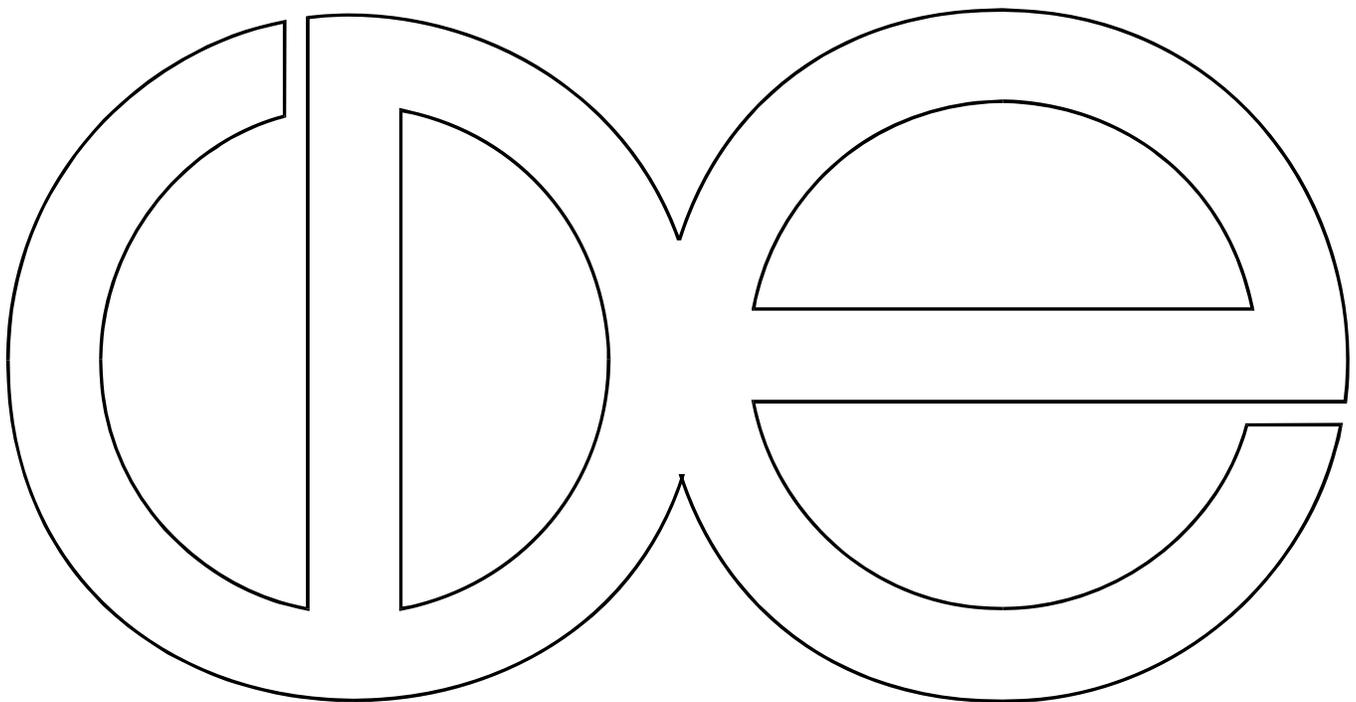


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**Sexual Satisfaction in the Seventh Decade of Life**

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### Abstract

The purpose of this research was to present and interpret data on the sexual behavior and satisfaction of men and women in their mid-sixties. These results fill an important gap in our understanding of human sexual activity across the life course. The data are from the Wisconsin Longitudinal Study 2003 mail survey, including 2,409 men and 2,717 women. The original sample consisted of graduates of Wisconsin high schools in 1957. Regression analyses were used to identify variables independently associated with sexual behavior and satisfaction. Included in the analyses were measures of physical health, sexual functioning, psychological distress, and satisfaction with the relationship. Frequency of sexual activity was significantly predicted by one measure of sexual functioning. Satisfaction with the sexual relationship was predicted by satisfaction with the relationship and frequency of sexual activity. The results support the conclusion that sexual expression remains a significant aspect of intimate relationships in the seventh decade of life.

### Sexual Satisfaction in the Seventh Decade of Life

Empirical studies of the sexual behavior and satisfaction of representative samples of people in the United States are few in number. The most frequently cited study is the National Health and Social Life Survey (NHSLs), based on interviews with a probability sample of 3,432 men and women, conducted in 1992 (Laumann, Gagnon, Michael & Michaels, 1994). Unfortunately, for budgetary reasons, the researchers limited the sample to persons between the ages of 18 and 59 (Laumann, et al., 1994, p. 52). The most recent study of a probability sample is the 2002 National Survey of Family Growth (NSFG; Mosher, Chandra, & Jones, 2005) based on interviews with 12,571 males and females. Because this survey is focused on reproduction, the sample was limited to men and women ages 15-44.

Empirical studies of the sexuality of persons over 60 are even fewer in number. Brecher and the editors of Consumer Reports Books (1984) reported the results of the largest survey of older persons to date, based on 4,246 questionnaires from persons over 50 years of age. These data were from a volunteer sample explicitly recruited to participate in a study of sexuality. Recently, two papers have been published reporting data from the American Association of Retired Persons *Modern Maturity* Sexuality Survey (DeLamater & Sill, 2005; DeLamater & Moorman, 2007). This survey involved 1,384 persons ages 45 and older. Participants were volunteers and told in advance that the survey included questions about sex.

The paucity of data on a representative sample of persons over 60 has both applied and substantive consequences. In the applied realm, without such data, mental, physical, and sexual health care professionals do not have a baseline on which to evaluate

the sexual health and sexual functioning of older persons. In the United States and elsewhere, men and women are living longer, and remaining sexually active longer (Laumann, Paik, Glasser, et al., 2006). The development of drugs and devices to treat sexual dysfunctions, many of which are thought to increase with age, highlights the need for better information about sexual functioning beyond age 60.

The absence of data also hinders efforts to develop our conceptions of and theories about sexuality and intimacy in later life. Social scientists are increasingly calling for a comprehensive life-course perspective on sexuality, in order to better comprehend the interconnectedness of sexual expression at various ages and life-stages (DeLamater, 2002; Lindau, Laumann, Levinson & Waite, 2003).

Plans to resurvey the participants in the Wisconsin Longitudinal Study provided an opportunity to collect limited data on the sexuality of this cohort. The study began with a brief survey of more than 10,000 randomly selected members of the high school graduating class of 1957 across the state of Wisconsin. Follow-up data have been collected at several points in time, and a major follow up, involving both interviews and mailed questionnaires, was conducted in 2003. In the original recruitment and follow-ups, there was no mention of questions about sex; thus, there is no self-selection bias based on knowing the research was about sex. All of the participants were ages 62 to 67, allowing analyses of data from a large sample of this age cohort.

### Conceptual Framework

#### *Sexual Satisfaction*

Sexual satisfaction figures prominently in a number of analyses of intimate and marital relationships (Blumstein & Schwartz, 1983; Edwards & Booth, 1994; Lawrance & Byers, 1995). Lawrance and Byers defined it as “*an affective response arising from*

*one's subjective evaluation of the positive and negative dimensions associated with one's sexual relationship.*" (p. 268; emphasis in original) In a recent review of the literature, Sprecher and Cate (2004) define it as "the degree to which an individual is satisfied or happy with the sexual aspect of his or her relationship." (p. 236) In their cross-national study, Laumann and colleagues (2006) focus on subjective sexual well-being, defined "as the cognitive and emotional evaluation of an individual's sexuality." (p. 146) These definitions share an emphasis on affect/evaluation of the sexual relationship. Edwards and Booth (1994) point out that sexual satisfaction has rarely been studied in persons over 60, an observation that remains true in 2007. This paper is intended to fill this gap in the literature.

There are several reasons to study the nature of and influences on sexual satisfaction. Several studies report that sexual satisfaction is linked to marital quality and marital stability (e.g., Edwards & Booth, 1994) but the data are from cross-sectional surveys so the directionality of the relationship is not clear. Yeh and colleagues (2006), using cross-lagged models to analyze longitudinal data from a midlife sample, conclude that sexual satisfaction influences marital quality both directly, and indirectly via an influence on marital instability. Given the importance of the marital relationship as a source of companionship and social support, particularly to older adults, the study of sexual satisfaction is valuable.

Published research on married couples that includes measures of sexual satisfaction or related constructs such as subjective sexual well-being find that most participants report very high or high satisfaction (Sprecher & Cate, 2004). Given the link between satisfaction and marital stability, this is not surprising; persons experiencing low satisfaction are likely to divorce. This might be less true of older persons, for whom

divorce may be unappealing, due to distaste for being single again, fear of being alone, or both.

### *Theories of Sexual Satisfaction*

Several theories have been offered to explain the importance of sexual satisfaction, and why most persons in intimate relationships are satisfied. The interpersonal exchange model of sexual satisfaction proposes that sexual satisfaction is a result of the rewards (e.g., physical pleasure, sense of intimacy) and costs (e.g., time, effort) that the person experiences in the sexual relationship; the balance of rewards and costs is evaluated according to what the person feels she or he deserves, and the perception of the partner's reward/cost balance (Lawrance & Byers, 1995). Yeh and colleagues (2006) suggest that satisfying sexual interactions are a reward that contributes to marital satisfaction.

Laumann and colleagues (1994) measured sexual satisfaction with two items: how physically pleasurable did you find your relationship with ..., and how emotionally satisfying did you find your relationship with ...? Response categories ranged from extremely pleasurable/satisfying to not at all pleasurable/satisfying. Eighty-seven percent of spouses reported being "extremely" or "very" physically pleased, and 84 percent reported being "extremely" or "very" emotionally satisfied. The researchers offer an "economic" perspective. The commitment and exclusivity associated with an intimate relationship gives one a greater incentive to invest in "partner-specific skills," including skills that enhance the pleasure and satisfaction of sex with the partner. Also, it is more cost-effective to remain in a long-term relationship than to search for new partners.

Sprecher and Cate (2004) present a symbolic interactionist perspective. Relationship properties emerge as two people interact, based on the meanings about interaction that they bring to the relationship, and their shared experiences. These meanings include role definitions and expectations that influence behavior, including sexual behavior. Partners develop interpersonal scripts that govern the what, where, and when of their sexual interactions, and these scripts are an important influence on the extent to which sexual interactions are satisfying.

### *Influences on sexual satisfaction*

We turn to a review of the published literature on sexual behavior and satisfaction in later life. We include influences on behavior for two reasons. First, frequency of activity and satisfaction are closely related (Sprecher & Cate, 2004; Young, Denny, Luquis, and Young, 1998). Second, there are a limited number of studies of each. We review biological, psychological, and social influences.

In the biological realm, the important variables are age and physical health. With respect to age, frequency of sexual behavior in men and women declines steadily into older age, and to a lesser extent there is diminution in sexual desire (Maurice, 1999). Some researchers have attributed these declines to increasing incidence of illness and or medication use. However, in their study of sexual desire in a sample of persons age 45 and older, DeLamater and Sill (2005) found that, controlling for illness and medication use, there was still a significant negative effect of age on sexual desire in both men and women.

Call and colleagues (1995) analyzed data from the 1988 National Survey of Families and Households, a representative sample of 7,463 adults (average age = 45.7). Focusing on the frequency of marital sexual activity (frequency of sexual intercourse

with the spouse in the past month), they report that, in regression analyses, age was the strongest predictor; as age increased, frequency decreased. The frequency among persons 50-54 was 5.5 times per month, declining to 2.4 times per month among persons 65-69, and .8 times a month among persons 75 or older. However, the researchers state that much of the decline was due to a decrease in the proportion of couples engaging in intercourse rather than frequency gradually decreasing; persons over 75 who were sexually active reported a frequency of 3 times per month.

Physical health includes overall ratings or assessments of physical health, and as appropriate, measures of illness, medications, and limitations related to physical condition. Numerous studies of small samples link declines in frequency of sexual behavior with various chronic conditions, including cardiovascular disease, hypertension, diabetes mellitus and arthritis (Schiavi, 1999). However, most of these studies are of samples of men and women who have been diagnosed with the condition, often with no comparison group. Also, persons with chronic conditions often are taking prescription drugs that have adverse effects on sexual functioning, such as anti-hypertension medications.

In their cross-national study of subjective sexual well-being, Laumann et al. (2006) report that self-rated health (on a four-point scale) was positively associated with sexual well-being; using ordered logit analysis, self-rated health attained the largest coefficients. The relationship was stronger in a group of Asian cultures, including China, Japan and Taiwan, than in the cluster of western cultures.

The psychological realm includes relevant attitudes, especially attitudes about sexual expression and sexual relationships, and mental health. Attitudes toward, knowledge about, and expectations with regard to sexual expression of one's self have impacts on behavior. For example, if a person assumes that frequency of activity will decline with age, he or she may make no effort to preserve sexual intimacy. Ageism, and specifically negative attitudes toward sex among older men and women are common (Story, 1989; Edwards & Booth, 1994). In part, these attitudes reflect the emphasis on youth and beauty characteristic of the United States (Burgess, 2004). DeLamater and Moorman (2007), analyzing the AARP survey data, found that men and women who believed that sex was not an important part of their relationships reported less frequent sexual behavior.

Mental health is an important influence on sexual functioning. Depression is associated with loss of interest in sex (Cyranowski, Bromberger, Youk, et al., 2004; Nicolosi, Moreira, Villa, & Glasser, 2004). Other psychological disorders may be related to sexual functioning. Drugs used to treat these disorders can cause sexual side effects. Antipsychotic medications, SSRI antidepressants, monoamine oxidase (MAO) inhibitors, and sedative drugs may contribute to decreasing levels of sexual desire (Schiavi, 1999; Segraves, 1989).

In regard to social factors, the presence or absence of a sexual partner is extremely important in understanding differing levels of sexual activity among aging women and men. Many people, especially in the cohort of persons who are currently over 65, consider sexual intimacy to be only or most appropriate in marriage, and death and divorce leave many older Americans unmarried. Older women are particularly disadvantaged since the sex ratio becomes increasingly imbalanced with age. Among

persons 55 to 64, the sex ratio is 92 (men for every 100 women), among those 65 to 74 it is 83, and among those 75 to 84 it is 67 (Smith, 2003).

For those who do have a sexual partner, satisfaction with the relationship is an important influence on sexuality. Several studies note that married respondents are more satisfied with their sexual relationship than single ones (e.g., Lawrance & Byers, 1995). This result is interpreted as reflecting the fact that married persons are more likely to develop the ability to accommodate the partner's needs and to satisfy him or her sexually (Laumann, et al., 1994). This, in turn, is suggested as a consequence of the emphasis in contemporary society on the expressive aspects of marriage (Edwards & Booth, 1994).

There is a substantial literature on marital satisfaction or marital quality. Broadly speaking, the nature of the couple's interaction or their interpersonal exchanges determines the level of satisfaction. In their review, Bradbury and colleagues (2001) identify several important aspects of the interaction. One is time spent together; this is obviously a prerequisite for building and sustaining intimacy. Another is the degree of conflict in these exchanges, or frequency of disagreements over important issues. A third element is satisfaction with the partner's personality and treatment of the respondent.

Finally, marital satisfaction is positively associated with frequency of sexual activity, both of sexual intercourse and related aspects such as frequency of orgasm per sexual encounter and sexual uninhibitedness (Young, et al., 1998). We would expect, therefore, that marital satisfaction would be negatively related to the incidence of sexual dysfunction.

### *The Current Research*

We have discussed the concept of sexual satisfaction and provided a rationale for studying it. We have reviewed the recent literature about sexual satisfaction, and

identified several variables that are associated with it, one of which is frequency of sexual activity. Data collected in the 2003 wave of the Wisconsin Longitudinal Study provide an opportunity to study these interrelated phenomena. The WLS sample is unique in providing data collected from several thousand persons ages 62 to 67, by far the largest sample of this cohort (persons born 1935 to 1942). Furthermore, the original sample was a representative one, not one recruited for research on sexuality. Finally, the WLS provides measures of most of the variables discussed above.

### *Hypotheses*

The literature reviewed above suggests several hypotheses regarding sexual activity and sexual satisfaction among couples in their 60s:

1. Frequency of sexual activity will be:
  - positively predicted by physical health.
  - positively predicted by satisfaction with the relationship.
  - negatively predicted by depression.
  - negatively predicted by experience of sexual dysfunction.
2. Sexual satisfaction will be:
  - positively predicted by frequency of sexual activity.
  - positively predicted by physical health.

## Methods

### *Participants*

The Wisconsin Longitudinal Study began with a 1/3 random sample (N = 10,317) of women and men who graduated from Wisconsin high schools in 1957. The original purpose of the study was to assess the demand for higher education in Wisconsin. Additional waves of data were collected in 1964, 1975, and 1992. In 2002-2003, one-hour telephone interviews and 48-page mail surveys were completed with 6,279 surviving American men and women. The survey instrument contained selected items from key inventories of personality, health (depression and alcohol use), and well-being. It also contained measures of the marital relationship, and of well-being, social contact, and social exchanges. The data collection was managed for WLS by the University of Wisconsin Survey Center.

The WLS sample is broadly representative of white, non-Hispanic American men and women who have completed at least a high school education. The WLS sample is mainly of German, English, Irish, Scandinavian, Polish, or Czech ancestry. Minorities are not well-represented: there is only a handful of African American, Hispanic, or Asian persons in the sample, reflecting the population of Wisconsin in 1957. About 19 percent of the WLS sample is of farm origin, and that is consistent with national estimates of persons of farm origin in cohorts born in the late 1930s. In 1964, 1975, and again in 1992, about two-thirds of the sample lived in Wisconsin, and about one-third lived elsewhere in the U.S. or abroad. At the time of the 2003 data collection, the age range for men was 62 to 67, with 54% age 64. The range for women was 63 to 67, with 62% age 64.

### *Measures*

*Current Marital Status.* Marital status was determined by responses to a sequence of questions about past and present marital circumstances. In this analysis, a four category indicator was used: never married, married, divorced/separated, and widowed. Questions concerning respondent's sexual behavior were included in the mailed questionnaire; these items were prefaced by the question, "Are you currently married?" Respondents who replied "No" were asked, "Do you have a sexual partner?" (yes, no). Questions about sexual behavior were completed only by respondents who were married or had a partner. Thus, persons who answered "No" to both questions are excluded from the analyses reported in this paper. The sample size for the variables included in the analyses range from 2,242 to 4,952, depending on skip patterns.

*Health.* A basic index of biological functioning is self-reported overall physical health. The question asked "How would you rate your health at the present time?" The response categories were very poor (1), poor, fair, good, and excellent (5). Another measure of health is provided by the respondent's answer to the following item; "I see myself as someone who is full of energy." The response categories were strongly agree (1) to strongly disagree (6). We also included self-reported circulatory problems: "How much do circulatory problems currently interfere with what you like to do?" The response categories were not at all (1) to a great deal (5).

*Mental health.* The measure of mental health was a summary score constructed from responses to 23 items from the CES-D (Center for Epidemiological Studies-Depression) (Radloff, 1977). Each of the items asked "How many days during the past week did you . . ." The respondent was asked to circle the number of days she or he experienced each; an overall score was created by summing responses across the items. Scores ranged from 0 to 112. Note that this is a non-standard method of administering

and scoring the CES-D, so scores reported here are not comparable to those reported in other research.

*Satisfaction with Relationship.* The survey included a number of measures of the intimacy or closeness of the marital relationship. The first is a measure of time spent alone with spouse in the past month. Response categories were: never (1), about once a month, 2 or 3 times per month, about once a week, 2 or 3 times per week, and almost everyday (6). The second is the question “How much did you experience each of the following feelings during this typical week? Loved.” Response categories were: not at all (1), a little, quite a lot, and a great deal (4).

The mailed survey contained a series of questions about the frequency of disagreements with the spouse. The series was prefaced with “How often, if at all, in the past year have you had open disagreements about each of the following?” (Emphases in original). The topics were “Household tasks,” “Money,” and “Time spent together.” Response categories were never (1), less than once a month, several times per month, about once a week, several times per week, and almost everyday (6). A scale was created by taking the mean of the responses to the items. The Cronbach’s alpha for the scale was only .47 (N = 4,770).

The survey contained a six-item scale measuring satisfaction with the relationship with spouse. The specific items asked “How satisfied are you with. . .:” day-to-day support and encouragement, spouse’s personality, amount of consideration shown respondent, the way disagreements are settled, how decisions are made, and how well the spouse listens to respondent. The response categories were very dissatisfied (1), dissatisfied, somewhat dissatisfied, somewhat satisfied, satisfied, and very satisfied (6).

The scores on the items were averaged to create a summary measure. The alpha for the scale was .94 (N = 4,780).

*Sexual Functioning.* As part of a series of questions about health problems, respondents were asked “How often have you had difficulties with or painful sexual intercourse in the past six months?” Response categories were not at all (1), monthly or less often, about once a week, and daily or more often (4). A follow-up question asked “How much discomfort has this symptom caused you in the past six months?” (Emphasis in original) Response categories were none (1), a little, some, and a lot (4).

Following the question on frequency of sex (see below), respondents read “If you have decreased or stopped sexual activities with your wife/husband or partner, please indicate whether each of the following was a reason.” A list of nine reasons followed, including my illness, spouse/partner’s illness, I lost interest, and my spouse/partner lost interest. Response categories were yes and no. About 62 percent of the respondents answered these four items, suggesting that at least half of the sample had experienced a decline in frequency.

*Frequency of Sex.* This variable was measured by the question, “During the past 12 months, about how often did you have sex with your husband/wife or partner?” Response categories were: once a day or more, 3 to 6 times per week, once or twice a week, 2 to 3 times a month, once a month or less, and not at all. For regression analyses, in order to create a measure with a common metric, we recoded responses into times per month: 30, 18, 6, 2.5, 1 and 0. The refusal rate on this item was 16 percent among men and 19 percent among women.

*Sexual Satisfaction.* Two items assessed facets of sexual satisfaction. The questions were, “In the past 12 months, how physically pleasurable did you find your

sexual relationship with your husband/wife or partner to be?” and “In the past 12 months, how emotionally satisfying did you find your sexual relationship with your husband/wife or partner to be?” The response categories were not at all(1), slightly, moderately, very, and extremely (5). The two items were averaged. The alpha for the scale was .95.

The means and standard deviations of variables included in the analyses are displayed in Table 1.

## Results

### *Descriptive Results*

The means in Table 1 provide a snapshot of the WLS sample in the analyses reported here. The average respondent is 64.4 years of age. Seventy-nine percent (4,844) are married, and an additional four hundred report having a sexual partner. On the self-rating of health, the typical person lies just below “good.” In terms of energy, the person slightly agrees that she or he is “full of energy.” Only 305 persons reported that circulatory problems interfere with their activities.

Of particular interest is the picture of the relationships of these men and women. They report spending time alone with their spouse almost everyday. They indicate that they felt loved by their spouse at least “quite a lot” in the past week. They also report less than one disagreement about household chores, money, and spending time together per month in the past year. Overall, they are satisfied with the relationship with their spouse. Thus, these are rewarding relationships, characterized by little conflict. As noted earlier, the interpersonal exchange model posits that rewarding relationships are satisfying ones.

With respect to sexual functioning, the average persons report no difficulties with or painful intercourse; those who do characterize it as causing little or no discomfort.

Among persons who report a decline in sexual activity, 30 percent attributed it to spouse or partner losing interest, 22 percent to their own illness, 28 percent to partner/spouse's illness, and 25 percent to their own loss of interest.

### *Frequency of Sexual Activity*

Our review of the literature led to four hypotheses about frequency of activity.

Frequency of sexual activity will be:

- positively predicted by physical health.
- positively predicted by satisfaction with the relationship.
- negatively predicted by depression.
- negatively predicted by experience of sexual dysfunction.

To assess these hypotheses we carried out regression analyses. In step 1 of the analysis, we included three measures of physical health (self-rated health, energy, and reported circulatory problems), psychological distress (CESD), and six measures of sexual functioning. In step 2, we added four measures of the relationship with spouse. In step 3, we added the interactions of gender with physical health, psychological distress and satisfaction with the relationship. All variables were centered. The results, using pairwise deletion for missing data, are shown in Table 2.

In model 1, none of the three measures of physical health were significantly associated with frequency. Also, the measure of mental health/depression is not significantly associated with frequency. On the other hand, the beta coefficients for two measures of sexual functioning are significant. Participants who report that the frequency of sex has declined because of partner's illness or loss of interest report less frequent sexual activity. In model 2, the four measures of the quality of the relationship were entered. The frequency of time spent alone, feeling loved, and of disagreements are

not associated with frequency of sex. In step 3, none of the interactions were associated with significant betas (not shown). Thus the results provide some support for only one hypothesis, that frequency of activity is associated with the experience of sexual dysfunction, specifically related to loss of interest or illness. The adjusted  $R^2$  of Model 2 is modest, .135, and is smaller than the  $R^2$  of Model 1.

### *Satisfaction with Sexual Relationship*

Our review of the literature led to two hypotheses about satisfaction with the sexual relationship. Sexual satisfaction will be:

- positively predicted by frequency of sexual activity.
- positively predicted by physical health.

We also conducted regression analyses using the two-item index of satisfaction with the sexual relationship as the outcome. Again, in step 1 of the analysis, we included three measures of physical health (self-rated health, energy, and reported circulatory problems), psychological distress (CESD), and six measures of sexual functioning. In step 2, we added four measures of the relationship with spouse. In step 3, we entered the frequency of sexual activity. In step 4, we added the interactions of gender with physical health, psychological distress and frequency of sex. The results, again using pairwise deletion, are shown in Table 3. All variables are centered.

The beta coefficients for two of the variables entered in step 1 are significant. Again, both are measures of sexual functioning. Persons who report a decline in sexual activity due to self or partner losing interest in sex report less frequent activity. This suggests that low or inhibited sexual desire is a problem for some of these persons/couples. None of the coefficients for the other measures of functioning or

physical health are significant. Also, psychological distress is not significantly related to sexual relationship satisfaction.

In step 2, the scale of satisfaction with the relationship is significantly associated with satisfaction with the sexual relationship. The coefficient for partner lost interest in sex remains significant. Finally, in step 3, the coefficient for frequency of sex is substantial and positive. Again, none of the interactions with gender are significant (not shown). The variables in the analysis explain a substantial amount of the variance in satisfaction; the adjusted  $R^2$  for Model 3 is .39. The change in  $R^2$  at each step is also significant. Thus there is strong support for the hypothesis that sexual satisfaction will be related to frequency of activity. Sexual satisfaction is also related to satisfaction with the relationship. There is no support for the hypothesis that satisfaction will be positively associated with physical health.

### Discussion

Measures of selected biological, psychological, and social influences are associated with sexuality among the women and men who comprised the WLS 2003 sample. In the analyses with frequency of activity as the outcome, there are significant coefficients associated only with one indicator of sexual dysfunction, reports of partner losing interest in sex. None of the measures of health or of the quality of the relationship are significant. In this sample, with many respondents reporting good health, physical health is not a significant correlate of frequency of sex. The  $R^2$  for this analysis is a modest .08.

These results are consistent with the symbolic interactionist perspective, which suggests that people in long-term relationships develop a sexual script which governs

their relationship, so that sexual activity becomes habitual. Thus, within limits, activity does not depend on daily or weekly fluctuations in health or relationship characteristics.

We noted in the literature review that other research reports that age is negatively related to frequency of sexual activity. Given that all of our respondents are 62 to 67 years of age, we cannot assess the relationship of age to behavior and satisfaction with the sexual relationship. DeLamater & Moorman (2007), analyzing data from a sample of 45 to 80+ year persons, found that age negatively predicted frequency of several sexual activities for both men and women.

Turning to the respondent's satisfaction with his or her sexual relationship, measures of physical health are not related to the two-item index. However, in step 1, reports of both self and partner losing interest are negatively related to it. Again, measures of characteristics of the relationship, such as amount of time spent together, feeling loved, and frequency of disagreements are not significantly associated with sexual relationship satisfaction. (However, the measure of frequency of disagreements had a poor alpha.) Satisfaction with the relationship and frequency of sexual activity are strongly positively associated with sexual relationship satisfaction. The  $R^2$  for Model 3 is a substantial .39.

Thus, both the quality of the relationship with the partner and the frequency of sexual expression are related to sexual satisfaction, for both men and women. Waite & Joyner (2001), analyzing data from the National Health and Social Life Survey, of persons age 18 to 59, also found that frequency of sexual activity was a strong predictor of satisfaction with the emotional and physical aspects of the respondent's current relationship.

Based on the literature, we stated four hypotheses about predictors of frequency of sexual activity and two about predictors of sexual relationship satisfaction. The data from our sample, using the measures available, do not support three of the hypotheses involving frequency, nor one of the hypotheses about sexual expression. The most obvious difference between WLS participants and the samples in the research we reviewed is age. Our participants are all in their 60s. They may be generally physically and mentally healthy, and the substantially less healthy may have been lost to death, illness or attrition. The finding that relationship characteristics are not related to sexual activity is more surprising; as we suggested above, it may be that sexual activity is governed by scripts that have evolved over a long period of time, with the persons adopting behaviors that fulfill their own and partner's needs. Thus, in the seventh decade sexual expression may reflect long-standing patterns of adjustment, not week to week fluctuations in health and relationships.

The results demonstrate that, nearly 50 years after graduating from high school, many of these adults are sexually active, and satisfied with their sexual relationship. This satisfaction is related to both the quality of the relationship and the frequency of sexual activity.

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Table 1: *Descriptive Statistics (Before Centering)*

<u>Variable</u>	<u>Mean</u>	<u>S.D.</u>
Age	64.36	.72
Marital Status	.79	.41
<b>Health</b>		
Physical Health (self-rating)	3.76	.98
Energy (self-rating)	2.67	1.17
Circulatory problems interfere (N = 305)	2.36	1.11
Psychological Distress (CESD)	13.98*	14.28
<b>Relationship</b>		
Time spent alone in past month	5.60	.89
Felt loved in past week	3.36	.79
Frequency of disagreements past year (3 item scale)	1.10	2.92
Satisfaction with relationship (6 item scale)	4.82	.99
<b>Sexual Functioning</b>		
Difficulties with or painful intercourse	1.18	.57
How much discomfort	1.21	.66
I lost interest	.25	.43
Spouse/partner lost interest	.30	.46
My illness	.22	.41
Spouse/partner's illness	.28	.45
Frequency of Sex (times/month)	1.72	1.18
Marital Satisfaction (two-item scale)	3.49	1.12

Table 2: *Regression Analysis on Predictors of Frequency of Sex*

<b>Predictors:</b>	<b>Model 1 <math>\beta_1</math></b>	<b>Model 2 <math>\beta_2</math></b>
<b>Step 1</b>		
Physical Health	.108	.095
Energy	.018	.022
Circulatory Problems	.049	.052
Psychological distress	-.062	-.022
Difficulties/pain with intercourse	-.053	-.050
How much discomfort	.096	.094
My illness	-.021	-.034
Partner's illness	-.185*	-.178
I lost interest	-.188	-.169
Partner lost interest	-.291**	-.265**
<b>Step 2</b>		
Time spent alone		.079
Felt loved		-.054
Frequency of disagreements		-.013
Satisfaction with relationship		.093
<b>R<sup>2</sup></b>	<b>.227</b>	
<b>Adjusted R<sup>2</sup></b>	<b>.148</b>	<b>.135</b>
<b>R<sup>2</sup> Change</b>	<b>.227**</b>	<b>.020</b>

\* p &lt;.05

\*\* p &lt;.01-

**Table 3: Regression Analysis on Predictors of Sexual Relationship Satisfaction**

<b>Predictors:</b>	<b>Model 1 β1</b>	<b>Model 2 β2</b>	<b>Model 3 β3</b>
<b>Step 1</b>			
Physical Health	.079	.042	.002
Energy	.003	.004	-.006
Circulatory Problems	.007	.019	-.004
Psychological distress	-.180	-.082	-.073
Difficulties/pain with intercourse	-.042	-.031	-.009
How much discomfort	.071	.060	.020
My illness	.051	.011	.026
Partner's illness	-.115	-.090	-.014
I lost interest	-.197*	-.156	-.082
Partner lost interest	-.274**	-.205*	-.092
<b>Step 2</b>			
Time spent alone		.081	.047
Felt loved		-.048	-.025
Frequency of disagreements		-.023	-.017
Satisfaction with relationship		.321**	.281**
<b>R<sup>2</sup></b>	.228	.336	.475
<b>Adjusted R<sup>2</sup></b>	.149	.238	.390
<b>R<sup>2</sup> Change</b>	.228**	.109**	.139**

\* p &lt;.05

\*\* p &lt;.01

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