

# Marital Characteristics and the Sexual Relationships of U.S. Older Adults: An Analysis of National Social Life, Health, and Aging Project Data

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**Abstract** We tested several hypotheses regarding the relationship between marital characteristics and sexual outcomes among 1,656 married adults ages 57–85 years from the 2005–2006 National Social Life, Health, and Aging Project. Results showed that individuals in their first marriage had more frequent sex than remarried individuals; marital duration had a curvilinear (U-shaped) relationship with frequency of sex; and a linear relationship between marital duration and frequency of sex varied by gender such that men had more frequent sex than women in younger marriages. We speculate that relationship permanency may drive the greater sexual activity in first marriages and sicker men in younger marriages may drive frequency of sex for women in younger marriages.

**Keywords** Aging · Sexual activity · Duration of marriage · Marital history · Gender

## Introduction

Despite popular stereotypes, sexual activity continues to be a part of many older adults' lives. Though sexual activity tends to decrease with age as health declines and the death of a

spouse become more likely, this general pattern masks substantial ongoing sexual activity among older adults. About two thirds of 65–74-year-old men in the United States remain sexually active as do about 40 % of 65–74-year-old women (Lindau et al., 2007). Older adults' satisfaction with their sexual relationships is also relatively high and about one third place a high value on sex (Laumann et al., 2006). In national population-based studies of sexual behavior in the United States, the average frequency of sexual activity among sexually active older adults aged 57–75 (2–3 times a month) was similar to that of people 18 to 59 years of age (Laumann, Gagnon, Michael, & Michaels, 1994; Lindau et al., 2007). While a satisfying sex life among married couples has shown positive benefits such as protection against mortality (Seldin, Friedman, & Martin, 2002; Smith, Frankel, & Yarnell, 1997), marital satisfaction, and stability (Yeh, Lorenz, Wickrama, Longer, & Elder, 2006), researchers know relatively little about the social factors that underlie the sex lives of older adults.

As a life course perspective would suggest, the processes leading to sexual relationships among older adults may differ from those associated with sexual behavior at other points in the life course. Important gender differences have been found, such as lower sexual activity for women compared to men (Lindau et al., 2007). Connections between race and sexual activity have also been shown. Older white men have sex less frequently. Frequency does not vary by race for older women (Karraker, DeLamater, & Schwartz, 2011). Education positively predicts older adult sex outcomes (DeLamater & Sill, 2005). Additionally, employment status and changes in non-partner co-residents affects sexual behavior (Fraser, Maticka-Tyndale, & Smylie, 2004). Religion is also linked to older adults' sexual behavior and attitudes (McFarland, Uecker, & Regnerus, 2011). Health has a strong influence on sexual frequency and enjoyment (DeLamater, Hyde, & Fong,

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2008; Laumann et al., 2006). Physical health positively predicts sexual activity (Lindau et al., 2007). Partner relationship quality and happiness also shape sexual behavior (Call, Sprecher, & Schwartz, 1995; MacNeil & Byers, 2005; Sprecher, 2002). Although these studies are a valuable starting point for understanding the sex lives of older adults, it is important to consider other potentially significant influences.

A person's marital history may be an especially important influence. Overall, roughly 73 % of adults aged 57–85 years had a spouse or current partner and, among married persons, 69 % were in first marriages (Cornwell & Waite, 2009). Overall, about two thirds of older adults in the National Social Life, Health, and Aging Project (NSHAP) data were married to their partner, suggesting that much of the partnered sexual activity of older adults likely occurred within marital relationships (Lindau et al., 2007). The characteristics of marital relationships, then, should have important ramifications for sexual behavior. In this study, we utilized data from the NSHAP, a large nationally representative sample of adults aged 57–85. We examined the effects of two marital characteristics—(1) whether the marriage was a first marriage and (2) marital duration—on frequency of sex, physical pleasure in, and emotional satisfaction in the sexual relationship among older married adults. We also considered whether the effects of these characteristics varied by gender.

Understanding how marital characteristics are related to older adults' sex lives is important for at least three reasons. First, until recently, most sex research focused on sexual dysfunction rather than sexual well-being. Indeed, the former U.S. Surgeon General voiced this concern: “[Sexuality] fulfills a number of personal and social needs, and we value the sexual part of our being for the pleasures and benefits it affords us. Yet, most discussion and research pertaining to sexuality derives from problematic aspects of sexual expression and behavior” (Satcher, 2001). Second, both marital history and sexual activity have been thought to be protective against mortality and ill-health. Understanding how these social domains intersect will cast light on important health determinants in older adulthood. Third, by studying the marriage-sex link, we can further our understanding of the marital life course in society.

### First Marriages Versus Remarriages

Remarriages are more likely to fail than first marriages in the U.S., though there is some debate about whether this is the result of selection (e.g., Furstenberg & Spanier, 1984) or remarriage as an institution where relationship expectations are low in certainty—an “incomplete institution” (e.g., Cherlin, 1978; White & Booth, 1985). Nevertheless, we know little about remarriages in later life. Conventional wisdom might suggest that remarriages are better matches; they take place at older ages when people are more financially viable and more familiar with the type of partner they desire (Cherlin, 1978). Indeed, those who marry earlier are more likely to divorce because they “grew

apart” than those who marry later (Amato & Previti, 2003) and remarriages among older adults are less likely to end in divorce than first marriages (Wu & Penning, 1997). The above literature suggests that individuals in first marriages will experience less positive sex outcomes than those in higher-order marriages.

Another set of literature, however, has suggested that those in higher-order marriages have less positive sex outcomes than those in first marriages. Researchers have found that married and cohabiting individuals have roughly the same frequency of sex and both groups have substantially more frequent sex than singles. Also, married and cohabiting individuals have significantly higher levels of sexual satisfaction than singles and married individuals have significantly greater sexual satisfaction than cohabiting individuals (Waite & Gallagher, 2000; Waite & Joyner, 2001a). The expectation of permanence in a relationship may explain why married individuals have higher levels of sexual satisfaction. Individuals who expect their romantic relationships to last the rest of their lives have higher levels of sexual satisfaction than those who did not have this confidence (Waite & Gallagher, 2000). This may be so because the expectation of permanence leads people to make more frequent investments and work harder at deriving greater pleasure and emotional satisfaction in their sex lives with their spouse. Additionally, expected permanence may accompany commitment, trust in the sexual relationship's exclusivity, and an overall feeling of security. Higher emotional satisfaction in sexual relationships that are exclusive have been found in relationships with greater expected longevity (Waite & Joyner, 2001b). Those who have experienced the end of a marriage may not perceive the same level of permanence in their remarriage compared to those who have never had a marriage end. Thus, remarried individuals may have less favorable sex outcomes compared to individuals in their first marriage.

### Marital Duration

Four perspectives suggest that marital duration will also be important for sexual satisfaction. Two perspectives, *aging as maturity* and *relationship-specific capital*, hold that duration will be favorable for sex outcomes. A third perspective, *habituation*, sees duration as negative. Finally, a fourth perspective combines elements and expects a *U-shaped* pattern.

First, *aging as maturity* reasons that life experience leads to greater emotional and social well-being.<sup>1</sup> Aging provides growing insight which merges with social and psychological traits into an increasingly balanced whole (Mirowsky & Ross, 1992). Studies have found that advanced age brings about a sense of equanimity and evenness of temper (Gove, Ortega, & Style, 1989). Older adults are less likely to have negative

<sup>1</sup> Aging also occurs in tandem with a decline in physical functioning and health, sense of control, and optimism, and an increase in passive emotions, such as depression and social isolation.

emotions (e.g., nervousness, restlessness, annoyance, frustration, or anger), and are more likely to report emotional stability and emotional regulation than younger individuals (Carstensen, Isaacowitz, & Charles, 1999; Gross et al., 1997; Ross & Mirowsky, 2008). Older adults live more ordered and less chaotic lives, are less impulsive, and less concerned with others' expectations (Neugarten, 1996; Umberson, 1987). Late life also often affords more leisure time and religious involvement as well as reduced financial, familial, and work-related burdens.

Older Americans tend to maintain a smaller number of social relationships than their younger counterparts, but the ones they do maintain are characterized by less conflict, more compatibility, are viewed as especially meaningful (Keltner, 1996; Neugarten, 1996; Schieman, 1999) and are paramount to the well-being of older adults (Carstensen et al., 1999). Socio-emotional selectivity theory suggests that, with the realization of proximate death, the goal of social relationships change such that emotionally meaningful relationships are primary (Carstensen et al., 1999). The importance of emotionally important relationships in older adulthood can be seen in the case of marriage. Orbuch, House, Mero, and Webster (1996), using nationally representative U.S. data, found that marital quality increased sharply from midlife to older adulthood. This study is of particular importance because it showed that the relationship between marital duration and marital quality was non-linear; the greatest increases in marital quality occurred for those married longer than 45 years. To the extent that aging brings about a social and emotional sense of wisdom and marital quality increases from midlife to late life, sex outcomes would also enhance at these ages. In addition to an individual maturation process that occurs with age, maturation can also occur between spouses with increasing marital duration such that a couple-specific emotional resiliency develops. Just as social and emotional benefits of aging will be greater for those in longer-duration marriages compared to those with marriages of a shorter duration, people's sex lives may also benefit for those in longer-duration marriages.

The second perspective, *relationship-specific capital*, also expects that individuals in longer-duration marriages will have higher levels of sexual satisfaction than those in shorter-duration marriages. In marriage, both partners have incentives to invest in the marriage-specific abilities (capital) to provide earning, companionship, empathy, or sexual pleasure (Becker, 1991). This capital includes partner-specific skills that enhance the enjoyment of sex and knowledge about a spouse's sexual preferences (Laumann et al., 1994). The longer each partner invests in these partner-specific skills, the more utility they receive from sexual activity.

Another framework, *habituation*, argues that sex outcomes decrease with marital duration. When a couple initially shares a high level of satisfaction, they are likely to have more sex. As marital sex increases in frequency, the satisfaction wears off, which leads to lower frequency of sex. This framework is an example of diminishing marginal utility, where the marginal

utility of consuming a good diminishes as that good increases (Liu, 2003). In this "habituation" process, decreased novelty of benefit of, and interest in sex also results from having a partner that is highly accessible and predictable in sexual behaviors (Call et al., 1995; James, 1981).

The foregoing perspectives assume that the relationship between marital duration and sexual frequency and satisfaction is linear. However, marital duration and sexual frequency and satisfaction could share "U-shaped" relationship, in which the benefits from growing old with a spouse and the detracting effects of habituation both influence sexual outcomes conjointly. Prior research suggests two scenarios (Liu, 2003): First, sexual satisfaction declines less and less steeply until the slope eventually becomes positive. In earlier stages of marital duration, habituation dominates; later, maturity of aging and partner-specific capital effects offset habituation somewhat. Orbuch et al. (1996) found such a "U-shaped" pattern; earlier in a marriage, marital quality started high but then declined until the beginning of late life where it then increased with those married longer than 45 years having the highest levels of marital quality.

#### Gender, Marital Characteristics, and Sex

The frequency and experience of sex tend to vary by gender among older adults. Lindau et al. (2007) reported gender differences in sexual behavior and found that 57–85-year-old females were less likely than their male counterparts to report sexual activity at all ages, with 43 % of women indicating low sexual desire—the most prevalent obstacle to sexual activity among this group. Gender disparities in mortality also created partnering problems in older ages: Among 75–85-year-olds, 72 % of men—but just 38 % of women—indicated the presence of a spouse or partner (Karraker et al., 2011). Given the importance of sex partner availability for sexual activity, shifts in the percentage of women who are widowed is an important predictor of sexual frequency. Not surprisingly, Lindau et al. also found large decreases in sexual activity as physical health deteriorated.

Gender differences in frequency of sex and experiences of sex also exist among married individuals (McFarland et al., 2011). One of the main reasons for these gender differences stem from age hypergamy; men tend to marry younger women and women tend to marry older men (England & McClintock, 2009). Further, research on sex among older adults found that sexual activity was more dependent on men's health than women's health (Lindau et al., 2007). Given age hypergamy and the importance of male health for sex within couples, frequency and experiences of sex are more likely to be lower for women as compared to men of similar age.

A growing body of research has found that the influence of marital characteristics on health and well-being varies by gender (Kiecolt-Glaser & Newton, 2001). In general, researchers have found that marriage tends to benefit men's health more (Umberson, 1992). Within marriage, women and men tend to be

differentially influenced by the ways in which marriage operates as a source of stress or social support. The gender difference in marriage effects may also be important for sexual experiences. Given this background, we expect that marital characteristics will affect the frequency of sex differently for women and men.

Given the foregoing discussion, we examine the effects of two marital characteristics on frequency of sex, physical pleasure in, and emotional satisfaction in the sexual relationship among older married adults. First, a focal interest is the effects of being in a first marriage or being remarried on sex outcomes. Second, we investigate the effects of marital duration and whether it has a curvilinear relationship with sex outcomes. Finally, we examine whether the effects of these marital characteristics vary by gender.

## Method

### Participants

The NSHAP was a nationally representative probability sample of 3,005 U.S. community-dwelling adults age 57–85 years, including oversamples of blacks, Hispanics, men, and individuals aged 75–85. The survey had an unweighted response rate of 74.8 % and a weighted response rate of 75.5 %.

This study focused on how marital characteristics influence sexual activity. Therefore, only married individuals were included in the analyses. After using listwise deletion of missing values to deal with item nonresponse, complete data were available for between 1,623 and 1,656 married older adults depending on the dependent variable of interest. We used a sampling weight in all analyses to reflect the current demographic landscape of older Americans.

### Measures

#### *Dependent Variables*

We examined three outcomes: sexual frequency, level of physical pleasure in the sexual relationship, and emotional satisfaction in the sexual relationship. These measures have been used in prior research across a variety of study populations (DeLamater et al., 2008; Gatzeva & Paik, 2010; Paik, 2010). The physical pleasure and emotional satisfaction measures have been used in a number of additional studies, also across different study populations (Carpenter, Nathanson, & Kim, 2009; Fahs & Swank, 2011; Laumann et al., 2006; Liu, 2003).

Data on the frequency of sex were collected via in-home interviews. Participants were first asked about the timing of their most recent sexual activity. Those who indicated their most recent sexual encounter was within 12 months of the interview were asked a follow-up question about how often they engaged in sexual activity with their current partner. Those who indicated

that they “don’t know” or who refused to answer either of these items were excluded from analyses. Sex frequency variable was coded as 0 (no sexual encounters in the last 12 months) to 5 (daily or more).

NSHAP collected data on participants’ assessment of physical pleasure and emotional satisfaction in their sexual relationship with their partner through two questions. These questions were prefaced in the interviews by: “The next set of questions is about your sexual relationship with (PARTNER) in the last 12 months.” These questions were asked of all participants and pertained to the last or current partner. Responses for both physical pleasure and emotional satisfaction were coded as: 0 (not at all pleasurable) to 4 (extremely pleasurable). Participants who responded “don’t know” or who refused to answer were excluded from analyses.

#### *Key Independent Variables*

We created a dichotomous variable to assess whether a participant was in a first marriage (coded 1) or a higher-order marriage (coded 0).

Marital duration was measured in years ( $M = 37.75$ ) and was obtained by subtracting the year of marriage from the year of interview. Mean marital duration for first marriages and remarriages were 44.05 and 21.7 years, respectively. To test for nonlinear effects of marital duration, we also included a quadratic term (marital duration X marital duration).

#### *Control Variables*

Age, race, educational attainment, work status, and religion were included as control variables because of their importance in prior literature. For race, Black was coded as 1, else 0. As a measure of education, we used a series of dummy variables, which have been shown to be a predictor of sex frequency in prior research (DeLamater & Sill, 2005): no high school degree, high school degree (reference), and college degree or more. Work status was also measured as a series of binary variables: working, homemaker, retired (reference), and other employment. Religion has been linked to marriage and sexual attitudes and behavior in prior research (Uecker, 2008; Uecker & Stokes, 2008), including research on sexual behavior and satisfaction among older adults (McFarland et al. 2011). Due to the available denomination categories in the NSHAP, we used a modified version of the Steensland et al. (2000) religious tradition typology to control for religion: religiously unaffiliated, Catholic, Jewish, mainline Protestant, conservative Protestant (reference), other Protestant, and other religion. We also used the NSHAP network roster file to add a measure of the number of people other than the spouse living in the home of the participant. This measure included those living in the home during all or part of the year. We included this control variable because of the possibility that potential curvilinear relationships between marital duration and sex outcomes

have to do with children, relatives, or other household residents present in the home rather than relationship duration per se.

Previous research has also suggested that health has a strong impact on both sexual frequency and enjoyment (Delamater et al., 2008; Laumann et al., 2006). NSHAP included measures of partner health and self-reported health. Both range from 1 (poor) to 5 (excellent). We also created a dummy variable that measured the health of a couple collectively. If the participant indicated that both partners had very good or excellent health, they were considered a healthy couple and coded 1 (else 0). An individual's inclination to engage in sex and the extent to which they felt pleasure from sex and emotional satisfaction may also be influenced by functional limitations. A scale measuring functional limitations was constructed using 7 items that asked participants the level of difficulty they encountered when performing activities of daily living (ADL), such as walking, dressing, bathing, etc. Responses varied from 0 (no difficulty) to 3 (unable to do). The Cronbach's alpha for this scale was .85. Unfortunately, this measure was not available for participants' partners. Analyses of the sexual pleasure and emotional satisfaction outcomes also included frequency of sex as an additional predictor.

In order to measure positive and negative spousal interactions, two scales—each consisting of two items from the take-home questionnaire—were created. Items tapping participants' openness with their spouse and also their reliance upon them regarding worries and problems were summed to create a variable for positive spousal interaction. Due to the ordinal nature of these items, polychoric correlations were used to compute the reliability score. The alpha value was .80. Two items asked participants if their spouse was too critical and demanding. These were summed to create a variable for negative spousal interaction. Responses for all questions ranged from "often" to "hardly ever." The alpha for the negative spousal interaction scale was .70.

Overall marital happiness was measured by asking participants to describe their relationship on a scale from "very unhappy" (coded 1) to "very happy" (coded 7). Those who indicated "did not know" or did not provide a response were omitted from analyses. Table 1 shows descriptive statistics for study variables and Table 2 presents a correlation matrix of study variables.

## Data Analysis

We analyzed older adults' frequency of sex, physical pleasure, and emotional satisfaction. Analysis of each outcome followed the same three-model strategy and all models controlled for background characteristics. First, we ran OLS regression models to estimate the relationship between marital status (first marriage), marital duration squared, and the sex outcomes (Table 3). Marital duration squared is a quadratic term (marital duration  $\times$  marital duration). A significant quadratic term indicated that marital duration had a curvilinear relationship with the outcome

**Table 1** Descriptive statistics

	Mean/ percentage	SD	Minimum	Maximum
Frequency of sex	1.41	1.24	0	5
Physical pleasure	3.00	0.97	0	4
Emotional satisfaction	3.07	0.94	0	4
Age (in years)	66.88	7.60	57	85
Female	43 %		0	1
Black	7 %		0	1
Religiously unaffiliated	7 %		0	1
Catholic	29 %		0	1
Jewish	3 %		0	1
Other religion	15 %		0	1
Conservative protestant	12 %		0	1
Mainline protestant	25 %		0	1
Other protestant	9 %		0	1
No high school degree	16 %		0	1
High school degree	57 %		0	1
College degree or more	27 %		0	1
Employed	39 %		0	1
Homemaker	11 %		0	1
Retired	45 %		0	1
Other employment status	5 %		0	1
Nonspouse residents	0.34	0.90	0	9
Healthy couple	0.29	0.48	0	1
Self-reported health	3.37	1.12	1	5
Functional limitations	0.14	0.34	0	3
Positive spousal interaction	5.59	0.84	2	6
Negative spousal interaction	3.06	1.18	2	6
Relationship happiness	6.28	1.28	1	7
First marriage	68 %		0	1
Marital duration	36.63	16.11	0	69

*N* is based on cases in models predicting frequency of sex ( $N = 1,656$ ). *N* for pleasure is 1,623. *N* for emotional satisfaction is 1,642

(for more on curvilinear effects, see Aneshensel, 2012; Baker & Draper, 2010). Then we added the interaction of gender by first marriage (Table 4, Models 1–3), gender by marital duration (Table 4, Models 4–6), and gender by marital duration squared (Table 4, Models 7–9).

## Results

Before reporting the results of regressions, we describe the focal outcomes of the study. All sex outcomes were five-point measures. With regard to sexual frequency, few participants reported having sex daily or more (.4 %) or 3–6 times a week or more (2.9 %). However, close to one in five (18.4 %) indicated having sex once or twice a week. Roughly 22 % percent

Table 2 Pearson correlation coefficients; study variables

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Frequency of sex	1															
Physical pleasure	.30***	1														
Emotional satisfaction	.24***	.68***	1													
Age	-.33***	-.12***	-.09***	1												
Female	-.10***	-.22***	-.20***	-.02	1											
Black	.02	-.02	-.05*	-.07**	.00	1										
Religiously unaffiliated	.00	-.04	-.03	-.04	-.05	-.07**	1									
Catholic	.00	-.06*	-.07**	.02	-.03	-.13***	-.17***	1								
Jewish	.02	-.03	-.02	.00	.03	-.05	-.04	-.10***	1							
Other religion	-.03	.00	.00	.00	.05*	.11***	-.11***	-.27***	-.07**	1						
Conservative Protestant	.01	.04	.02	-.04	.02	.20***	-.10***	-.24***	-.06*	-.16***	1					
Mainline Protestant	-.01	.04	.07**	.02	.02	-.05	-.15***	-.37***	-.10***	-.24***	-.22***	1				
Other Protestant	.02	.04	.01	.03	-.05*	-.02	-.09***	-.20***	-.05*	-.14***	-.12***	-.19***	1			
No high school degree	-.06*	-.03	-.07**	.08**	-.01	.09***	-.03	.07**	-.02	.05*	.07**	-.15***	.01	1		
High school degree	-.04	.01	.01	.03	.12***	-.02	.00	-.01	-.14***	.02	.02	.03	-.01	-.51***	1	
College degree plus	.09***	.01	.05*	-.10***	-.13***	-.06*	.02	-.04	.18***	-.07**	-.09***	.09***	.00	-.27***	-.69***	1
Employed	.18***	.08**	.07**	-.36***	-.15***	-.01	.01	-.04	.07**	.00	-.02	.01	.03	-.09***	-.03	.11***
Homemaker	-.07**	-.05*	-.06*	.03	.40***	-.05*	-.04	-.01	-.05	.03	.02	.02	-.02	.06*	.05	-.10***
Retired	-.12***	-.02	-.01	.39***	-.09***	.00	.01	.04	-.03	-.06	.00	.01	.00	.00	.02	-.02
Other employment status	-.02	-.05*	-.06*	-.12***	-.02	.10***	.01	.01	-.02	.08***	.02	-.07**	-.03	.12***	-.04	-.05*
Nonspouse residents	.04	.01	.00	-.13***	-.04	.08**	.01	.04	.01	.04	.02	-.08***	-.02	.13***	-.06	-.04
Healthy couple	.25***	.17***	.17***	-.16***	-.06*	-.07**	-.03	-.06**	.02	-.03	-.02	.10***	.02	-.16***	.02	.11***
Self-rated health	.25***	.10***	.07**	-.11***	.03	-.07**	.01	-.05*	.06*	-.13***	.00	.08**	.07**	-.20***	.01	.15***
Functional limitations	-.20***	-.04	-.01	.10***	.00	.03	-.01	.03	-.04	.06*	.01	-.03	-.05*	.11***	-.04	-.05
Positive spousal interaction	.17***	.33***	.45***	-.10***	-.08**	-.05*	-.01	-.01	-.02	-.03	.04	.04	-.03	-.06*	-.01	.06*
Negative spousal interaction	-.12***	-.21***	-.29***	.04	-.14***	.11***	-.02	.04	.03	-.05*	-.01	-.02	.04	-.04	.04	-.01
Relationship happiness	.15***	.42***	.53***	-.01	-.11***	-.06*	-.01	-.07**	-.04	.05*	.04	.05*	-.04	-.05*	.03	.01
First marriage	-.06*	-.10***	-.06**	.06*	.07**	-.02	-.10***	.12***	.04	.01	.00	-.04	-.08**	.01	-.03	.03
Marital duration	-.26***	-.15***	-.10***	.45***	.11***	-.06*	-.10***	.07**	.00	.01	.02	-.02	-.03	.06*	.01	-.06**

Table 2 continued

	17	18	19	20	21	22	23	24	25	26	27	28	29	
Frequency of sex	1													
Physical pleasure	2													
Emotional satisfaction	3													
Age	4													
Female	5													
Black	6													
Religiously unaffiliated	7													
Catholic	8													
Jewish	9													
Other religion	10													
Conservative Protestant	11													
Mainline Protestant	12													
Other Protestant	13													
No high school degree	14													
High school degree	15													
College degree plus	16													
Employed	17	1												
Homemaker	18	-.28***	1											
Retired	19	-.72***	-.32***	1										
Other employment status	20	-.19***	-.08***	-.21***	1									
Nonsouse residents	21	.05	-.02	-.05*	.03	1								
Healthy couple	22	.17***	-.04	-.10***	-.11***	.01	1							
Self-rated health	23	.21***	-.05*	-.07**	-.22***	-.02	.55***	1						
Functional limitations	24	-.17***	.05	.02	.25***	.02	-.21***	-.43***	1					
Positive spousal interaction	25	.00	.01	-.01	.02	-.02	.10***	.04	.01	1				
Negative spousal interaction	26	.06*	-.07**	.00	-.02	-.02	-.11***	-.03	-.02	-.20***	1			
Relationship happiness	27	-.01	.00	.03	-.04	-.02	.12***	.05*	-.03	.39***	-.31***	1		
First marriage	28	-.08**	.10***	.01	.01	-.03	-.04	-.01	-.06*	.02	.05*	-.02	1	
Marital duration	29	-.23***	.10***	.17***	-.04	-.08**	-.12***	-.09***	.04	-.04	.07	-.01	.72***	1

**Table 3** OLS regressions of predicting frequency of sex, physical pleasure, and emotional satisfaction

	Frequency of sex			Physical pleasure			Emotional satisfaction		
	Model 1			Model 2			Model 3		
	<i>b</i>	<i>B</i>	SCC	<i>b</i>	<i>B</i>	SCC	<i>b</i>	<i>B</i>	SCC
Intercept	3.63***			1.46***			.78*		
Age (in years)	-.04***	-.26	.026	-.01	-.05	.001	-.01	-.05	.001
Female	-.19**	-.08	.005	-.34***	-.18	.025	-.27***	-.15	.017
Black	.12	.03	.001	.02	.01	.000	.01	.00	.000
Religiously unaffiliated	-.10	-.02	.000	-.22*	-.06	.002	-.09	-.03	.000
Catholic	.06	.02	.000	-.10	-.05	.001	-.03	-.02	.000
Jewish	.08	.01	.000	-.05	-.01	.000	.09	.02	.000
Other religion	-.05	-.01	.000	-.05	-.02	.000	.00	.00	.000
Mainline protestant	-.09	-.03	.000	-.02	-.01	.000	.07	.03	.000
Conservative protestant ( <i>r</i> )									
Other protestant	.08	.02	.000	.06	.02	.000	.07	.02	.000
No high school degree	.05	.02	.000	.00	.00	.000	-.08	-.03	.001
High school degree ( <i>r</i> )									
College degree or more	.05	.02	.000	-.10*	-.05	.002	-.05	-.02	.000
Employed	.01	.00	.000	-.01	.00	.000	.03	.02	.000
Homemaker	-.04	-.01	.000	.06	.02	.000	-.01	.00	.000
Retired ( <i>r</i> )									
Other employment status	.00	.00	.000	-.22*	-.05	.002	-.26**	-.06	.003
Nonspouse residents	.00	.00	.000	.00	.00	.000	.00	.00	.000
Healthy couple	.27***	.10	.007	.08	.04	.001	.11*	.05	.002
Self-rated health	.11***	.10	.005	.01	.01	.000	-.02	-.02	.000
Functional limitations	-.40***	-.11	.009	.09	.03	.001	.13*	.04	.002
Positive spousal interaction	.11**	.08	.005	.18***	.15	.019	.29***	.26	.054
Negative spousal interaction	-.07**	-.07	.004	-.07***	-.09	.007	-.12***	-.15	.018
Relationship happiness	.07**	.08	.004	.21***	.28	.059	.25***	.34	.086
Frequency of sex				.14***	.18	.025	.07***	.10	.007
First marriage	.24**	.10	.003	-.10	-.05	.001	-.05	-.03	.000
Marital duration	-.04***	-.52	.014	.00	-.08	.000	-.01	-.11	.001
Marital duration squared	.00*** <sup>a</sup>	.36	.006	.00	.06	.000	.00	.12	.001
R-square	.24			.31			.41		

Frequency of sex  $N = 1,656$ , Physical pleasure  $N = 1,623$ , Emotional satisfaction  $N = 1,642$

*b* unstandardized coeff., *B* standardized coeff., *SCC* semipartial correlation coeff., *r* reference

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

<sup>a</sup> This coefficient rounded to four decimal places is .0004

reported having sex 2–3 times a month, 29.2 % once a month or less, and 27.7 % did not have sex in the last year. In the second dependent measure, physical pleasure, 32.8 % of participants reported that their sexual relationship was extremely physically pleasurable, 41.6 % very pleasurable, 19.8 % moderately pleasurable, 4.2 % slightly pleasurable, and 1.7 % not at all pleasurable. Finally, in the third outcome, emotional satisfaction, 35.9 % indicated that their sexual relationship was extremely emotionally satisfying, 40.4 % very satisfying, 19.3 % moderately satisfying, 3.2 % slightly satisfying, and 1.2 % not at all satisfying.

The first model predicting frequency of sex (Model 1, Table 3) showed that being in a first marriage was associated with higher frequency of sex. To illustrate, the predicted value on the frequency of sex outcome went from 1.21 for a remarried individual to 1.45 for an individual in a first marriage—a 19.8 % increase. Comparing the size of standardized coefficients, first marriage was the fourth largest standardized coefficient after marital duration squared, couple health, and self-rated health. Additionally, first marriage had a semipartial correlation coefficient on par with relationship negativity, another significant variable in the model. Turning to Models 2 and 3, marriage order



**Table 4** OLS regressions of predicting frequency of sex, physical pleasure, and emotional satisfaction; Interaction effects

	Frequency of sex			Physical pleasure			Emotional satisfaction			Frequency of sex			Physical pleasure		
	Model 1			Model 2			Model 3			Model 4			Model 5		
	<i>b</i>	<i>B</i>	SCC	<i>b</i>	<i>B</i>	SCC	<i>b</i>	<i>B</i>	SCC	<i>b</i>	<i>B</i>	SCC	<i>b</i>	<i>B</i>	SCC
Intercept	3.64***			1.44***			.78*			2.88***			1.29***		
Age (in years)	-.04***	-.25	.026	-.01	-.05	.001	-.01	-.05	.001	-.03***	-.20	.021	-.01	-.04	.001
Female (A)	-.23*	-.10	.003	-.30***	-.16	.007	-.26***	-.14	.006	-.49***	-.21	.006	-.28**	-.15	.003
Black	.12	.03	.001	.02	.00	.000	.01	.00	.000	.11	.02	.001	.01	.00	.000
Religiously unaffiliated	-.10	-.02	.000	-.22*	-.06	.002	-.09	-.03	.000	-.10	-.02	.000	-.22*	-.06	.002
Catholic	.06	.02	.000	-.10	-.05	.001	-.03	-.02	.000	.05	.02	.000	-.10	-.05	.001
Jewish	.08	.01	.000	-.05	-.01	.000	.09	.02	.000	.05	.01	.000	-.05	-.01	.000
Other religion	-.05	-.01	.000	-.05	-.02	.000	.00	.00	.000	-.05	-.01	.000	-.05	-.02	.000
Mainline Protestant	-.09	-.03	.000	-.02	-.01	.000	.07	.03	.000	-.09	-.03	.000	-.01	-.01	.000
Conservative Protestant (r)															
Other Protestant	.08	.02	.000	.06	.02	.000	.07	.02	.000	.08	.02	.000	.06	.02	.000
No high school degree	.05	.02	.000	-.01	.00	.000	-.08	-.03	.001	.05	.02	.000	.00	.00	.000
High school degree (r)															
College degree or more	.05	.02	.000	-.10*	-.05	.002	-.05	-.02	.000	.02	.01	.000	-.11*	-.05	.002
Employed	.01	.00	.000	-.01	.00	.000	.03	.02	.000	.01	.00	.000	-.01	.00	.000
Homemaker	-.05	-.01	.000	.06	.02	.000	-.01	.00	.000	-.06	-.02	.000	.06	.02	.000
Retired (r)															
Other employment status	.00	.00	.000	-.23*	-.05	.002	-.26**	-.06	.003	.01	.00	.000	-.22*	-.05	.002
Nonspouse residents	.00	.00	.000	.00	.00	.000	.00	.00	.000	-.01	.00	.000	.00	.00	.000
Healthy couple	.27***	.10	.007	.08	.04	.001	.11*	.05	.002	.27***	.10	.007	.08	.04	.001
Self-rated health	.11***	.10	.005	.01	.01	.000	-.02	-.02	.000	.11***	.10	.005	.01	.01	.000
Functional limitations	-.40***	-.11	.009	.09	.03	.001	.13*	.05	.002	-.39***	-.11	.009	.10	.03	.001
Positive spousal interaction	.11**	.07	.005	.18***	.15	.019	.29***	.26	.054	.11**	.08	.005	.18***	.15	.019
Negative spousal interaction	-.07**	-.07	.004	-.07***	-.09	.006	-.12***	-.15	.017	-.07**	-.07	.004	-.07***	-.09	.007
Relationship happiness	.07**	.08	.004	.21***	.28	.059	.25***	.34	.086	.08**	.08	.005	.21***	.28	.058
Frequency of sex				.14***	.18	.025	.07***	.10	.007				.14***	.18	.026
First marriage (B)	.22*	.09	.002	-.08	-.04	.000	-.05	-.02	.000	.27**	.11	.004	-.09	-.05	.001
Marital duration (C)	-.04***	-.52	.014	.00	-.08	.000	-.01	-.11	.001	-.02***	-.26	.017	.00	-.01	.000
Marital duration squared (D)	.00***	.36	.006	.00	.07	.000	.00	.13	.001						
A X B	.06	.02	.000	-.06	-.03	.000	-.02	-.01	.000	.01*	.16	.003	.00	-.03	.000
A X C															
A X D															
R-square	.24			.31			.41			.24			.31		

Table 4 continued

	Emotional satisfaction			Frequency of sex			Physical pleasure			Emotional satisfaction		
	Model 6			Model 7			Model 8			Model 9		
	<i>b</i>	<i>B</i>	SCC	<i>b</i>	<i>B</i>	SCC	<i>b</i>	<i>B</i>	SCC	<i>b</i>	<i>B</i>	SCC
Intercept	.52			3.79***			1.50***			.76*		
Age (in years)	.00	-.02	.000	-.04***	-.25	.026	-.01	-.05	.001	-.01	-.05	.001
Female (A)	-.24*	-.13	.002	-.64**	-.27	.004	-.44**	-.23	.003	-.22	-.13	.001
Black	.01	.00	.000	.13	.03	.001	.02	.01	.000	.01	.00	.000
Religiously unaffiliated	-.09	-.03	.000	-.09	-.02	.000	-.22*	-.06	.002	-.09	-.03	.000
Catholic	-.03	-.02	.000	.05	.02	.000	-.10	-.05	.001	-.03	-.02	.000
Jewish	.08	.01	.000	.09	.01	.000	-.04	-.01	.000	.09	.02	.000
Other religion	.00	.00	.000	-.05	-.02	.000	-.05	-.02	.000	.00	.00	.000
Mainline Protestant	.07	.03	.000	-.09	-.03	.000	-.01	-.01	.000	.07	.03	.000
Conservative Protestant (r)												
Other Protestant	.07	.02	.000	.08	.02	.000	.06	.02	.000	.07	.02	.000
No high school degree	-.08	-.03	.001	.05	.02	.000	-.01	.00	.000	-.08	-.03	.001
High school degree (r)												
College degree or more	-.05	-.03	.001	.04	.02	.000	-.10*	-.05	.002	-.05	-.02	.000
Employed	.03	.02	.000	.00	.00	.000	-.01	.00	.000	.03	.02	.000
Homemaker	-.01	.00	.000	-.06	-.02	.000	.07	.02	.000	-.01	.00	.000
Retired (r)												
Other employment status	-.26**	-.06	.003	.01	.00	.000	-.22*	-.05	.002	-.26**	-.06	.003
Nonspouse residents	.00	.00	.000	.00	.00	.000	.00	.00	.000	.00	.00	.000
Healthy couple	.10*	.05	.002	.27***	.10	.007	.08	.04	.001	.11*	.05	.002
Self-rated health	-.02	-.02	.000	.11***	.10	.005	.01	.01	.000	-.02	-.02	.000
Functional limitations	.13*	.05	.002	-.41***	-.11	.009	.09	.03	.001	.13*	.05	.002
Positive spousal interaction	.29***	.26	.055	.11**	.07	.004	.18***	.15	.018	.29***	.26	.054
Negative spousal interaction	-.12***	-.15	.018	-.07**	-.07	.004	-.07***	-.09	.007	-.12***	-.15	.017
Relationship happiness	.25***	.34	.085	.08**	.08	.005	.21***	.28	.058	.25***	.33	.085
Frequency of sex	.07***	.10	.007	.00	.00	.000	.14***	.18	.025	.07***	.10	.007
First marriage (B)	-.04	-.02	.000	.23*	.09	.003	-.10	-.05	.001	-.05	-.03	.000
Marital duration (C)	.00	.00	.000	-.05***	-.61	.013	-.01	-.16	.001	-.01	-.11	.000
Marital duration squared (D)				.00***	.41	.005	.00	.16	.001	.00	.13	.000
A X B												
A X C	.00	-.02	.000	.02	.40	.001	.01	.27	.001	.00	-.03	.000
A X D				.00	-.21	.001	.00	-.24	.001	.00	.01	.000

Table 4 continued

	Emotional satisfaction		Frequency of sex		Physical pleasure		Emotional satisfaction	
	Model 6	B	Model 7	B	Model 8	B	Model 9	B
R-square	.41		.24		.31		.41	

Frequency of sex  $N = 1,656$ , Physical pleasure  $N = 1,623$ , Emotional satisfaction  $N = 1,642$

$b$  unstandardized coeff.,  $B$  standardized coeff.,  $SCC$  semipartial correlation coeff.,  $r$  reference

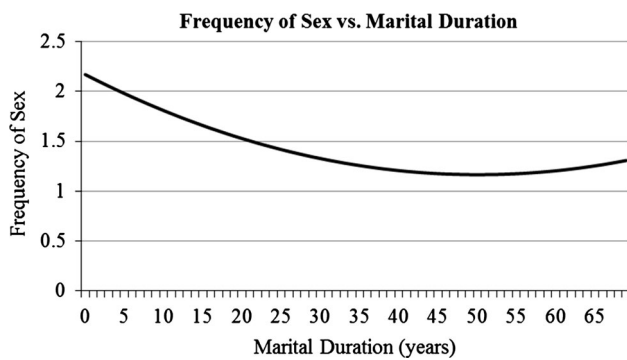
\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

was not significantly related to physical pleasure or emotional satisfaction.

Returning to Model 1, the marital duration quadratic term had a significant and positive association with frequency of sex. Marital duration, the lower-order coefficient, had a negative association with frequency of sex. Interpreted together, the marital duration and marital duration squared results suggested a curvilinear (U-shaped) relationship between marital duration and frequency of sex. Figure 1 shows the quadratic relationship between frequency of sex and marital duration when other covariates were at their mean values. The figure shows that frequency of sex decreased at an increasingly slower rate with increasing marital duration until roughly 50 years. After 50 years of marriage, frequency of sex increased slightly with marital duration. Marriage duration squared had a semipartial correlation coefficient on par with other significant variables, such as gender, self-rated health, and the relationship interaction and happiness variables. The quadratic term for marital duration was not statistically significant in the physical pleasure or emotional satisfaction models (Models 2 and 3).

The effects of some control variables are also worth noting. Age had an inverse relationship with frequency of sex. Women reported lower frequency of sex compared to men. Favorable couple health, self-rated health, positive spousal interaction, and relationship happiness were all associated with higher frequency of sex. Negative spousal interaction was associated with lower frequency of sex. For the physical pleasure and emotional satisfaction analyses, women reported lower values for both outcomes compared to men. Compared to conservative Protestants, religiously unaffiliated individuals reported lower physical pleasure. College graduates reported lower physical pleasure compared to high school graduates. Compared to retired persons, those with “other” employment status (i.e., disabled, unemployed, or other) reported lower physical pleasure and emotional satisfaction. Couple health and functional limitations were associated with higher emotional satisfaction. Favorable couple health, self-rated health, positive spousal interaction, relationship happiness, and frequency of sex were all associated with greater physical pleasure and emotional satisfaction. Negative spousal interaction was associated with lower physical pleasure and emotional satisfaction.

In order to explore the possibility that relationships may have depended on gender, we estimated a series of models that included interactions of focal variables by gender. Models 1 through 3 in Table 4 tested whether the effect of being in a first marriage varied by gender. None of the interaction terms of first marriage by gender were statistically significant in any models. In Models 4 through 6, we tested whether marital duration had a linear effect that varied by gender. We found that an interaction between gender and marital duration was statistically significant when predicting frequency of sex (Model 4), but not when predicting physical pleasure (Model 2) or emotional satisfaction (Model 3). Seen in Fig. 2, increased marital duration was



**Fig. 1** Frequency of sex as a function of marital duration in years among married older adults in the National Social Life, Health, and Aging Project

associated with lower frequency of sex for women and men alike. However, the gap between men's higher sex frequency and women's low sex frequency was largest at low levels of marital duration. With increasing marital duration, the gap diminished and eventually closed at relatively high levels of marital duration (around 55 years of marriage).

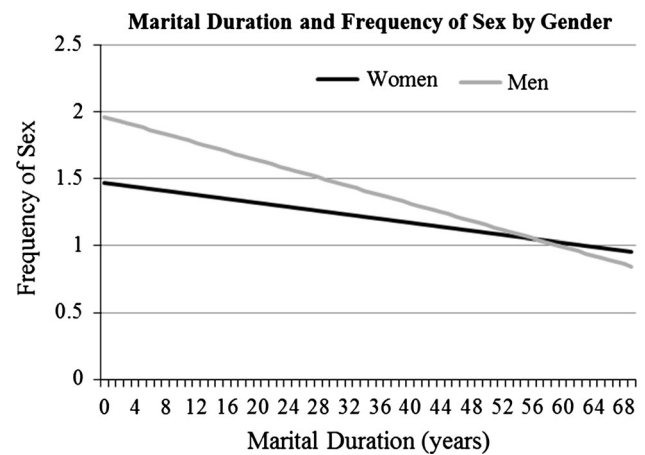
Models 7 through 9 in Table 4 tested whether curvilinear relationships between marital duration and sex outcomes varied by gender. No significant interaction effect was present between gender and marital duration squared in any model.<sup>2</sup>

## Discussion

This study was the first to use a national sample to examine the role of marriage order and marital duration in frequency of sex, physical pleasure, and emotional satisfaction in the sex lives of married older Americans aged 57–85 years. Further, this was the first study to test whether key relationships between these marital characteristics and these sex outcomes differed significantly by gender. This study contributed several findings. Results showed that (1) individuals in their first marriage had more frequent sex than remarried individuals; (2) marital duration had a curvilinear (U-shaped) relationship with frequency of sex; and (3) a linear relationship between marital duration and frequency of sex varied by gender such that men had more frequent sex than women in younger marriages. We discuss each of these findings in turn.

First, some support was present for the idea that sex differed in first marriages compared to remarriages. We found that individuals in first marriages had sex more frequently than remarried individuals; however, marriage order made no difference for physical pleasure and emotional satisfaction. Ideas such as remarriage as an “incomplete institution” (i.e., an institution with less clear

<sup>2</sup> In ancillary models, we included a difference score between the partners' ages. The difference score variable approached significance ( $p = .055$ ) when included in the model with the gender X marital duration interaction. We, however, saw no meaningful changes in our key analyses.



**Fig. 2** Frequency of sex as a function of marital duration in years and variations by gender among married older adults in the National Social Life, Health, and Aging Project

roles, norms, and expectations) (Cherlin, 1978) may be relevant for predicting frequency of sexual behavior among older adults. Individuals who have experienced the end of a marriage in the past may not perceive the same level of permanence in their current marriage as those who have never had a marriage end and thus remarried individuals may have somewhat lower motivation for investing in frequent sex. Expected permanence may help cultivate commitment, trust in the exclusivity of the sexual relationship, and an overall feeling of security, which can further motivate more frequent investments in sex. While research on sexual pleasure among young adults has indicated that commitment and permanency in relationships is associated with greater pleasure (Armstrong, England, & Fogarty, 2012), it is noteworthy that we found no significant difference between first and subsequent marriages in terms of physical pleasure or emotional satisfaction. Our results suggest that the potential negative effect of perceiving less relationship permanence applies to frequency of sex among older adults.

Second, this study found a “U-shaped” relationship between marital duration and frequency of sex, but not for physical pleasure or emotional satisfaction. This finding highlights the relevance of several perspectives—habituation, aging as maturity, and partner-specific human capital—for the frequency of sex. It also helps make sense of these perspectives, some of which offer countervailing expectations regarding older adults' sex lives. The results were limited in that they were not a complete affirmation of any one perspective. However, based on the results at hand, we suggest that evidence was present in support of all three perspectives. Although sex decreased in frequency as marriages endured, it did so at a decelerating rate and eventually began to increase somewhat. To illustrate, take three married individuals of the same age, health status, and demographic profile, an individual married for 1 year will have appreciably more sex than an individual married for 50 years. However, an individual married for 50 years will have somewhat less sex than

an individual married for 65 years. The effects of habituation may at first have negatively impacted the sex lives of older adults, but growing old as a couple and the experience and knowledge conferred may have eventually led to a minor rebound in frequency of sex. Future research could seek to assess the extent to which aging as maturity or partner-specific capital mechanisms explain more of upward portion of the curvilinear pattern.

Finally, in examining the possibility that the effects of marital characteristics varied by gender, we found that a linear relationship between marital duration and frequency of sex differed between women and men. Consistent with the notion of habituation, increased marital duration was associated with lower frequency of sex for women and men alike. However, the gap between men's higher sex frequency and women's low sex frequency was largest at low levels of marital duration. With increasing marital duration, the sex frequency gap diminished and eventually closed at relatively high levels of marital duration. The finding that men generally had more frequent sex dovetails with prior work documenting gender differences in frequency of sex among married individuals (McFarland et al., 2011). The greater dependence of sex on men's health (Lindau et al., 2007) and age hypergamy—the tendency of older men and younger women to be married to each other (England & McClintock, 2009)—together likely explain the gap in frequency of sex between women and men in shorter duration marriages. In shorter duration marriages, the older men that women are married to have a greater chance of being unhealthy because the unhealthy men have not yet died. In contrast, longer duration marriages are more likely to have fewer of these unhealthy men because they are more likely to have died over time. In other words, women in longer duration marriages are more likely to be married to the healthier older men that have survived. In sum, the sex frequency convergence between men and women in longer duration marriages may be explained by the greater likelihood of long duration marriage women to be married to healthier men. These longer marriages had men whose health allowed not only their lives to endure, but also their sex lives.

Some effects of control variables were noteworthy for their support of prior research and their contribution of novel information. The pattern of relationships between this study's sex outcomes and physical limitations, couple health, and measures of relationship quality align closely with past national research on older adults aged 57–85 in the United States (McFarland et al., 2011). This study added new information as well. We found that religiously unaffiliated individuals reported lower levels of physical pleasure compared to conservative Protestants. Speculatively, this may be the case because prayer in couples has been found to be associated with greater sexual "ecstasy" (Greely, 1991) and conservative Protestants have relatively active prayer lives (Baker, 2008). Interestingly, we also found that college graduates reported lower levels of physical pleasure than high school graduates. Our inclusion of employment status also revealed noteworthy patterns. Individuals with an employment

status other than being currently employed or retired had lower physical pleasure and emotional satisfaction, suggesting a connection between occupational life and intimate experiences. The associations between better relationship quality and more frequent sex, physical pleasure, and emotional satisfaction corroborated the findings of a number of studies on the topic (e.g., MacNeil & Byers, 2005; Sprecher, 2002). Couples may have engaged in sex because of favorable relationship quality, but they also may have a positive assessment of their relationship with their spouse because of a high-quality sexual relationship.

Until recently, the sex lives of older adults have been largely neglected in scholarly research. Older adults are one of the fastest growing demographics in the United States and their sexual behavior contributes to health, quality of life, and marital quality. Researchers can no longer afford to overlook a component of social life that plays such a meaningful role for such a large proportion of the U.S. population. This study added knowledge to this area by assessing the role of marital characteristics in sex outcomes among older adults. Older adult sexual activity was higher in first marriages, suggesting the importance of permanency found in these marriages. Additionally, countervailing mechanisms may slow and even somewhat reverse the negative effects of marital duration on frequency of sex. Finally, men's higher frequency of sex in younger marriages compared to women adds to a story about the presence of sicker men driving down sex frequency in younger marriages. In general, investing in a single marriage leads to more sex in later life and longer marriage does not always mean less sex in later life.

### Limitations

This study had several important limitations. First, a weakness of the study was that it used single-item measures as dependent variables. Future studies could use multi-item scales in order to better reduce any gaps between survey questions and participants' interpretation of the meaning of questions about sex frequency, physical pleasure, emotional satisfaction, and the extent to which participants understand sexual experiences as multi-dimensional. Relatedly, the sex frequency is limited in precision by broad periods of reference in some response categories. Nevertheless, it is not uncommon in recent studies of sexual behavior (e.g., Delamater et al., 2008; Gatzeva & Paik 2010; Paik 2010). Another limitation is that we retain only married individuals in our analytic sample, excluding 46 % of the sample not married at the time of the interview; readers should use caution in applying the implications of our results to unmarried older adults, a task for future research. This study was also limited by its focus on older adults in heterosexual marriages. New research could also study sexual behavior and satisfaction among older adults who are single or in homosexual relationships. Additionally, sexual outcomes within extramarital relationships and encounters could also be studied.

We were unable to establish causal relationships among variables in this study, which also proved limiting. Selection bias may have confounded our results to some extent as those married for the longest period of time may also have been the most likely to have lived healthy lifestyles. We have assumed that marital characteristics influence sexual outcomes, but this association could have also run in the opposite direction. Another issue pertaining to selection bias is that mortality and marital duration are likely related as marriage is thought to be protective of health (McFarland, Hayward, & Brown, 2013; Waite & Gallagher, 2000). Those married for the shortest period of time were likely those who experienced divorce, making them less healthy and more likely to have died before being selected into the sample than those who had never experienced divorce. Also, some suggest that the often-found “U-shaped” relationship between marital duration and marital quality is a data artifact resulting from cross-sectional data (VanLaningham, Johnson, & Amato, 2000). This may also have been the case in regards to marital duration and sexual frequency. Accordingly, by restricting the sample to married older adults, we made our sample a select group. Those in the lowest quality marriages—and perhaps those with the lowest quality sex lives—were likely selected out of the sample. This was especially problematic for the marital duration analyses, since those in longer marriages may have been more select. Divorce is relatively rare among lengthy marriages, however, and the mean marital duration in our sample was 36.6 years, so we suspect this was not a major issue.

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