8%	(478)
Less than high school diploma	14.1%	(516)	10.1%	(194)	9.3%	(160)
High school diploma	39.4%	(1,439)	39.4%	(758)	39.2%	(674)
Some college	22.5%	(823)	22.9%	(441)	22.6%	(388)
College degree and greater	23.9%	(873)	27.6%	(530)	28.9%	(496)
Social background						
Female	52.4%	(1,912)	56.3%	(1,083)	55.6%	(955)
Age	40.3	(13.8)	43.5	(11.6)	43.2	(11.3)
Non-Hispanic White	85.2%	(3,112)	89.8%	(1,727)	90.3%	(1,551)
Non-Hispanic Black	8.8%	(321)	7.3%	(141)	7.1%	(122)
Hispanic	4.9%	(180)	2.3%	(44)	2.2%	(38)
Asian	.8%	(29)	.4%	(8)	.4%	(6)
Other	.3%	(9)	.2%	(3)	.1%	(1)
R's parents are still married	40.4%	(1,475)	37.3%	(717)	38.3%	(658)

Source: National Survey of Families and Households

Table 2. Logistic Regression Analyses of Divorce in Wave II

	Model 1	Model 2	Model 3
Functional impairment status[1]			
Functionally impaired in both Waves I and II	.45†	.46†	.70
	(.20 – 1.03)	(.20 – 1.07)	(.29 – 1.70)
Functionally impaired in Wave I only	1.68	1.67	2.31†
	(.76 – 3.74)	(.71 – 3.92)	(.96 – 5.52)
Functionally impaired in Wave II only	1.08	1.04	1.22
	(.79 – 1.49)	(.76 – 1.43)	(.87 – 1.70)
Marital quality			
Not happy[2]		1.53**	1.66***
		(1.15 – 2.03)	(1.23 – 2.24)
Frequency of disagreement		1.62***	1.34***
		(1.39 – 1.88)	(1.13 – 1.59)
Marital characteristics			
Same religion as spouse[3]			.84
			(.63 – 1.12)
Same education as spouse[4]			.92
			(.69 – 1.23)
Difference in age between R and spouse (5+ years)[5]			2.99***
			(2.01 – 4.45)
Age at first marriage			.98
			(.94 – 1.02)
R has children under age of five[6]			.92
			(.63 – 1.33)
R has children[7]			1.05
			(.76 – 1.47)
Socio-economic status			
Employed in Wave I[8]			1.08
			(.74 – 1.57)
Household income			1.00
			(.99 – 1.00)
Professional occupation[9]			1.13
			(.77 – 1.65)
High school diploma[10]			1.00
			(.64 – 1.55)
Some college[10]			.96
			(.58 – 1.59)
College degree and greater[10]			.78
			(.44 – 1.36)
Social background			
Female[11]			.74*
			(.55 – 1.00)
Age			.95***
			(.93 – .96)
Non-Hispanic Black[12]			1.03
			(.65 – 1.64)
Hispanic[12]			.98
			(.50 – 1.90)
Other[12]			1.04
			(.27 – 3.92)
R's parents are still married[13]			.69**
			(.51 – .94)

***p<0.001; **p<0.01; *p<0.05; † marginal significance

Source: National Survey of Families and Households (N=3,651)

Sample excludes spouses with missing information. Results from logistic regression report odds ratios with confidence intervals reported at p<.05. Analyses are weighted.

[1] Reference category is R not impaired in Wave I or Wave II.

[2] Reference category is very happy.

[3] Reference category is different religion than spouse.

[4] Reference category is different education level than spouse.

[5] Reference category is R is same age as spouse (within five years).

Table 2. Continued.

[6] Reference category is R has children age five or over.
[7] Reference category is R has no children.
[8] Reference category is unemployed in Wave I.
[9] Reference category is non-professional occupation.
[10] Reference category is less than high school diploma.
[11] Reference category is male.
[12] Reference category is non-Hispanic White.
[13] Reference category is R's parents are not married.

Table 3. Logistic Regression Analyses of Divorce in Wave III

	Model 1	Model 2	Model 3
Functional impairment status[1]			
Functionally impaired in both Waves I and II	.72	.67	1.01
	(.34 – 1.51)	(.32 – 1.42)	(.45 – 2.29)
Functionally impaired in Wave I only	.88	.81	1.22
	(.26 – 2.94)	(.24 – 2.75)	(.31 – 4.74)
Functionally impaired in Wave II only	.74	.71†	.80
	(.49 – 1.10)	(.47 – 1.06)	(.52 – 1.23)
Marital quality			
Not happy[2]		1.84***	2.00***
		(1.31 – 2.58)	(1.40 – 2.86)
Frequency of disagreement		1.48***	1.14
		(1.21 – 1.81)	(.91 – 1.44)
Marital characteristics			
Same religion as spouse[3]			.84
			(.61 – 1.17)
Same education as spouse[4]			.78
			(.56 – 1.08)
Difference in age between R and spouse (5+ years) [5]			1.50
			(.90 – 2.51)
Age at first marriage			.97
			(.93 – 1.02)
R has children under age of five[6]			1.34
			(.82 – 2.20)
R has children[7]			1.26
			(.81 – 1.96)
Socio-economic status			
Employed in Wave I[8]			1.41
			(.91 – 2.18)
Household income			1.00
			(.99 – 1.00)
Professional occupation[9]			.69†
			(.45 – 1.05)
High school diploma[10]			.56*
			(.31 – .99)
Some college[10]			.80
			(.44 – 1.46)
College degree and greater[10]			.84
			(.43 – 1.66)
Social background			
Female[11]			1.15
			(.82 – 1.62)
Age			.92***
			(.90 – .95)
Non-Hispanic Black[12]			.86
			(.49 – 1.52)
Hispanic[12]			.70
			(.24 – 2.06)
Other[12]			3.61†
			(.97 – 13.44)
R's parents are still married[13]			.59**
			(.42 – .83)

***p<0.001; **p<0.01; *p<0.05; † marginal significance

Source: National Survey of Families and Households (N=1,923)

Sample excludes spouses with missing information. Results from logistic regression report odds ratios with confidence intervals reported at p<.05. Analyses are unweighted.

[1] Reference category is R not impaired in Wave I or Wave II.

[2] Reference category is very happy.

[3] Reference category is different religion than spouse.

[4] Reference category is different education level than spouse.

[5] Reference category is R is same age as spouse (within five years).

Table 3. Continued.

[6] Reference category is R has children age five or over.
[7] Reference category is R has no children.
[8] Reference category is unemployed in Wave I.
[9] Reference category is non-professional occupation.
[10] Reference category is less than high school diploma.
[11] Reference category is male.
[12] Reference category is non-Hispanic White.
[13] Reference category is R's parents are not married.

Table 4. Logistic Regression Analyses of Divorce in Wave III: Continuously Married

	Model 1	Model 2	Model 3
Functional impairment status[1]			
Functionally impaired in both Waves I and II	.66	.55	.77
	(.24 – 1.85)	(.19 – 1.55)	(.25 – 2.39)
Functionally impaired in Wave I only	.55	.59	.71
	(.07 – 4.15)	(.08 – 4.50)	(.07 – 6.89)
Functionally impaired in Wave II only	.43**	.38**	.41**
	(.23 – .82)	(.20 – .73)	(.21 – .83)
Marital quality			
Not happy[2]		1.46†	1.53†
		(.94 – 2.27)	(.96 – 2.43)
Frequency of disagreement Wave I		.97	.88
		(.70 – 1.34)	(.62 – 1.25)
Frequency of disagreement Wave II		1.99***	1.59***
		(1.53 – 2.59)	(1.20 – 2.11)
Marital characteristics			
Same religion as spouse[3]			.86
			(.55 – 1.33)
Same education as spouse[4]			.85
			(.55 – 1.32)
Difference in age between R and spouse (5+ years) [5]			1.39
			(.66 – 2.90)
Age at first marriage			.98
			(.92 – 1.03)
R has children under age of five[6]			1.51
			(.81 – 2.80)
R has children[7]			.90
			(.51 – 1.60)
Socio-economic status			
Employed in Wave I[8]			1.07
			(.62 – 1.86)
Household income			1.00
			(.99 – 1.00)
Professional occupation[9]			.79
			(.46 – 1.37)
High school diploma[10]			.60
			(.26 – 1.37)
Some college[10]			1.16
			(.50 – 2.67)
College degree and greater[10]			1.18
			(.46 – 3.03)
Social background			
Female[11]			1.32
			(.84 – 2.09)
Age			.90***
			(.87 – .93)
Non-Hispanic Black[12]			1.31
			(.67 – 2.60)
Hispanic[12]			1.61
			(.51 – 5.05)
Other[12]			1.70
			(.18 – 16.04)
R's parents are still married[13]			.53**
			(.34 – .82)

***p<0.001; **p<0.01; *p<0.05; † marginal significance

Source: National Survey of Families and Households (N=1,718)

Sample excludes spouses with missing information. Results from logistic regression report odds ratios with confidence intervals reported at p<.05. Analyses are unweighted.

[1] Reference category is R not impaired in Wave I or Wave II.

Table 4. Continued.

[2] Reference category is very happy.
[3] Reference category is different religion than spouse.
[4] Reference category is different education level than spouse.
[5] Reference category is R is same age as spouse (within five years).
[6] Reference category is R has children age five or over.
[7] Reference category is R has no children.
[8] Reference category is unemployed in Wave I.
[9] Reference category is non-professional occupation.
[10] Reference category is less than high school diploma.
[11] Reference category is male.
[12] Reference category is non-Hispanic White.
[13] Reference category is R's parents are not married.

Table 5. Imputed Values for Income

Constant	Over 65	Educated	Employed	Imputed Value
35,161	(-8,237.3 x 1)	(24,124.4 x 0)	(4,849.8 x 0)	26,923.70
35,161	(-8,237.3 x 1)	(24,124.4 x 1)	(4,849.8 x 1)	55,897.90
35,161	(-8,237.3 x 1)	(24,124.4 x 0)	(4,849.8 x 1)	31,773.50
35,161	(-8,237.3 x 1)	(24,124.4 x 1)	(4,849.8 x 0)	51,048.10
35,161	(-8,237.3 x 0)	(24,124.4 x 0)	(4,849.8 x 0)	35,161.00
35,161	(-8,237.3 x 0)	(24,124.4 x 0)	(4,849.8 x 1)	40,010.80
35,161	(-8,237.3 x 0)	(24,124.4 x 1)	(4,849.8 x 1)	64,135.20
35,161	(-8,237.3 x 0)	(24,124.4 x 1)	(4,849.8 x 0)	59,285.40

Source: National Survey of Families and Households