# Sexual Activity is Associated with Greater Enjoyment of Life in Older Adults

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# Abstract

**Background:** Relationships between sexual activity, problems and concerns and wellbeing among older adults have not been fully explored.

**Aim:** To investigate associations between sexual activity, problems and concerns and *experienced wellbeing* in a representative sample of older adults.

**Methods:** Cross-sectional analyses from the English Longitudinal Study of Ageing. Sexual behavior, problems and concerns were assessed by self-completion questionnaire. Covariates included age, partnership status, socio-economic status, smoking status, alcohol intake, limiting long-standing illness, and depressive symptoms. Data were analyzed using one-way independent analyses of variance.

**Main Outcome:** Enjoyment of life was assessed with the pleasure subscale from CASP-19, a validated measure of quality of life specific to older age.

**Results:** Data were available on sexual activity and enjoyment of lifefor a total of 3,045 men and 3,834 women (mean=64.4 in men, 65.3 in women). Men and women who reported any sexual activity in the past year had significantly higher mean enjoyment of life scores than those who were not sexually active (men=9.75 vs. 9.44, *p*<0.001, women=9.86 vs. 9.67, *p*=0.003). Among sexually active men, frequent (≥2 times a month) sexual intercourse (*p*<0.001) and frequent kissing, petting or fondling (*p*<0.001) were associated with greater enjoyment of life. Among sexually active women, frequent kissing, petting or fondling was also associated with greater enjoyment of life (*p*<0.001) but there was no significant association with frequent intercourse (*p*=0.101). Concerns about one’s sex life and problems with sexual function were strongly associated with lower levels of enjoyment of life in men, and to a lesser extent in women.

**Conclusion:** This is among the first studies to show that wellbeing is higher among older adults when they are sexually active. Preferences regarding the expression of sexual activity differed between the sexes. Further longitudinal research is required in order to confirm a causal association between sexual activity and wellbeing.

**Key words:** Sexuality, Sexual Activity, Wellbeing, Enjoyment of Life, Older Adults

# Introduction

Research has shown that subjective wellbeing is associated with a number of favorable health outcomes in older adults and reduced mortality (*1*). Owing to such clear and compelling evidence, promoting subjective wellbeing has been identified as an important strategy for promoting public health in several government and organizational policies (*2, 3*). Subjective wellbeing encompasses multiple aspects, including *experienced wellbeing* (positive feelings such as pleasure, and happiness, and negative feelings such as distress), evaluative wellbeing (overall life satisfaction), and eudemonic wellbeing (judgements about meaning and purpose in life) (*4*).

*Experienced wellbeing* is the most studied aspect and is typically conceptualized as positive psychological wellbeing, happiness, or optimism. In a meta-analysis conducted 10 years ago, positive psychological wellbeing was associated with a 28% reduction in mortality in healthy individuals (combined hazard ratio (HR) = 0.82; 95% confidence interval (CI) = 0.76-0.89; *p*<.001) (*5*). More recent studies have shown measures of positive affect, enjoyment of life, happiness, and optimism to be protective against risk of incident coronary heart disease (*6*) and to reduce the risk of mortality by up to 35% (*7-11*).

In order to understand how we might effectively promote wellbeing in later life, it is important to identify and understand its correlates. A wide range of factors have been associated with wellbeing in older age, such as fostering and maintaining ‘non-cognitive’ life skills such as persistence and conscientiousness (*12*), social support and interaction with friends (*13, 14*), religion and spirituality (*15*), and better mobility status (*16*). Whilst important, these factors may not be amenable to change.

One factor that may prove a promising modifiable target for wellbeing in older age is sexual activity. Sexual health is defined by the World Health Organization as “a state of physical, emotional, mental and social wellbeing related to sexuality, not merely the absence of disease dysfunction or infirmity” (*17*). Sexual activity is a central component of intimate relationships, but has been shown to decline with age. In a population-based study of English adults, sexual activity was found to decrease substantially from 50-59 years to ≥80 years in both men (94.1% to 31.1%) and women (53.7% to 14.2%) (*18*). A similar trend and magnitude of decline were also observed in a US population-based study (*19*).

Several studies have suggested that frequent sexual intercourse (defined in this study as ≥2 times a month), one aspect of sexual activity, is associated with a range of benefits for psychological and physiological wellbeing, such as improved quality of life and mental health, increased heart rate variability, and lower risk of certain cancers and fatal coronary events (*1, 20-24*). Strikingly, “a positive sex life” (frequency of intercourse in men, and enjoyment of intercourse in women) has been found to be associated with a lower annual death rate (*25*).

It is important to note that although the frequency of sexual activity declines as people age, older adults are not asexual and have sexual interest (26, 27). The benefits of sexual activity may be particularly relevant for older adults, given that mental and physical health complications may increase with age (*28, 29*) and these tend to be negatively associated with wellbeing (*30, 31*). Should an association between sexual activity and wellbeing in later life be identified, there would be considerable potential to improve the wellbeing of older adults by supporting them in achieving and maintaining an active sex life. It is plausible that a frequent and problem-free sex life may be associated with higher levels of *experienced wellbeing* among older adults. However, to the authors’ knowledge, this has not been empirically tested.

The aim of the present study was therefore to investigate relationships between sexual activity, problems and concerns with *experienced wellbeing*, measured as enjoyment of life, in a large, population-based sample of older adults. It was hypothesised that engagement in sexual activity and fewer sexual problems and concerns would be associated with higher levels of *experienced wellbeing*.

# Materials and Methods

## Study population

Data were from the English Longitudinal Study of Ageing (ELSA), a longitudinal panel study of men and women aged ≥50 years living in private households in England. Full methodological details have been published elsewhere (*32*), but briefly, ELSA began in 2002 and participants take part in biennial assessments that include a computer-assisted personal interview and self-completion questionnaires. Comparisons of the sociodemographic characteristics of participants against results from the English national census indicate that the sample is representative of the population (*32*).

In wave 6 (2012/13), the self-completion measures administered to participants included a Sexual Relationships and Activities Questionnaire (SRA-Q), which was returned by 7,079 participants (67% of those eligible). The present analyses use these data in addition to data on enjoyment of life, also assessed in wave 6. A total of 40 individuals who did not respond to a question asking about engagement in sexual activity over the last year were excluded, as were 170 who had missing data on enjoyment of life, leaving a final analytic sample of 6,869 men and women. All participants gave full informed consent to participate in the study, and ethical approval was obtained from the London Multi‐Centre Research Ethics Committee.

## Sexual Relationships and Activities Questionnaire (SRA-Q)

Full details of the SRA-Q have previously been published (*18*). Sex-specific versions of the questionnaire were developed based on previously validated measures, with some modifications made in order to ensure data obtained were comparable with the National Survey of Sexual Attitudes and Lifestyles in the UK (*34*) and the National Social Life, Health and Aging Study in the USA (*33*). The SRA-Q captures data on a broad range of aspects of sexuality, including frequency of sexual activities (sexual intercourse, masturbation, kissing, petting or fondling); problems with sexual function; concerns about sexual activities and function; and sexual satisfaction. The versions of the SRA-Q that were completed by men and women in this sample are available online at <http://www.elsa-project.ac.uk/documentation> (there were no additional versions of the questionnaire for trans people/gender non-conforming people/gender-fluid people). In order to provide assurance of full anonymity of responses, the questionnaire was completed in private and returned in a sealed envelope. Full details of the SRA-Q items analyzed in this study are provided in the online [supplementary material](https://heart.bmj.com/content/102/14/1095.full#DC1).

## Enjoyment of life

Enjoyment of life was assessed with the pleasure subscale from the CASP-19 (Control, Autonomy, Self-realization and Pleasure), a previously validated measure developed specifically to assess quality of life in old age (*35*). This instrument has previously been used to assess the relationship between subjective wellbeing and mortality in ELSA (*7, 36*). The pleasure subscale asks respondents to indicate their agreement with four statements: (i) “*I enjoy the things that I do*”; (ii) “*I enjoy being in the company of others*”; (iii) “*On balance, I look back on my life with a sense of happiness*”; and (iv) “*I feel full of energy these days*”. Responses are on a 4‐point Likert scale from 0 (never) to 3 (often). Total scores range from 0 to 15, with higher scores indicating greater enjoyment of life.

## Potential confounders

All potential confounders were selected *a priori.* Demographic information collected included age, sex (male vs. female; no other genders were included) and partnership status (married/cohabiting, separated/divorced, widowed, or single/never married). Socio-economic status was based on household non-pension wealth, which has been shown to be a sensitive indicator in this age group (*37*), categorized into quintiles across all ELSA participants who took part in wave 6. Descriptive data on ethnicity (white vs. non-white [black, Asian, mixed ethnic group, other]) are also presented, but ethnicity was not included as a covariate because the ELSA sample is overwhelmingly white British. Health-related covariates included self-reported limiting long-standing illness (defined as any long-standing illness, disability or infirmity that limits activities in any way), current smoking status (smoker vs. non-smoker) and frequency of alcohol intake, categorized as never/rarely (never – once or twice a year), regularly (once every couple of months – twice a week), or frequently (3 days a week – almost every day) (*18*). Depressive symptoms were assessed using the 8-item Centre of Epidemiological Studies Depression scale, highly validated for use in older adults (*38*).

## Statistical analysis

Secondary data analyses were performed using IBM SPSS Statistics 22. Data were weighted to correct for sampling probabilities and differential non-response and to ensure the sample matched the 2011 National Census population distributions for age and sex. The weights accounted for the differential probability of being included in wave 6 of ELSA and for non-response to the SRA‐Q. Full details of the weighting procedure are available at <http://doc.ukdataservice.ac.uk/doc/>5050[/mrdoc/pdf/](http://mrdoc/pdf/)5050[\_elsa\_w6\_technical\_report\_v1.pdf](http://_elsa_w6_technical_report_v1.pdf/).

One-way independent analyses of variance (ANOVAs) were used to examine the extent to which sexual activities, problems, concerns and satisfaction were associated with enjoyment of life. Analyses were performed separately for men and women, with age, partnership status, wealth, limiting long-standing illness, smoking status, alcohol intake and depressive symptoms entered as covariates.

# Results

A total of 3,045 men and 3,834 women provided data on sexual activity and enjoyment of life and were included in the present analyses. Sample characteristics are summarized in Table 1. Participants ranged in age from 50-89 years (mean [SD]=64.4 [9.8] in men, 65.3 [10.1] in women). The majority were married or cohabiting with a partner (74% of men, 60% of women), and were of white ethnicity (94% of men, 96% of women). Around a third of each sex reported a limiting long-standing illness, one in seven were smokers, and the majority (84% of men, 69% of women) were regular alcohol drinkers.

Associations between sexual activities, problems, concerns and satisfaction, and enjoyment of life are presented in Table 2. After adjusting for sociodemographic and health-related covariates, men who reported any sexual activity in the past year had significantly higher mean enjoyment of life scores than those who were not sexually active (9.75 [SE 0.04] vs. 9.44 [0.07], *p*<0.001), and the same was observed in women (9.86 [0.04] vs. 9.67 [0.05], *p*=0.003). Among sexually active men, frequent (≥2 times a month) sexual intercourse (vaginal, anal, oral) (*p*<0.001) and frequent kissing, petting or fondling (*p*<0.001) were associated with greater enjoyment of life. Frequent kissing, petting or fondling was also associated with greater enjoyment of life among sexually active women (*p*<0.001), although the association with frequent sexual intercourse was not significant (*p*=0.101). Frequent (≥2 times a month) masturbation was not associated with enjoyment of life in either men or women (*p*>0.7).

Among men, difficulty having and maintaining an erection was associated with poorer enjoyment of life (*p*<0.001). In both men and women, difficulty achieving orgasm was associated with poorer enjoyment of life (both *p*<0.001).

Concerns about sex life were consistently associated with poorer enjoyment of life in men, with lower mean enjoyment of life scores in those who were concerned about their level of sexual desire (*p*<0.001), frequency of sexual activities (*p*=0.004), ability to have an erection (*p*<0.001) and orgasmic experience (*p*<0.001) than in men who were not concerned. Results were less consistent in women, with significantly poorer enjoyment of life among those who were concerned about the frequency of sexual activities (*p*=0.001) and ability to become sexually aroused (*p*=0.018), but no association observed between enjoyment of life and level of sexual desire or orgasmic experience (*p*>0.1).

In both men (*p*<0.001) and women (*p*=0.001), feeling emotionally close to their partner during sex was associated with greater enjoyment of life. Satisfaction with overall sex life was associated with greater enjoyment of life in men (*p*<0.001) but the difference was not significant in women (*p*=0.132).

# Discussion

The present study has shown that several domains of sexual activity and functioning are associated with wellbeing, specifically enjoyment of life, in a large population-based sample of older English adults. It was found that men and women who reported any sexual activity in the last year enjoyed life more than those who were not sexually active. Moreover, among those who were sexually active, a greater frequency of kissing, petting, and fondling was associated with greater enjoyment of life in both sexes and greater frequency of sexual intercourse in men only. Feeling emotionally close to one’s partner during intercourse was also associated with greater life enjoyment. Those who experienced sexual problems or had concerns about their sex life reported lower levels of life enjoyment. Men who reported being satisfied with their overall sex life reported greater enjoyment of life, but there was no significant association between sexual satisfaction and enjoyment of life in women.

These interesting findings support the hypothesis that “positive sexual activity” is associated with wellbeing. Several mechanisms may explain this novel association. (i) Sexual activity has been shown to be associated with better health (*18, 19*), and better health is associated with greater enjoyment of life (*39*). (ii) During sexual activity or at the time sexual intercourse is at its peak, there is a release of endorphins which generates a happy or blissful feeling after sex (*40*). (iii) Those who engage in sexual intercourse with their partner are likely to share a closer relationship (*41*), and indeed closeness to one’s partner has been shown to be associated with wellbeing per se (*31*). This is supported by the present finding that feeling emotionally close to one’s partner during intercourse was associated with greater life enjoyment. (iv) Finally, sexual intercourse can be seen as a form of physical activity and thus may yield similar physical and psychological benefits, including an improvement in wellbeing (*42*). Further research is needed exploring the above pathways to understand what exactly is driving the observed associations between sexual activity, function and concerns and enjoyment of life. However, it is likely to be a combination of all of them.

Importantly, older adults’ concerns about their sex lives were negatively associated with life enjoyment. This is likely owing to the absence of the benefits that one acquires from a frequent and problem-free sex life discussed above. The management of sexual health concerns might be more challenging for older than younger adults, due to the common misconception that individuals lose interest in sexual intercourse and capacity to engage in sexual activities (*26, 43, 44*), and the inability or reluctance of medical professionals to proactively address such issues with older adults (*45*). Given the high prevalence of sexual activity and reported levels of sexual health concerns in the present study sample and others (*26*), there is a clear need to support older adults in maintaining a healthy sex life, regardless of effects on wellbeing. The authors speculate that without an adequate coping system, such problems and concerns with one’s sex life may manifest as mental health complications such as depression and anxiety in the older population. However, further research is required to test this hypothesis.

While there was an overall pattern for “positive sex life” being associated with greater life enjoyment in both sexes, many aspects of sexuality were much more strongly associated with enjoyment of life in men than women. For example, greater frequency of petting, fondling, and kissing was associated with greater enjoyment of life in both sexes, but greater frequency of intercourse was associated with enjoyment of life in men only. These findings indicate potential sex differences in the relative importance of different sexual activities. It appears that sexual intercourse may be more important for men than women in terms of promoting wellbeing, whereas women’s enjoyment is more closely linked to other sexual activities. While sexual intercourse tends to be the most commonly assessed sexual activity, recent data has shown that physical tenderness (i.e. fondling or kissing) comprises a considerable part of older adults’ sexual activity, particularly in women (*46*). Future research should therefore consider including non-intercourse measures of sexual activity in order to gain a more nuanced insight into the prevalence and importance of sexual activity in older adults. Satisfaction with overall sex life was associated with greater enjoyment of life in men, but the difference was not significant in women. A previous descriptive study found that lack of interest in sex was more prevalent among elderly women than elderly men (*47*). This could be due to a decline in levels of sex hormones can influence sexuality after menopause (*48*). Another factor that might influence female sexual behavior in later life is longevity; in comparison with men, women live longer and may find it difficult to find a partner after the loss of a spouse or partner. The reason for this has not been systematically evaluated, but appears to be multi-dimensional, with biological, cultural and psychological factors playing a role (*49*).

Ageing is associated with a range of biological and physiological changes to the human body. For example, ageing is associated with loss of skeletal muscle mass (*50*), a decline in circulating levels of the principal androgen and sex hormone testosterone (*51*), as well as a reduction in peak bone mass (*52*). Such changes are likely to partially contribute to the increase in chronic health conditions, such as cardiometabolic disease, as people age (*53*). The ageing process is likely to increase the prevalence of sexual problems (*54*) and may reduce the frequency of sexual activity. It is possible that men and women who are sexually active have more positive ageing parameters and fewer chronic conditions, and thus tend to enjoy life more. Indeed, a recent study showed that higher successful ageing scores were consistently related to lower reduction in sexual interest/enjoyment among men and women across four countries (*55*). However, given that the present analyses controlled for age and limiting long-standing illness, it is unlikely that these factors are driving the observed findings.

The present study investigates the relationship between sexual activity, problems, concerns and satisfaction. Strengths include the large population-based sample of older English adults and adjustment for a range of sociodemographic and health-related confounders. However, the findings must be interpreted considering several limitations. The cross-sectional study design means casual inference cannot be made. For example, it is not clear whether sexual activity allows one to enjoy life more or whether those who enjoy life more are more likely to be sexually active. It is possible that the relationship is bidirectional. A further limitation is that sexual information was self-reported and people may not respond honestly to questions for fear of being judged. However, it was made clear to participants that survey responses would remain anonymous and they were returned in a sealed envelope. Moreover, there is currently little other option to measure the variables investigated in the present study other than by self-report. The present study was unable to take into account cultural norms which may influence reasons to engage in sexual activity. Therefore, results may not generalize to other countries with differing attitudes towards sex in later life.

In conclusion, in this large representative sample of older English adults, sexual activity and feeling emotionally close to one’s partner during sexual activity were associated with greater enjoyment of life in both men and women, although an association between overall satisfaction with sex life and enjoyment of life was only evident in men. Men who experienced sexual problems or had concerns about their sex life consistently reported lower levels of life enjoyment, and some associations were also observed in women. These findings have important implications for health practitioners and caregivers, highlighting the need to acknowledge that older adults are not asexual and that a frequent and problem-free sex life in this population is related to better wellbeing. Encouragement to try new positions and explore different types of sexual activities is not regularly given to ageing populations. Opening up discussion on sexuality in later life could help redress perceived norms and expectations about sexual activity in older people and help them to live more fulfilling lives. Therefore, the present findings and others (*54*) suggest that it may be beneficial for physicians to routinely query geriatric patients about their sexual activity, and offer help for sexual difficulties.

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# Tables

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| **Table 1** Sample characteristics | | | | | |
|  | |  |  | **Men (*n*=3045)** | **Women (*n*=3824)** |
| Age (mean [SD] years) | | | | 64.43 (9.78) | 65.33 (10.08) |
| Partner status | | | |  |  |
|  | Married/cohabiting | | | 73.8 | 60.1 |
|  | Separated/divorced | | | 11.1 | 15.5 |
|  | Widowed | | | 6.7 | 18.8 |
|  | Single/never married | | | 8.4 | 5.6 |
| Ethnicity | | | |  |  |
|  | White | | | 94.0 | 96.0 |
|  | Non-white | | | 6.0 | 4.0 |
| Wealth quintile | | | |  |  |
|  | 1 (poorest) | | | 17.0 | 20.1 |
|  | 2 | | | 19.1 | 20.5 |
|  | 3 | | | 20.0 | 21.3 |
|  | 4 | | | 22.1 | 19.6 |
|  | 5 (richest) | | | 21.7 | 18.6 |
| Limiting long-standing illness | | | |  |  |
|  | Yes | | | 31.4 | 35.9 |
|  | No | | | 68.6 | 64.1 |
| Smoking status | | | |  |  |
|  | Smoker | | | 14.3 | 13.4 |
|  | Non-smoker | | | 85.7 | 86.6 |
| Alcohol intake¹ | | | |  |  |
|  | Never/rarely | | | 15.9 | 30.5 |
|  | Regularly | | | 41.5 | 43.3 |
|  | Frequently | | | 42.6 | 26.2 |
| Depressive symptoms (0-8) (mean [SD]) | | | | 1.12 (1.78) | 1.55 (1.99) |
| Enjoyment of life (0-15) (mean [SD]) | | | | 9.63 (2.01) | 9.72 (1.91) |

Values are percentages unless otherwise stated.

All figures are weighted for sampling probabilities and differential non-response.

SD = standard deviation.

¹ Never/rarely = never – once or twice a year; regularly = once every couple of months – twice a week; frequently = 3 days a week – almost every day.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table 2** Sexual activities, functioning and concerns and satisfaction in relation to enjoyment of life | | | | | | | | | | | | | | | | | |
|  | |  | |  | **Men** | | | | | |  | | **Women** | | | | |
|  | |  | |  | **% yes1** | **Mean (SE)** | | **F** | **p** |  | | **% yes1** | | **Mean (SE)** | | **F** | **p** |
|  | |  | |  | **Yes** | **No** |  | | **Yes** | **No** |
| Sexual activity | | | | |  |  |  |  |  |  | |  | |  |  |  |  |
|  | Any sexual activity in the past year | | | | 76.9 | 9.75 (0.04) | 9.44 (0.07) | 13.08 | <.001 |  | | 57.8 | | 9.86 (0.04) | 9.67 (0.05) | 8.79 | .003 |
|  | Frequent sexual intercourse2 | | | | 45.9 | 9.97 (0.05) | 9.68 (0.05) | 16.35 | <.001 |  | | 49.3 | | 10.09 (0.05) | 9.97 (0.05) | 2.70 | .101 |
|  | Frequent kissing, petting, or fondling2 | | | | 64.3 | 9.99 (0.04) | 9.52 (0.06) | 43.68 | <.001 |  | | 67.1 | | 10.13 (0.04) | 9.81 (0.06) | 16.68 | <.001 |
|  | Frequent masturbation2 | | | | 42.0 | 9.84 (0.05) | 9.82 (0.05) | 0.14 | .709 |  | | 15.0 | | 10.02 (0.09) | 10.04 (0.04) | 0.06 | .812 |
| Sexual function | | | | |  |  |  |  |  |  | |  | |  |  |  |  |
|  | Erectile difficulties | | | | 42.7 | 9.46 (0.05) | 9.84 (0.04) | 26.47 | <.001 |  | | - | | - | - | - | - |
|  | Difficulty becoming sexually aroused3 | | | | - | - | - | - | - |  | | 33.1 | | 10.00 (0.07) | 10.08 (0.05) | 0.88 | .348 |
|  | Difficulty achieving orgasm3 | | | | 17.5 | 9.44 (0.09) | 9.93 (0.04) | 24.62 | <.001 |  | | 26.4 | | 9.88 (0.08) | 10.14 (0.05) | 8.28 | .004 |
| Sexual health concerns | | | | |  |  |  |  |  |  | |  | |  |  |  |  |
|  | Concerned about… | | | |  |  |  |  |  |  | |  | |  |  |  |  |
|  |  | | Level of sexual desire | | 13.5 | 9.23 (0.08) | 9.76 (0.03) | 33.40 | <.001 |  | | 7.6 | | 9.72 (0.10) | 9.78 (0.03) | 0.26 | .614 |
|  |  | | Frequency of sexual activities2 | | 13.7 | 9.58 (0.09) | 9.86 (0.04) | 8.19 | .004 |  | | 8.2 | | 9.62 (0.13) | 10.07 (0.04) | 11.30 | .001 |
|  |  | | Ability to have an erection | | 14.6 | 9.38 (0.09) | 9.73 (0.03) | 14.80 | <.001 |  | | - | | - | - | - | - |
|  |  | | Ability to become sexually aroused3 | | - | - | - | - | - |  | | 8.2 | | 9.73 (0.14) | 10.09 (0.04) | 5.59 | .018 |
|  |  | | Orgasmic experience3 | | 12.1 | 9.44 (0.11) | 9.90 (0.04) | 16.28 | <.001 |  | | 6.7 | | 9.87 (0.15) | 10.09 (0.04) | 1.96 | .162 |
| Sexual satisfaction | | | | |  |  |  |  |  |  | |  | |  |  |  |  |
|  | Emotionally close to partner4 | | | | 94.4 | 10.08 (0.04) | 8.71 (0.16) | 68.32 | <.001 |  | | 92.0 | | 10.18 (0.04) | 9.68 (0.15) | 10.51 | .001 |
|  | Satisfied with overall sex life4 | | | | 78.6 | 10.10 (0.04) | 9.60 (0.09) | 25.60 | <.001 |  | | 87.3 | | 10.16 (0.04) | 9.97 (0.12) | 2.27 | .132 |

1 Valid percentages.  2 In participants reporting any sexual activity in the past year. 3 In participants reporting any sexual activity in the past month. 4 In participants reporting any sexual activity with a partner in the past 3 months.

SE = standard error. Means and *F* values are adjusted for age, wealth quintile, limiting long-standing illness, smoking status, alcohol intake and depressive symptoms.

All analyses are weighted for sampling probabilities and differential non-response.