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## Whose Health Matters? Longitudinal Analyses of Older Romantic Couples' Health, Physical Capabilities, and Sexual Experiences

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## Abstract

**Objectives:** While considerable work has linked sexual activity to health and well-being in later life, the role of an individual's physical health conditions in shaping their own and their partner's later sexual experiences remains underexplored. This research examined concurrent and prospective dyadic effects of health and physical capabilities on sexual experiences.

**Methods:** We used two-wave data from 1,301 heterosexual couples ( $N=2,602$ ) in the English Longitudinal Study of Ageing. Multilevel models were fitted, estimating the association of both partners' self-rated health, grip strength, and gait speed with sexual interest, activity, and satisfaction concurrently and four years later. Various sociodemographic and psychosocial covariates were adjusted in addition to the baseline outcome levels in longitudinal models.

**Results:** Both individuals' and partner's baseline self-rated health were positively related to intercourse frequency concurrently and at follow-up. Higher self-rated health was also associated with greater sexual satisfaction at follow-up across gender, but its positive associations with concurrent and later sexual interest were observed only among men. Men's slower gait speed was linked to lower sexual interest for both partners at baseline and to women's reduced sexual satisfaction at follow-up. Grip strength also showed some gender-specific associations with interest and intercourse frequency.

**Discussion:** Sexual experiences in later life appear to be shaped by both partners' physical health conditions, with notable gendered patterns. These findings underscore the importance of considering both individual and dyadic health factors in supporting sexual interest and activity in later life, as well as identifying objective markers that may precede declines in sexual health.

**Keywords:** sexual well-being, sexual behavior, successful aging, frailty, dyadic effects

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3 Sexual activity remains relevant and integral to most people's lives across the lifespan  
4 (DeLamater, 2012; Træen & Villar, 2020). The maintenance of functional capacity, a central  
5 component of Rowe and Kahn's (1997) conceptualization of successful aging, may both shape  
6 and be shaped by sexual well-being. However, sexual aspects of later life continue to be an  
7 "overlooked aspect of successful aging" (p. 1235; Soysal & Smith, 2022).  
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12 A growing body of evidence highlights the implications of sexual activity for quality of  
13 life, including physical well-being. For example, prospective studies have linked sexual activity  
14 to a lower incidence of cardiovascular disease (Teng et al., 2024) and a reduced risk of mortality  
15 (Cao et al., 2020). At a daily level, engaging in sexual activity has been related to better sleep  
16 quality and lower blood pressure the next morning (Park et al., 2024). That said, the link between  
17 sexual activity and physical health is likely bidirectional (Gianotten et al., 2021); while sex may  
18 promote health, better health conditions may also increase desire for sexual activity and enable  
19 individuals to engage in it (Erens et al., 2019).  
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34 There is indeed considerable cross-sectional evidence suggesting that healthy individuals  
35 are more sexually active (Field et al., 2013; Freak-Poli et al., 2017; Lindau & GavriloVA, 2010;  
36 Traen et al., 2018). Yet, longitudinal research on whether better physical health tends to precede  
37 later sexual experiences is scarce. More broadly, research on older individuals' sexuality and  
38 health has been notoriously limited to cross-sectional investigations (DeLamater, 2012; Gillespie  
39 et al., 2017), despite the conceptual models (i.e., biopsychosocial perspectives on late-life  
40 sexuality; Delamater & Koepsel, 2014) acknowledging physical weakness as a *predictor* of  
41 changes in sexual experiences. One exception is a recent study among Czech older adults that  
42 examined chronic health conditions as a predictor of sexual activity status—specifically, whether  
43 one is sexually active across two years, as opposed to a) being consistently sexually inactive, or  
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3 b) ceasing to be sexually active at follow-up (Gore-Gorszewska et al., 2024). They found that  
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5 those with fewer self-reported chronic conditions at baseline were more likely to be in the  
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7 consistently sexually active group. While the meaning of this aggregate score is somewhat  
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9 ambiguous, another study among older men that examined independent associations of various  
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11 chronic health conditions with sexual activity status found that diagnoses of diabetes in particular  
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13 predicted later inactivity (Hyde et al., 2010).  
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17 Given that most sexual interactions occur within established romantic relationships, with  
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19 a regular partner (Træen et al., 2019), sexual interest and activity, as well as overall evaluation of  
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21 sex lives, may be shaped not only by the person's own but also by their partner's health  
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23 conditions (Bell et al., 2017). From the perspective of successful sexual aging (Štulhofer, 2025),  
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25 a partner's disinterest in or inability to engage sexually can constitute an external constraint on  
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27 sexual expression that shapes sexual trajectories in later life. Empirically, a partner's physical  
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29 limitations have been identified as a common reason for sexual inactivity, particularly among  
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31 women (Lindau et al., 2007). Reports of a partner's illness that causes sexual problems have also  
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33 been linked to women's (but not men's) lower frequency of sexual intercourse (Kontula &  
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35 Haavio-Mannila, 2009). Together, these findings appear to suggest that women's sexual  
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37 experiences may be more sensitive to partner health. However, this pattern is not consistent  
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39 across studies. One study of older men showed that men who reported having a partner with  
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41 physical limitations were also less likely to be sexually active and to remain sexually active  
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43 approximately six years later (Hyde et al., 2010). Another study found that, across gender, poorer  
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45 perceptions of a partner's health were associated with greater odds of sexual inactivity, even  
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47 after adjusting for individuals' perceptions of their own health (Karraker & Delamater, 2013).  
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54 Notably, one study reported that poorer perceived spousal health was associated with *lower* odds  
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3 of reporting an inability to maintain a sexual relationship, despite showing the expected positive  
4 association with odds of sexual dissatisfaction; these effects were independent of individuals'  
5  
6 own health, and gender differences were not tested (Syme et al., 2013).  
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10 While promising, previous work has been limited in its ability to precisely capture the  
11 *dyadic* interplay of health and sexual experiences, in part because most studies rely on one  
12 partner's reports (cf. Galinsky & Waite, 2014), which may be biased for various reasons,  
13 including motivated reasoning (e.g., attributing sexual inactivity to a partner's characteristics  
14 rather than oneself) or projection (e.g., projecting one's own physical limitations onto the  
15 partner). Further, the narrow coverage of health indicators and sexual experiences in prior work  
16 has constrained a fuller understanding of how physical health conditions predict later sexual  
17 experiences. Finally, inconsistent findings and, in some cases, a lack of formal tests regarding  
18 gender differences highlight a persistent gap in understanding whether and how these  
19 associations differ for men and women.  
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33 Addressing these gaps, the present research uses dyadic data from older romantic couples  
34 to examine how *both partners'* characteristics jointly contribute to their current or later sexual  
35 interest, activity, and satisfaction. In addition to partners' subjective evaluations of their health,  
36 we examined their physical capabilities, objectively assessed through standard strength tests.  
37 Specifically, we used grip strength and gait speed, both of which commonly serve as indicators  
38 of physical capabilities (Cooper et al., 2011). Grip strength is widely used as a marker of upper-  
39 body muscle strength and overall vitality, while gait speed reflects the integrated functioning of  
40 multiple physiological systems, including lower-body strength, balance, and cardiorespiratory  
41 fitness. Both have been linked with important health outcomes, including mortality risk (Elbaz et  
42 al., 2013; Xie et al., 2022).  
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3 In short, our research addressed the following question: how are individuals' and their  
4 partners' self-rated health and physical capabilities related to sexual experiences (i.e., sexual  
5 interest, sexual activity status, frequency of intercourse, and sexual satisfaction) concurrently and  
6 four years later? We also examined if and how these associations differed for men and women.  
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8 Although this study was not pre-registered, several of our research questions were conceptual  
9 replications of prior work and informed a priori expectations. Specifically, we expected that  
10 individuals' own and their partner's self-rated health would show concurrent positive  
11 associations with greater odds of being sexually active and having more frequent intercourse  
12 (e.g., Karraker & Delamater, 2013). In contrast, we did not advance specific predictions  
13 regarding physical capabilities or prospective associations.  
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## 26 **Methods**

### 27 **Participants and Procedure**

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29 Data for this research came from the English Longitudinal Study of Ageing (ELSA), an  
30 ongoing study that began in 2002, based on the English population aged 50 and older living in  
31 private households. For information on data access, please see [https://www.elsa-](https://www.elsa-project.ac.uk/accessing-elsa-data)  
32 project.ac.uk/accessing-elsa-data. At wave 1, 12,099 individuals, which included age-eligible  
33 core members and their spouses who did not need to meet the age criteria, were recruited. ELSA  
34 interviews participants every two years, collecting rich information on their health (emotional,  
35 cognitive, physical) as well as their social and economic circumstances. For more information on  
36 the study and the cohort, please see Steptoe et al., 2013. The current analysis focuses on data  
37 collected in 2012/2013 (wave 6) and 2016/2017 (wave 8), when the sexual activity module was  
38 administered. The total number of respondents in waves 6 and 8 was 10,601 and 8,445,  
39 respectively; of these, 85% and 86% completed the self-completion questionnaires. Note that  
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3 although these data have been used in prior work (e.g., Smith et al., 2020), none have addressed  
4 our research question or, importantly, any dyadic effects.  
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8 Our analytic sample included all individuals who completed the sexual activity module in  
9 both waves and whose partner also did, with the partner being the same person across waves.  
10 Given our interest in the gender effects, we focused on opposite-sex couples, which resulted in  
11 the exclusion of 24 couples. The final sample included 1,301 individuals and their partners (total  
12  $N = 2,602$ ). Participants were 63.3 years old on average ( $SD = 8.1$ ) and were predominantly  
13 White (98%; all but 53). More than half of the sample (58%;  $n = 1383$ ) reported having  
14 completed upper secondary education, and 24% ( $n = 575$ ) tertiary education. Most (94%;  $n =$   
15 2,448) were married. The median total family wealth (based on the harmonized variable,  
16 *h6atotb*, a household-level measure, aggregating housing, financial, business, and other assets)  
17 was £303,000 (mean = 450,164; standard deviation = 879,820).  
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31 **Analytic sample comparison.** To examine if and how our sample selection biased the  
32 type of individuals we analyzed, we compared those who were included in our primary analyses  
33 ( $n = 2,602$  who had dyadic data on sexual modules at both time points) against partnered  
34 individuals who were not ( $n = 2,492$ ) in terms of various sociodemographic (age, education,  
35 wealth), psychosocial (depression, life satisfaction, relationship closeness), and health-related  
36 variables (number of chronic conditions, physical activity). We found that those included in our  
37 analyses were younger ( $p < .001$ ) but were not any more likely to be highly educated ( $p = .19$ ) or  
38 in the wealthiest tertile ( $p = .99$ ). They felt closer to their partner ( $p = .003$ ) but did not differ in  
39 life satisfaction ( $p = .06$ ) or depression ( $p = .09$ ). Finally, they had fewer chronic conditions ( $p$   
40  $< .001$ ) and self-reportedly engaged in all types of exercise more frequently ( $ps < .01$ ). Full  
41 statistics are reported in Supplementary Table 1.  
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## Measures: Sexual Experiences

**Sexual interest.** At baseline, participants responded to the following question: “How often did you think about sex during the past month? This includes times of just being interested in sex, daydreaming or fantasizing about sex, as well as times when you wanted to have sex.” The response options ranged from 1 (*not at all*) to 7 (*more than once a day*). At follow-up, the same question was asked with the stem changed to “during the past 12 months.” The response options ranged from 1 (*not at all*) to 6 (*once a day or more*). For consistency across waves, we recoded the baseline 7-point scale to match the 6-point scale used at follow-up, combining option 7 with option 6 (originally *once a day*).

**Sexual activity and frequency.** Participants were asked if they had had any sexual activity (sexual intercourse, masturbation, petting, or fondling) in the past year (Yes/No; sexual activity status). Those who responded with a “Yes” were directed to further questions, including “how many times have you had or attempted sexual intercourse [vaginal, anal, or oral sex]” (intercourse frequency). As in sexual interest, this question referred to the past month at baseline and the past 12 months at follow-up. Response options ranged from 1 (*not at all*) to 7 (*more than once a day*) at baseline and from 1 (*not at all*) to 6 (*once a day or more*) at follow-up. As with sexual interest, baseline responses were harmonized to the 6-point follow-up scale by recoding option 7 to 6. Participants who reported no sexual activity were coded as 1 (*not at all*) for intercourse frequency.

**Sexual satisfaction.** At baseline, participants who indicated being sexually active were asked how satisfied they had been with their overall sex lives during the past three months. At the follow-up, this question was asked with reference to the past 12 months. Response options

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3 ranged from 1 (*very satisfied*) to 5 (*very dissatisfied*) and were recoded so that higher values  
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5 indicate higher satisfaction.  
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### 7 **Measures: Health and Physical Capabilities**

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10 **Self-rated health.** Participants answered the question, “Would you say your health is...”  
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12 using a scale ranging from 1 (*excellent*) to 5 (*poor*). We recoded this item so that higher values  
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14 indicate better health.  
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17 **Grip strength (kg).** During a nurse visit, participants completed a grip strength module  
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19 in which they were asked to squeeze a Smedley hand-held dynamometer as hard as possible for a  
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21 couple of seconds. This process was repeated three times for each hand. We used the average of  
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23 the three measurements from the dominant hand for our analyses (Smith et al., 2019).  
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26 **Gait speed (m/s).** At baseline, participants aged 60 or older were asked to walk, with or  
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28 without a gait-assistance device, 2.44m at their usual walking pace, and the time from start to  
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30 finish was recorded. The test was repeated twice. We used the average of the two walks in our  
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32 analyses (Hackett et al., 2018). Following previous research, we created a binary indicator of  
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34 slowness, defined as  $\leq 0.8\text{m/s}$ , considered to indicate low physical performance (de Souza et al.,  
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36 2025).<sup>1</sup> Out of 1,676 individuals who completed the test, 13% were coded as slow walkers (103  
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38 men, 113 women). We also report full results from models using gait speed as a continuous  
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40 measure in Supplementary Material.  
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### 44 **Covariates and Missing Values**

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47 We controlled for sociodemographic characteristics including participants' gender, their  
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49 and their partner's age, race (white vs. non-white), education (< less than upper secondary, upper  
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51 secondary and vocational training, tertiary), and total household wealth (tertilled). Socioeconomic  
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53 status, such as educational attainment, has been linked with both health and sexual activity in  
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3 later life (Ikeda, 2024; Momtaz et al., 2014) and was therefore considered important to account  
4 for. We also controlled for participants' marital status (married vs. not), relationship closeness  
5 (assessed using one item, "How close is your relationship with your spouse or partner?" on a 4-  
6 point scale), and depressive symptoms (assessed using the 8-item Center for Epidemiological  
7 Studies-Depression scale; Radloff, 1977), all of which could serve as potential confounders  
8 (Roman Ray et al., 2023; Skoblow et al., 2023). Missing values for covariates were minimal and  
9 below 2%, except for educational attainment (8%), and were imputed using a random forest-  
10 based imputation algorithm (Stekhoven & Bühlmann, 2012). Our key variables (self-rated health,  
11 physical capabilities, and sexual experiences) were not imputed.  
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### 24 **Analysis Plan**

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26 All analyses were conducted in R. To account for the nested structure of the data, we  
27 conducted multilevel modeling using the *lme4* package (Bates et al., 2015). We used an Actor-  
28 Partner Interdependence Model (Kenny et al., 2006) to examine both actor and partner effects—  
29 that is, how one's own health or physical capabilities (actor effect), as well as their partner's  
30 health or physical capabilities (partner effect), are related to their sexual experiences. We first  
31 examined concurrent associations at baseline, followed by prospective associations in models  
32 that included baseline level of each outcome as a covariate (e.g., baseline sexual interest was  
33 controlled for in models predicting follow-up interest). We also tested gender interactions and  
34 dropped nonsignificant interaction terms. Any significant interactions were probed by estimating  
35 simple slopes for men and women using the *emmeans* package (Lenth, 2022). Statistical  
36 inference was based on a significance threshold of  $p < .05$ . Given the exploratory nature of the  
37 analyses and the treatment of each model as an independent test, we did not apply corrections for  
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multiple comparisons and report uncorrected  $p$ -values while acknowledging the increased potential for Type 1 error (Rubin, 2021).

**Robustness check.** Considering that baseline sexual dysfunction may confound any association between health or physical capabilities and later sexual experiences, we re-ran our prospective analyses, excluding couples with men who were “never able to get and keep an erection which would be good enough for sexual activity” at baseline, which resulted in the exclusion of 193 couples. All reported results remained unchanged in this analysis.

## Results

### Preliminary Analyses

At baseline, 81% of our participants were sexually active, and 89% of them remained active at follow-up. A transition matrix illustrating changes in sexual activity across waves is presented in Supplementary Figure 1. Table 1 presents descriptive statistics and correlations for key study variables at baseline, separately for men and women.

### Cross-sectional Analyses

Table 2 shows a summary of the results from cross-sectional models across outcomes. Full results with all covariates can be found in Supplementary Material.

**Self-rated health.** Across genders, higher self-rated health was associated with greater odds of being sexually active and having more frequent intercourse. Having a partner with higher self-rated health was independently associated with having more frequent intercourse. However, associations between self-rated health and sexual interest or satisfaction varied by gender.

Among men, higher self-rated health was associated with greater sexual interest,  $b = 0.17$ ,  $t = 4.09$ ,  $p < .001$  (Figure 1A), and greater sexual satisfaction,  $b = 0.17$ ,  $t = 3.90$ ,  $p < .001$  (Figure 1B). Among women, self-rated health was not associated with interest,  $b = 0.03$ ,  $t = 0.69$ ,  $p = .49$

(Figure 1A), and in fact, associated with lower sexual satisfaction,  $b = -0.09$ ,  $t = -2.02$ ,  $p = .04$  (Figure 1B). Gender differences also emerged for partner effects on sexual satisfaction: For women, having a partner with higher self-rated health was associated with greater sexual satisfaction,  $b = 0.11$ ,  $t = 2.68$ ,  $p = .008$ , but this partner effect was not significant for men,  $b = -0.03$ ,  $t = -0.64$ ,  $p = .52$  (Figure 1C).

**Grip strength.** One gender interaction emerged with grip strength, suggesting that greater grip strength was associated with greater sexual interest among men,  $b = 0.03$ ,  $t = 4.06$ ,  $p < .001$ , but not among women,  $b = 0.003$ ,  $t = 0.28$ ,  $p = .78$  (Figure 1D).

**Gait speed.** Significant gender interactions suggested that men's slowness was associated with reduced sexual interest for both partners. Specifically, men's own slowness was associated with their lower sexual interest,  $b = -0.54$ ,  $t = -2.90$ ,  $p = .004$ , whereas no such actor effect emerged for women,  $b = -0.03$ ,  $t = -0.21$ ,  $p = .83$  (Figure 1E). In contrast, partner's slowness was unrelated to interest among men,  $b = 0.12$ ,  $t = 0.69$ ,  $p = .49$ , but was associated with lower interest among women,  $b = -0.41$ ,  $t = -2.20$ ,  $p = .03$  (Figure 1F).

In sum, higher self-rated health, and to some degree, having a partner with higher self-rated health, were linked to being more sexually active across gender, but their positive implications for sexual interest and satisfaction were evident only among men. Further, men's physical capabilities, reflected in greater grip strength and the absence of slowness, were positively associated with their own and their partner's sexual interest.

### Prospective Associations

Table 3 shows a summary of the results from longitudinal models across outcomes, with full results available in Supplementary Material. Note that each model adjusted for an equivalent outcome assessed at baseline.



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3 individual-focused perspective toward a dyadic perspective in understanding older adults' sexual  
4 experiences (Waite et al., 2017). Given that most partnered sexual interactions occur within  
5 established relationships (Træen et al., 2019), both one's own and the partner's health conditions  
6 appear to play a role in predicting sexual experiences. For example, higher self-rated health in  
7 *both* partners was independently associated with more frequent intercourse at baseline, as well as  
8 with greater odds of remaining sexually active and with increases in intercourse frequency over  
9 four years. Across outcomes, the significant prospective associations were small-to-modest in  
10 magnitude, partly reflecting adjustment for baseline levels of the corresponding outcome. For  
11 self-rated health, odds ratios for sexual activity were 1.29 for actor and 1.23 for partner effects,  
12 indicating 29% and 23% greater odds of being sexually active at follow-up for a one-unit  
13 difference in one's own and partner's self-rated health. Given the high prevalence of sexual  
14 activity, these odds ratios correspond to small differences in probability; unstandardized  
15 coefficients for continuous outcomes were similarly small in absolute magnitude.

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33 Our findings revealed several gendered patterns, particularly for sexual interest. At  
34 baseline, higher self-rated health, grip strength, and absence of slowness were related to greater  
35 interest among men, but none of these actor effects were significant for women. Instead, men's  
36 slowness was associated with lower interest among women, a partner effect not observed in men.  
37 Likewise, the association between higher self-rated health and increased interest four years later  
38 was evident only among men. Together, these findings suggest that men's sexual interest is more  
39 closely tied to their own health and capabilities than women's is. This aligns with the literature  
40 on women's sexual interest, which does acknowledge the role of physical conditions but places  
41 great emphasis on psychological or relational factors (e.g., Cherkasskaya & Rosario, 2019;  
42 Meana, 2010). The significant partner effect observed only for women's interest also reinforces  
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3 the view that women's sexual interest may be responsive to relational factors and is consistent  
4 with previous work. For example, men's successful aging (a latent construct capturing emotional  
5 and social well-being) has been associated with women's changes in sexual desire, but not vice  
6 versa (Štulhofer et al., 2019); likewise, stronger evidence is found for men's feelings of intimacy  
7 predicting their partner's sexual well-being than the reverse (Štulhofer et al., 2020), suggesting  
8 that women's subjective sexual experiences may be more sensitive to their partner's conditions  
9 than men's are.

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12 In contrast, fewer gender differences emerged for sexual activity or intercourse frequency  
13 and changes therein. Only one gender difference emerged with a partner effect of grip strength,  
14 whereby women's strength was associated with men's reports of intercourse frequency, but not  
15 vice versa. All other effects were comparable across gender. For both men and women, better  
16 self-rated health was associated with greater odds of being and remaining sexually active as well  
17 as more frequent intercourse at both baseline and follow-up. Independently, having a partner  
18 with higher self-rated health was associated with remaining sexually active by the follow-up, and  
19 with greater intercourse frequency both concurrently and longitudinally. Thus, unlike interest in  
20 sexual experiences, which may be shaped differently for men and women, the extent to which  
21 partners' physical conditions are tied to sexual behavior appears more generalizable across  
22 genders.

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25 Looking at the global evaluation of sexual life, which reflects both sexual interest and  
26 actual engagement in sexual activity, one particularly notable finding was that women's sexual  
27 satisfaction was higher when their partner reported better health, but, if anything, lower when  
28 women themselves reported better health. Although healthier women may engage in more  
29 frequent intercourse, as suggested by the association between self-rated health and intercourse  
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3 frequency in our data (Table 2), frequency alone may be insufficient to ensure greater  
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5 satisfaction. Especially in heterosexual relationships, women are less likely than men to  
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7 consistently experience orgasm (McElroy & Perry, 2024), and sexual activity that is not fulfilling  
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9 may, in turn, lower sexual satisfaction. From this perspective, it may be the partner's health that  
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11 is more critical for ensuring the quality, not merely the quantity, of women's sexual experiences.  
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15 Our findings linking physical health status to later sexual activity are important because  
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17 the pathway from health to sexual engagement has received comparatively less attention than the  
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19 growing body of work examining sexual activity as a predictor of health outcomes. In fact, in our  
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21 analyses testing this reverse pathway (i.e., whether sexual experiences predicted health outcomes  
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23 four years later), there was no evidence of the putative "benefits" of sexual activity (see the  
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25 Supplementary Material for the full results). The only exception was a gender interaction  
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27 indicating that, among men, higher sexual interest at baseline was associated with increases in  
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29 grip strength at follow-up. Even in cases when sexual activity may indeed confer physical health  
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31 benefits, failing to consider that individuals' and their partners' health conditions may act as  
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33 antecedents of sexual activity risks overestimating the causal influence of sexual activity on  
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35 health. For example, linking sexual activity at a single time point to distal outcomes such as  
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37 mortality (Cao et al., 2020; Tang et al., 2024) often implies a unidirectional causal pathway, yet  
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39 such associations may partly reflect pre-existing individual or dyadic health conditions. Although  
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41 the individual's own health is sometimes statistically controlled in this type of work, the role of  
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43 partner health is rarely accounted for, despite emerging evidence that partner characteristics can  
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45 meaningfully contribute to individual health outcomes (Burns, 2020; Stavrova, 2019). Our  
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47 findings highlight the importance of considering both actor and partner characteristics in  
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49 modeling the presumed bidirectional link between health and sex. It is likely that sexual activity  
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3 has short-term health-promoting effects (e.g., energy boosts), which may both accumulate to  
4 support long-term health and also serve to sustain sexual engagement, potentially creating a  
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6 positive feedback loop within couples.  
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10 Our work extends previous investigations linking physical health conditions to sexual  
11 experiences by exploring both subjective perceptions of health and objective indicators of  
12 physical capabilities, examining dyadic effects, and conducting prospective analyses, all of  
13 which are rare in studies of older couples' sexuality. In particular, this work revealed the  
14 potential implications of gait speed for sexual experiences for the first time—specifically, men's  
15 physical slowness was associated with both their own and their partners' lower sexual interest, as  
16 well as their partners' decreases in satisfaction. It is conceivable that gait speed, reflecting lower-  
17 body strength, coordination, and mobility, may have unique implications (e.g., positioning and  
18 movement) for the quality and feasibility of various sexual activities from the partner's  
19 perspective. Alternatively, men's slowness may serve as a visible, salient indicator of declining  
20 vitality, prompting women to recalibrate their expectations or investment in sex (e.g., by raising  
21 concerns about potential health risks of sexual activity), which could also contribute to lower  
22 interest and satisfaction. We also observed more limited associations involving grip strength:  
23 Men's baseline grip strength was associated with their higher concurrent sexual interest, whereas  
24 women's baseline grip strength was associated with their male partner's greater intercourse  
25 frequency four years later. The lack of associations with women's sexual experiences suggests  
26 that women's sexual experiences may be more responsive to partners' visible indicators of  
27 vitality than to the underlying physical capacity that grip strength captures (Bohannon, 2019).  
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51 While these findings, particularly the gendered associations, warrant replication, they  
52 highlight the value of assessing physical vitality, such as gait speed and grip strength, when  
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3 studying sexual experiences in later life. Future research should explore other markers of vitality  
4 and uncover those that best predict the maintenance of sexual activity and satisfaction. Such  
5 work could offer valuable insights for identifying individuals at greater risk of declining sexual  
6 health—individuals who may benefit from open communication around these issues, a topic  
7 often overlooked by healthcare professionals but worthy of greater attention (Dyer & das Nair,  
8 2013).

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17 Several limitations of this study should be noted. While large, our sample lacked ethnic  
18 diversity (e.g., 98% White) and was geographically homogeneous (England). Because gendered  
19 patterns in sexual experiences are at least in part socially constructed (Laan et al., 2021), it is  
20 critical to examine whether similar effects emerge in cultures with different gender norms and  
21 sexual scripts. Further, given the nature of our research question, some individuals were  
22 necessarily excluded from the analyses, including partnered individuals without available partner  
23 data, a group known to differ psychologically from dyadic samples (Park et al., 2021), as well as  
24 individuals who selectively declined to complete the sexual activity modules (see Supplementary  
25 Material for comparisons between the analytic sample and excluded participants for this reason).  
26 Indeed, volunteer bias in sexuality research has been well documented (albeit largely among  
27 younger, college-aged samples; Dawson et al., 2019; Strassberg & Lowe, 1995; Wiederman,  
28 1999), with individuals reporting more sexual experience and positive sexual attitudes being  
29 more likely to participate. If similar patterns extend to older populations, our findings, as well as  
30 much of the existing literature, may overestimate levels of sexual activity and disproportionately  
31 reflect experiences among those who are more (vs. less) sexually active. These considerations  
32 should be carefully accounted for when interpreting our results.

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3 Further, although our prospective analyses adjusted for baseline levels of corresponding  
4 sexual experiences, allowing us to better capture changes, the discrepancy in reporting time  
5 frames across waves (referring to the past month vs. past year) may have influenced participants'  
6 responses (Cameron & Santos-Iglesias, 2024), limiting the longitudinal interpretation of these  
7 analyses. Future research using equivalent measures across time points will allow for more  
8 accurate modeling of bidirectional relationships.  
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11 Finally, the scope of the sexual variables we assessed was constrained. The only specific  
12 activity we assessed was intercourse, but other specific forms of partnered sexual activities (e.g.,  
13 caressing) could be more relevant to older adults and should be assessed. Further, equally  
14 important to successful sexual aging as the objective changes in one's own and partner's physical  
15 health conditions is the acceptance of and adaptation to those changes and subsequent  
16 ramifications in sexual experiences (Štulhofer, 2025). Assessing those experiences can provide  
17 deeper insights into the processes related to positive sexual aging.  
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19  
20 In conclusion, these findings, while exploratory and small-to-modest in magnitude,  
21 underscore the importance of investigating dyadic effects and identifying objective health  
22 markers that may signal vulnerabilities to declines in sexual health. As sexual well-being is  
23 increasingly recognized as a vital component of healthy aging, understanding the determinants of  
24 sexual experiences in later life warrants more systematic and inclusive research.  
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### Conflict of Interest

None.

### Data Availability

Authors have no right to share the data publicly. Information on how to access the data used in the current study can be found at <https://www.elsa-project.ac.uk/accessing-elsa-data>. This study was not preregistered.

### Author Contribution

Y. Park planned the study, analyzed the data, and wrote the paper. A. Steptoe provided access to data. S. Stenlund and A. Steptoe contributed to revising the paper.

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**Table 1.** Descriptive Statistics and Zero-Order Correlations Between Key Study Variables at Baseline

Variable	Men							Men <i>M</i> ( <i>SD</i> )
	1	2	3	4	5	6	7	
Women								
1. Self-rated health	<b>.41*</b>	.15*	.38*	.19*	.16*	.20*	.15*	3.39 (1.05)
2. Grip strength	.23*	<b>.26*</b>	.30*	.25*	.20*	.19*	.08*	29.3 (6.66)
3. Gait speed	.41*	.27*	<b>.48*</b>	.23*	.20*	.16*	.01	1.00 (0.17)
4. Sexual interest	.14*	.15*	.19*	<b>.42*</b>	.53*	.44*	.01	4.42 (1.60)
5. Sexual activity status	.18*	.11*	.18*	.50	<b>84%</b>	.41*	—	0.84 (0.36)
6. Intercourse frequency	.15*	.15*	.14*	.55*	.51*	<b>.81*</b>	.37*	2.31 (1.38)
7. Sexual satisfaction	-.02	.08	-.03	.16	—	.29*	<b>.36*</b>	3.58 (1.19)
Women <i>M</i> ( <i>SD</i> )	3.44 (1.05)	17.77 (4.63)	0.97 (0.16)	3.10 (1.52)	0.77 (0.42)	2.28 (1.37)	3.79 (1.09)	

*Notes.* Men's and women's correlations, means (*M*), and standard deviations (*SD*) appear above and below the diagonal, respectively. Bolded diagonal values represent within-dyad correlations (percent agreement for sexual activity status). Continuous gait-speed score is used. Sexual activity status is coded as 0 = inactive, 1 = active. Sexual satisfaction was only assessed among participants who reported being sexually active. \* $p < .05$ .

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**Table 2.** Self-Rated Health and Physical Capabilities Associated with Sexual Outcomes at Baseline

Predictors	Sexual interest			Activity			Intercourse			Satisfaction		
	<i>b</i>	<i>SE</i>	<i>p</i>	<i>OR</i>	<i>SE</i>	<i>p</i>	<i>b</i>	<i>SE</i>	<i>p</i>	<i>b</i>	<i>SE</i>	<i>p</i>
<i>Self-rated health (Ns: 2,595, 2,596, 2,584, 1,619)</i>												
Actor	0.17	0.04	<.001	1.87	0.35	.001	0.09	0.02	<.001	0.17	0.04	<.001
Partner	-0.02	0.04	.623	1.02	0.19	.921	0.08	0.02	.001	-0.03	0.04	.522
Actor × Gender	-0.14	0.06	.018							-0.25	0.06	<.001
Partner × Gender	0.08	0.06	.173							0.14	0.06	.021
<i>Grip strength (Ns: 1,786, 1,783, 1,776, 1,060)</i>												
Actor	0.03	0.01	<.001	1.04	0.04	.400	0.01	0.01	.079	0.01	0.01	.087
Partner	0.00	0.01	.988	0.98	0.04	.650	0.01	0.01	.093	0.00	0.01	.462
Actor × Gender	-0.03	0.01	.035									
Partner × Gender	0.01	0.01	.599									
<i>Slowness (Ns: 1,401, 1,400, 1,392, 744)</i>												
Actor	-0.54	0.19	.004	0.55	0.19	.089	-0.02	0.09	.818	-0.04	0.14	.784
Partner	0.12	0.17	.488	0.70	0.25	.305	-0.09	0.09	.321	0.11	0.14	.443
Actor × Gender	0.50	0.25	.048									
Partner × Gender	-0.52	0.25	.039									

Notes. *b* = unstandardized coefficient; *SE* = standard error; *OR* = odds ratio. All models adjusted for sociodemographic, relationship, and psychological covariates. Gender interactions were retained if the interaction with either actor or partner effect was significant. Standard errors for sexual activity refer to the log-odds estimates. *Ns* correspond to the number of individuals included in each model. Full results are reported in Supplementary Material.

**Table 3.** Self-Rated Health and Physical Capabilities Associated with Sexual Outcomes at Follow-up

Predictors	Sexual interest			Activity			Intercourse			Satisfaction		
	<i>b</i>	<i>SE</i>	<i>p</i>	<i>b</i>	<i>OR</i>	<i>p</i>	<i>b</i>	<i>SE</i>	<i>p</i>	<i>b</i>	<i>SE</i>	<i>p</i>
<i>Self-rated health (Ns = 2,566, 2,595, 2,570, 1,603)</i>												
Actor	0.12	0.03	<.001	1.29	0.12	.005	0.05	0.02	.002	0.08	0.03	.004
Partner	0.02	0.03	.577	1.23	0.11	.021	0.04	0.02	.014	0.02	0.03	.507
Actor × Gender	-0.12	0.04	.007									
Partner × Gender	-0.03	0.04	.526									
<i>Grip strength (Ns = 1,767, 1,782, 1,767, 1,049)</i>												
Actor	0.00	0.00	.442	0.99	0.02	.789	0.00	0.00	.373	-0.00	0.01	.826
Partner	-0.00	0.00	.770	1.01	0.02	.448	0.02	0.01	.001	0.00	0.01	.612
Actor × Gender							0.01	0.01	.497			
Partner × Gender							-0.02	0.01	.035			
<i>Slowness (Ns = 1,382, 1,399, 1,382, 733)</i>												
Actor	0.03	0.09	.741	0.70	0.18	.178	-0.00	0.06	.960	-0.31	0.18	.086
Partner	0.11	0.09	.235	0.91	0.24	.714	-0.08	0.06	.202	0.10	0.16	.529
Actor × Gender										0.42	0.24	.079
Partner × Gender										-1.16	0.25	<.001

*Notes.* *b* = unstandardized coefficient; *SE* = standard error; *OR* = odds ratio. All models adjusted for baseline levels of the outcome, as well as sociodemographic, relationship, and psychological covariates. Gender interactions were retained if the interaction with either the actor or partner effect was significant. Full model results are provided in Supplementary Material.

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3 **Figure 1.** Gender Interactions with Self-Rated Health and Physical Capabilities Associated with  
4 Sexual Experiences at Baseline

5 Alt Text: Six-panel figure showing estimated baseline sexual interest and satisfaction by gender,  
6 across levels of actor and partner self-rated health, actor grip strength, and actor and partner  
7 slowness.  
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13 **Figure 2.** Gender Interactions with Self-Rated Health and Physical Capabilities Associated with  
14 Sexual Experiences at Follow-up Levels (Adjusting for Baseline)

15 Alt Text: Three-panel figure showing estimated baseline sexual interest, intercourse frequency,  
16 and sexual satisfaction by gender, across levels of actor self-rated health, partner grip strength,  
17 and partner slowness.  
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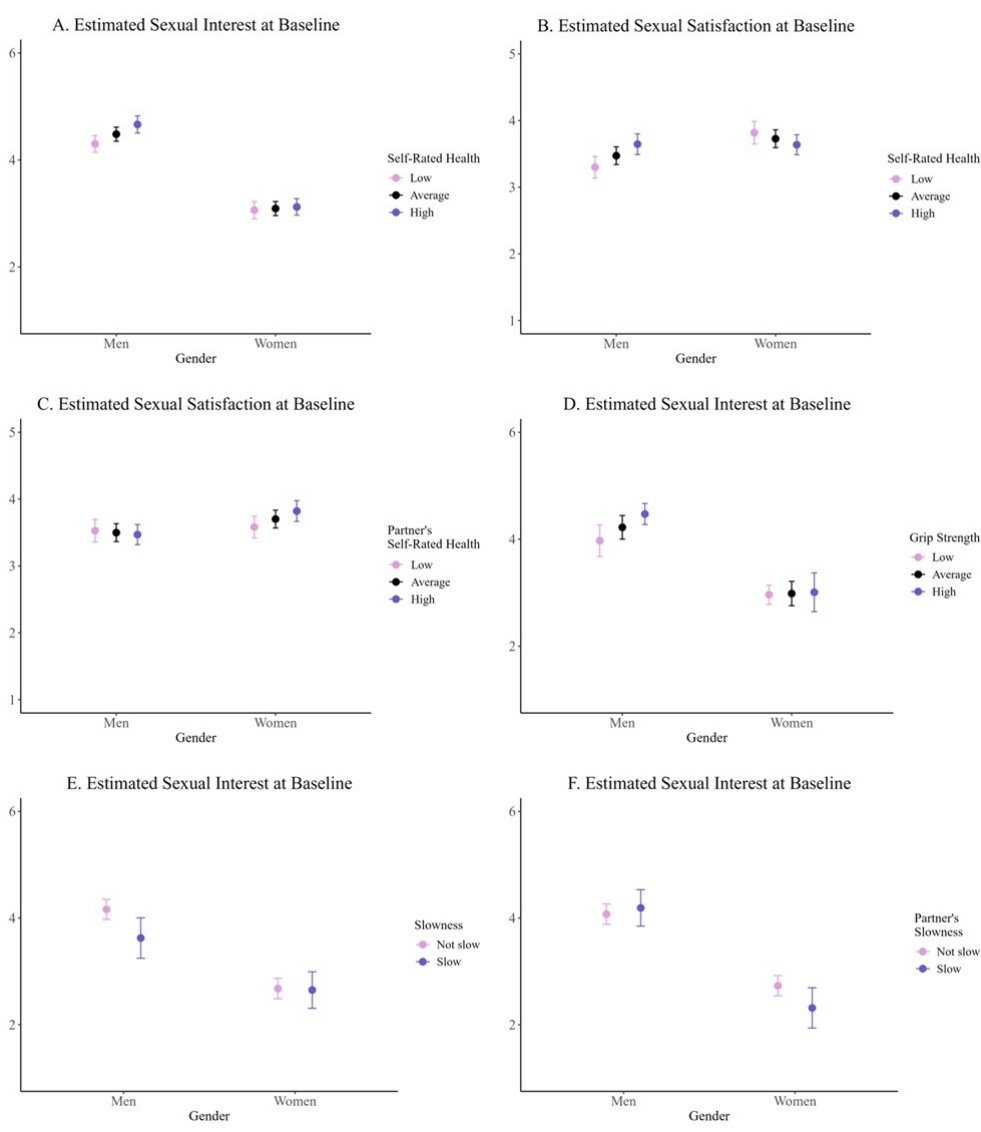


Figure 1. Gender Interactions with Self-Rated Health and Physical Capabilities Associated with Sexual Experiences at Baseline

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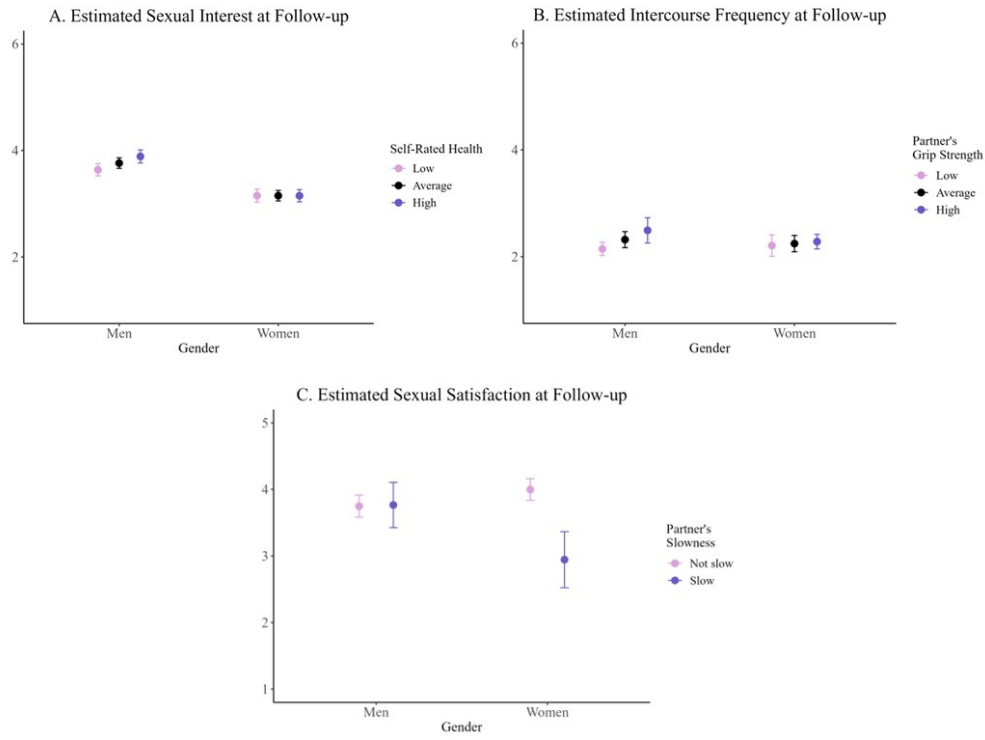


Figure 2. Gender Interactions with Self-Rated Health and Physical Capabilities Associated with Sexual Experiences at Follow-up Levels (Adjusting for Baseline)

274x208mm (96 x 96 DPI)

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3 ***The Journals of Gerontology, Series B: Psychological Sciences and Social Sciences***  
4 **Supplementary Material: Park, Stenlund, & Steptoe. Whose Health Matters? Longitudinal**  
5 **Analyses of Older Romantic Couples' Health, Physical Capabilities, and Sexual**  
6 **Experiences.**  
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10 **Table S1** below presents full statistics comparing individuals included in our analytic sample  
11 against partnered individuals who were excluded. Note that this includes people who were  
12 excluded because either they or their partner has not completed the sexual activity module (or  
13 any modules) at either wave. To address one reviewer's concern about selective non-response  
14 (i.e., not responding to the sexual activity module specifically), we also compared our analytic  
15 sample against a subset of individuals ( $n = 1,211$ ) who completed the self-completion  
16 questionnaire but *selectively* skipped the sexual activity module across waves. The results were  
17 very similar such that our sample was younger ( $b = -3.24, t = -9.23, p < .001$ ), had fewer health  
18 problems ( $b = -0.15, t = -3.27, p < .001$ ), and reported more frequent moderate and vigorous  
19 physical activity ( $b = 0.09, t = 2.46, p = .01$ , and  $b = 0.18, t = 3.59, p < .001$ ). The two groups did  
20 not differ in their educational attainment, wealth, closeness with a partner, general life  
21 satisfaction, depressive symptoms, or frequency of light physical activity.  
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**Table S1.** Descriptive Statistics by Inclusion Status and Comparison Between Participants Included vs. Excluded from the Final Analyses

<i>Outcomes</i>	<b>Included (<i>n</i> = 2602)</b>	<b>Excluded (<i>n</i> = 2492)</b>	<i>Est.</i>	<i>SE</i>	<i>t</i>	<i>p</i>
Age	63.28 (8.09)	64.87 (8.70)	-1.59	0.31	-5.11	< .001
Closeness	1.40 (1.23)	1.54 (1.28)	0.06	0.02	2.98	.003
Life satisfaction	3.75 (0.51)	3.70 (0.56)	0.08	0.04	1.92	.056
Depression	3.72 (0.74)	3.66 (0.85)	-0.09	0.05	-1.74	.082
Chronic health conditions	5.31 (1.14)	5.23 (1.20)	-0.14	0.04	-3.60	.001
Light exercise	3.47 (0.96)	3.31 (1.08)	0.06	0.02	2.47	.014
Moderate exercise	0.99 (1.61)	1.08 (1.67)	0.16	0.03	5.00	< .001
Vigorous exercise	2.16 (1.30)	2.00 (1.27)	0.16	0.04	3.85	< .001
			<i>OR</i>	<i>SE</i>	<i>z</i>	<i>p</i>
Tertiary education	575 (24%)	505 (22%)	1.21	0.17	1.32	.186
Highest wealth tertile	814 (33%)	876 (34%)	1.05	3.66	0.01	.988

*Notes.* Means (with standard deviations in parentheses) are reported for continuous variables, and counts (with proportions in parentheses) are reported for categorical variables. Statistics are based on estimates (Est) and odds ratios (OR) from multilevel models accounting for clustering by couples.

**Table S2** corresponds to Table 3 in the main manuscript but examines the opposite direction of association (i.e., sexual experiences at baseline predicting health at follow-up). Because gait speed was not assessed at follow-up, these models are limited to self-rated health and grip strength. The significant actor sexual interest  $\times$  gender interaction indicated that, for men, higher sexual interest predicted increases in grip strength at the follow-up ( $b = 0.26, t = 2.77, p = .006$ ), but this association was not significant for women ( $b = -0.03, t = -0.32, p = .75$ ).

**Table S2.** Self-Rated Health and Physical Capabilities Associated with Sexual Outcomes at Follow-up

<i>Predictors</i>	<b>Interest</b>			<b>Activity</b>			<b>Intercourse</b>			<b>Satisfaction</b>		
	<i>b</i>	<i>SE</i>	<i>p</i>	<i>b</i>	<i>SE</i>	<i>p</i>	<i>b</i>	<i>SE</i>	<i>p</i>	<i>b</i>	<i>SE</i>	<i>p</i>
Outcomes: Self-rated health (Ns: 2588, 2590, 2566, 1474)												
Actor	0.01	0.01	.202	0.09	0.05	.051	-	0.02	.963	-0.02	0.02	.319
Partner	0.01	0.01	.338	0.04	0.04	.415	0.01	0.02	.536	-0.02	0.02	.348
Outcomes: Grip strength (Ns: 1770, 1768, 1754, 976)												
Actor	0.26	0.09	.006	0.07	0.27	.787	0.01	0.11	.919	-0.07	0.12	.542
Partner	0.12	0.10	.234	0.35	0.27	.194	0.14	0.11	.228	0.03	0.12	.797
Actor $\times$ Gender	-0.29	0.14	.036									
Partner $\times$ Gender	-0.18	0.14	.188									

*Notes.*  $b$  = unstandardized coefficient;  $SE$  = standard error. All models adjusted for baseline levels of the outcome, as well as sociodemographic, relationship, and psychological covariates. Gender interactions were retained if the interaction with either the actor or partner effect was significant.

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3 Tables S3-S10 present the full results from models examining the concurrent and prospective  
4 associations of self-rated health and physical capabilities with sexual experiences. In particular,  
5 Tables S6 and S10 report results from models treating gait speed as a continuous measure rather  
6 than categorizing it as slowness.  
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## 10 **Table Notes**

### 11 **Tables S3-S6:**

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14 *Notes.* (A) = Actor effect; (P) = Partner effect. For categorical variables, the majority group  
15 served as a reference (i.e., White for race, upper secondary/vocational training for education, and  
16 married for marital status). For wealth, the second tertile was the reference group. Gender  
17 interactions were retained if the interaction with either the actor or partner effect was significant.  
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### 20 **Tables S7-S10:**

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23 *Notes.* (A) = Actor effect; (P) = Partner effect. For categorical variables, the majority group  
24 served as a reference (i.e., White for race, upper secondary/vocational training for education, and  
25 married for marital status). For wealth, the second tertile was the reference group. Gender  
26 interactions were retained if the interaction with either the actor or partner effect was significant.  
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**Table S3.** Results From Models with Self-Rated Health Predicting Sexual Experiences at Baseline

<i>Predictors</i>	<b>Sexual interest</b>			<b>Activity</b>			<b>Intercourse</b>			<b>Satisfaction</b>		
	<i>Est.</i>	<i>SE</i>	<i>p</i>	<i>OR</i>	<i>SE</i>	<i>p</i>	<i>Est.</i>	<i>SE</i>	<i>p</i>	<i>Est.</i>	<i>SE</i>	<i>p</i>
Gender	-1.39	0.05	<.001	0.11	0.03	<.001	-0.04	0.03	.138	0.24	0.05	<.001
Age (A)	-0.05	0.00	<.001	0.83	0.02	<.001	-0.03	0.00	<.001	-0.01	0.00	.281
Age (P)	-0.02	0.00	<.001	0.92	0.02	.002	-0.03	0.00	<.001	0.00	0.00	.961
Race (A)	-0.67	0.25	.007	0.41	0.55	.506	-0.10	0.17	.554	0.26	0.23	.267
Race (P)	-0.19	0.25	.455	0.48	0.65	.587	0.17	0.17	.317	0.11	0.23	.648
Education (A)												
< Upper sec.	-0.28	0.08	<.001	0.45	0.18	.052	0.02	0.06	.762	0.17	0.08	.038
Tertiary	0.14	0.07	.048	1.35	0.71	.573	0.08	0.06	.161	-0.06	0.07	.357
Education (P)												
< Upper sec.	-0.09	0.08	.269	0.57	0.23	.168	0.08	0.06	.190	0.10	0.08	.209
Tertiary	0.26	0.07	<.001	1.40	0.72	.515	0.18	0.06	.002	-0.03	0.07	.709
Wealth (1 <sup>st</sup> )	-0.21	0.08	.010	0.43	0.26	.159	-0.05	0.08	.552	0.10	0.08	.240
Wealth (3 <sup>rd</sup> )	0.09	0.08	.251	1.64	1.10	.460	0.24	0.08	.004	0.00	0.08	.995
Marital status	0.29	0.13	.029	3.66	4.93	.334	0.28	0.13	.032	0.25	0.12	.037
Closeness (A)	0.08	0.06	.162	1.09	0.33	.783	0.25	0.04	<.001	0.49	0.07	<.001
Closeness (P)	0.20	0.06	.001	4.03	1.24	<.001	0.24	0.04	<.001	0.21	0.07	.002
Depression (A)	0.03	0.02	.129	1.11	0.13	.353	-0.02	0.02	.284	-0.07	0.02	<.001
Depression (P)	-0.00	0.02	.906	0.89	0.10	.328	-0.02	0.02	.289	-0.01	0.02	.676
Health (A)	0.17	0.04	<.001	1.87	0.35	.001	0.09	0.02	<.001	0.17	0.04	<.001
Health (P)	-0.02	0.04	.623	1.02	0.19	.921	0.08	0.02	.001	-0.03	0.04	.522
Health (A) × Gender	-0.14	0.06	.018							-0.25	0.06	<.001
Health (P) × Gender	0.08	0.06	.173							0.14	0.06	.021
<i>N</i>		2595			2596			2584			1619	

**Table S4.** Results From Models with Grip Strength Predicting Sexual Experiences at Baseline

<i>Predictors</i>	<b>Sexual interest</b>			<b>Activity</b>			<b>Intercourse</b>			<b>Satisfaction</b>		
	<i>Est.</i>	<i>SE</i>	<i>p</i>	<i>OR</i>	<i>SE</i>	<i>p</i>	<i>Est.</i>	<i>SE</i>	<i>p</i>	<i>Est.</i>	<i>SE</i>	<i>p</i>
Gender	-1.24	0.12	<.001	0.23	0.11	.003	-0.04	0.06	.527	0.37	0.12	.003
Age (A)	-0.03	0.01	<.001	0.84	0.03	<.001	-0.02	0.00	<.001	0.00	0.01	.766
Age (P)	-0.03	0.01	.001	0.90	0.03	.002	-0.03	0.00	<.001	-0.00	0.01	.820
Race (A)	-0.89	0.30	.003	0.34	0.50	.460	-0.30	0.20	.137	0.25	0.31	.419
Race (P)	-0.36	0.30	.225	0.21	0.32	.305	0.09	0.20	.662	0.21	0.30	.491
Education (A)												
< Upper sec.	-0.36	0.09	<.001	0.41	0.19	.049	-0.00	0.07	.988	0.08	0.10	.419
Tertiary	0.17	0.09	.052	1.51	0.91	.500	0.09	0.07	.192	-0.04	0.09	.672
Education (P)												
< Upper sec.	-0.14	0.09	.120	0.37	0.17	.030	0.07	0.07	.308	0.05	0.10	.596
Tertiary	0.24	0.09	.005	1.43	0.85	.550	0.15	0.07	.032	-0.07	0.08	.440
Wealth (1 <sup>st</sup> )	-0.26	0.10	.007	0.38	0.25	.142	-0.14	0.10	.164	0.09	0.10	.352
Wealth (3 <sup>rd</sup> )	0.13	0.10	.176	1.92	1.46	.388	0.29	0.10	.004	-0.02	0.09	.869
Marital status	0.35	0.19	.067	2.64	4.43	.563	0.48	0.19	.012	0.36	0.18	.043
Closeness (A)	0.08	0.07	.234	0.98	0.35	.965	0.24	0.05	<.001	0.38	0.08	<.001
Closeness (P)	0.19	0.07	.006	3.93	1.40	<.001	0.22	0.05	<.001	0.09	0.08	.273
Depression (A)	-0.01	0.02	.676	0.96	0.12	.722	-0.04	0.02	.039	-0.10	0.02	<.001
Depression (P)	0.00	0.02	.895	0.94	0.12	.634	-0.03	0.02	.107	-0.02	0.02	.332
Grip (A)	0.03	0.01	<.001	1.04	0.04	.400	0.01	0.01	.079	0.01	0.01	.087
Grip (P)	0.00	0.01	.988	0.98	0.04	.650	0.01	0.01	.093	0.00	0.01	.462
Grip (A) × Gender	-0.03	0.01	.035									
Grip (P) × Gender	0.01	0.01	.599									
<i>N</i>		1786			1783			1776			1060	

**Table S5.** Results From Models with Slowness Predicting Sexual Experiences at Baseline

<i>Predictors</i>	<b>Sexual interest</b>			<b>Activity</b>			<b>Intercourse</b>			<b>Satisfaction</b>		
	<i>Est.</i>	<i>SE</i>	<i>p</i>	<i>OR</i>	<i>SE</i>	<i>p</i>	<i>Est.</i>	<i>SE</i>	<i>p</i>	<i>Est.</i>	<i>SE</i>	<i>p</i>
Gender	-1.41	0.08	<.001	0.26	0.06	<.001	-0.06	0.04	.120	0.20	0.08	.018
Age (A)	-0.04	0.01	<.001	0.87	0.02	<.001	-0.02	0.01	.009	0.02	0.01	.163
Age (P)	-0.01	0.01	.189	0.96	0.03	.108	-0.02	0.01	.001	-0.01	0.01	.611
Race (A)	-0.65	0.40	.0104	1.00	1.45	.998	-0.31	0.27	.247	0.31	0.41	.460
Race (P)	-0.38	0.40	.348	0.23	0.31	.274	0.26	0.27	.329	0.34	0.39	.381
Education (A)												
< Upper sec.	-0.27	0.10	.009	0.63	0.18	.108	0.04	0.08	.634	0.26	0.11	.026
Tertiary	0.20	0.11	.062	1.48	0.56	.298	0.17	0.08	.031	-0.03	0.10	.747
Education (P)												
< Upper sec.	-0.13	0.10	.205	0.68	0.20	.195	0.06	0.08	.446	0.06	0.11	.574
Tertiary	0.37	0.11	.001	1.62	0.60	.194	0.26	0.08	.001	0.05	0.10	.624
Wealth (1 <sup>st</sup> )	-0.28	0.12	.018	0.42	0.16	.024	-0.11	0.11	.307	-0.02	0.13	.856
Wealth (3 <sup>rd</sup> )	0.14	0.11	.211	1.64	0.66	.217	0.31	0.10	.003	-0.09	0.11	.419
Marital status	0.53	0.24	.031	4.39	4.47	.146	0.61	0.21	.003	0.32	0.22	.145
Closeness (A)	-0.01	0.08	.856	0.97	0.23	.914	0.23	0.06	<.001	0.48	0.10	<.001
Closeness (P)	0.26	0.08	.001	2.74	0.64	<.001	0.21	0.06	<.001	0.14	0.10	.161
Depression (A)	0.04	0.03	.138	1.10	0.09	.274	-0.01	0.02	.661	-0.07	0.03	.016
Depression (P)	-0.01	0.03	.802	0.97	0.08	.736	-0.03	0.02	.117	-0.08	0.03	.010
Slow (A)	-0.54	0.19	.004	0.55	0.19	.089	-0.02	0.09	.818	-0.04	0.14	.784
Slow (P)	0.12	0.17	.488	0.70	0.25	.305	-0.09	0.09	.321	0.11	0.14	.443
Slow (A) × Gender	0.50	0.25	.048									
Slow (P) × Gender	-0.52	0.25	.039									
<i>N</i>	1401			1400			1392			744		

**Table S6.** Results From Models with Gait Speed Predicting Sexual Experiences at Baseline

<i>Predictors</i>	<b>Sexual interest</b>			<b>Activity</b>			<b>Intercourse</b>			<b>Satisfaction</b>		
	<i>Est.</i>	<i>SE</i>	<i>p</i>	<i>OR</i>	<i>SE</i>	<i>p</i>	<i>Est.</i>	<i>SE</i>	<i>p</i>	<i>Est.</i>	<i>SE</i>	<i>p</i>
Gender	-1.41	0.08	<.001	0.28	0.07	<.001	-0.05	0.04	.162	0.19	0.08	.022
Age (A)	-0.04	0.01	<.001	0.87	0.02	<.001	-0.01	0.01	.015	0.02	0.01	.181
Age (P)	-0.01	0.01	.183	0.95	0.03	.050	-0.02	0.01	.001	-0.00	0.01	.686
Race (A)	-0.68	0.40	.090	0.84	1.18	.900	-0.33	0.27	.225	0.33	0.41	.429
Race (P)	-0.43	0.40	.287	0.23	0.30	.256	0.27	0.27	.312	0.32	0.39	.405
Education (A)												
< Upper sec.	-0.28	0.10	.007	0.62	0.18	.106	0.04	0.08	.608	0.26	0.12	.026
Tertiary	0.20	0.11	.063	1.48	0.57	.307	0.17	0.08	.034	-0.03	0.11	.751
Education (P)												
< Upper sec.	-0.14	0.10	.179	0.67	0.20	.185	0.06	0.08	.457	0.07	0.11	.555
Tertiary	0.37	0.11	.001	1.59	0.59	.213	0.26	0.08	.001	0.05	0.11	.646
Wealth (1 <sup>st</sup> )	-0.29	0.12	.016	0.39	0.15	.015	-0.12	0.11	.285	-0.01	0.13	.926
Wealth (3 <sup>rd</sup> )	0.13	0.11	.255	1.60	0.65	.250	0.30	0.10	.004	-0.09	0.11	.411
Marital status	0.49	0.24	.045	4.09	4.16	.166	0.60	0.21	.004	0.32	0.22	.139
Closeness (A)	-0.02	0.08	.848	0.97	0.23	.913	0.23	0.06	<.001	0.48	0.10	<.001
Closeness (P)	0.27	0.08	.001	2.72	0.64	<.001	0.21	0.06	<.001	0.14	0.10	.160
Depression (A)	0.04	0.03	.174	1.10	0.09	.270	-0.01	0.02	.696	-0.07	0.03	.018
Depression (P)	-0.01	0.03	.716	0.95	0.08	.578	-0.04	0.02	.097	-0.07	0.03	.016
Speed (A)	0.45	0.27	.089	4.63	3.87	.067	0.13	0.19	.503	0.03	0.28	.901
Speed (P)	0.18	0.27	.486	0.68	0.57	.643	0.06	0.20	.758	0.01	0.28	.958
<i>N</i>		1401			1400			1392			744	

**Table S7.** Results From Models with Self-Rated Health Predicting Sexual Experiences at Follow-up

<i>Predictors</i>	<b>Sexual interest</b>			<b>Activity</b>			<b>Intercourse</b>			<b>Satisfaction</b>		
	<i>Est.</i>	<i>SE</i>	<i>p</i>	<i>OR</i>	<i>SE</i>	<i>p</i>	<i>Est.</i>	<i>SE</i>	<i>p</i>	<i>Est.</i>	<i>SE</i>	<i>p</i>
Gender	-0.61	0.05	<.001	0.87	0.15	.432	-0.05	0.03	.076	0.09	0.05	.097
Age (A)	-0.02	0.00	<.001	0.96	0.02	.021	-0.01	0.00	.019	0.00	0.00	.480
Age (P)	-0.01	0.00	.102	0.97	0.02	.075	-0.01	0.00	<.001	-0.01	0.00	.257
Race (A)	-0.42	0.21	.043	0.72	0.55	.671	0.03	0.13	.797	-0.05	0.22	.808
Race (P)	0.14	0.21	.510	0.37	0.29	.201	-0.03	0.13	.844	0.21	0.22	.355
Education (A)												
< Upper sec.	-0.14	0.06	.016	0.56	0.12	.006	-0.13	0.04	.002	0.11	0.08	.137
Tertiary	0.09	0.06	.112	1.49	0.40	.141	0.04	0.04	.269	-0.00	0.06	.951
Education (P)												
< Upper sec.	-0.10	0.06	.087	0.81	0.17	.309	-0.05	0.04	.234	0.05	0.07	.475
Tertiary	0.08	0.06	.187	1.41	0.38	.204	-0.02	0.04	.602	-0.12	0.06	.065
Wealth (1 <sup>st</sup> )	-0.04	0.06	.444	0.93	0.22	.749	-0.02	0.05	.710	0.12	0.07	.089
Wealth (3 <sup>rd</sup> )	0.09	0.06	.101	1.37	0.35	.227	0.06	0.05	.199	0.07	0.06	.246
Marital status	-0.02	0.10	.862	1.20	0.53	.678	0.02	0.08	.759	-0.08	0.10	.411
Closeness (A)	0.03	0.05	.503	1.40	0.23	.047	0.01	0.03	.814	0.25	0.06	<.001
Closeness (P)	0.03	0.05	.576	1.27	0.22	.157	0.08	0.03	.013	-0.05	0.06	.387
Depression (A)	0.03	0.01	.047	1.04	0.06	.496	0.01	0.01	.501	-0.00	0.02	.941
Depression (P)	-0.00	0.01	.881	1.03	0.06	.570	0.01	0.01	.467	-0.03	0.02	.081
Baseline outcome	0.57	0.02	<.001	39.55	7.82	<.001	0.58	0.01	<.001	0.40	0.02	<.001
Health (A)	0.12	0.03	<.001	1.29	0.12	.005	0.05	0.02	.002	0.08	0.03	.004
Health (P)	0.02	0.03	.577	1.23	0.11	.021	0.04	0.02	.014	0.02	0.03	.507
Health (A) × Gender	-0.12	0.04	.007									
Health (P) × Gender	-0.03	0.04	.526									
<i>N</i>		2566			2595			2570			1603	

**Table S8.** Results From Models with Grip Strength Predicting Sexual Experiences at Follow-up

<i>Predictors</i>	<b>Sexual interest</b>			<b>Activity</b>			<b>Intercourse</b>			<b>Satisfaction</b>		
	<i>Est.</i>	<i>SE</i>	<i>p</i>	<i>OR</i>	<i>SE</i>	<i>p</i>	<i>Est.</i>	<i>SE</i>	<i>p</i>	<i>Est.</i>	<i>SE</i>	<i>p</i>
Gender	-0.46	0.10	<.001	0.68	0.24	.275	-0.09	0.06	.121	0.11	0.13	.370
Age (A)	-0.02	0.01	.004	0.96	0.02	.043	-0.00	0.00	.640	0.01	0.01	.196
Age (P)	-0.01	0.01	.403	0.97	0.02	.175	-0.01	0.00	.004	-0.01	0.01	.256
Race (A)	-0.49	0.25	.045	0.58	0.49	.521	-0.07	0.15	.661	-0.14	0.30	.654
Race (P)	0.05	0.25	.824	0.27	0.23	.130	0.05	0.15	.736	0.22	0.29	.447
Education (A)												
< Upper sec.	-0.16	0.07	.020	0.57	0.14	.020	-0.19	0.05	<.001	0.08	0.09	.392
Tertiary	0.16	0.07	.020	1.66	0.52	.104	0.03	0.05	.479	0.01	0.08	.931
Education (P)												
< Upper sec.	-0.06	0.07	.414	0.77	0.19	.280	-0.04	0.05	.382	-0.02	0.09	.840
Tertiary	0.07	0.07	.305	1.35	0.41	.318	-0.00	0.05	.964	-0.10	0.08	.209
Wealth (1 <sup>st</sup> )	-0.05	0.07	.437	0.67	0.18	.130	-0.01	0.06	.871	0.05	0.08	.531
Wealth (3 <sup>rd</sup> )	0.12	0.07	.071	1.25	0.37	.455	0.05	0.06	.350	0.06	0.08	.434
Marital status	0.22	0.14	.099	1.50	0.91	.502	0.05	0.11	.643	0.19	0.15	.195
Closeness (A)	0.08	0.06	.173	1.31	0.25	.160	0.01	0.04	.815	0.25	0.08	.002
Closeness (P)	0.02	0.06	.720	1.17	0.23	.418	0.04	0.04	.338	-0.09	0.08	.239
Depression (A)	0.02	0.02	.144	0.99	0.06	.820	0.00	0.01	.837	-0.03	0.02	.156
Depression (P)	-0.02	0.02	.157	0.98	0.06	.723	-0.01	0.01	.361	-0.03	0.02	.221
Baseline outcome	0.59	0.02	<.001	34.65	7.75	<.001	0.58	0.02	<.001	0.40	0.03	<.001
Grip (A)	0.00	0.00	.442	0.99	0.02	.789	0.00	0.00	.373	-0.00	0.01	.826
Grip (P)	-0.00	0.00	.770	1.01	0.02	.448	0.02	0.01	.001	0.00	0.01	.612
Grip (A) × Gender							0.01	0.01	.497			
Grip (P) × Gender							-0.02	0.01	.035			
<i>N</i>		1767			1782			1767			1049	

**Table S9.** Results From Models with Slowness Predicting Sexual Experiences at Follow-up

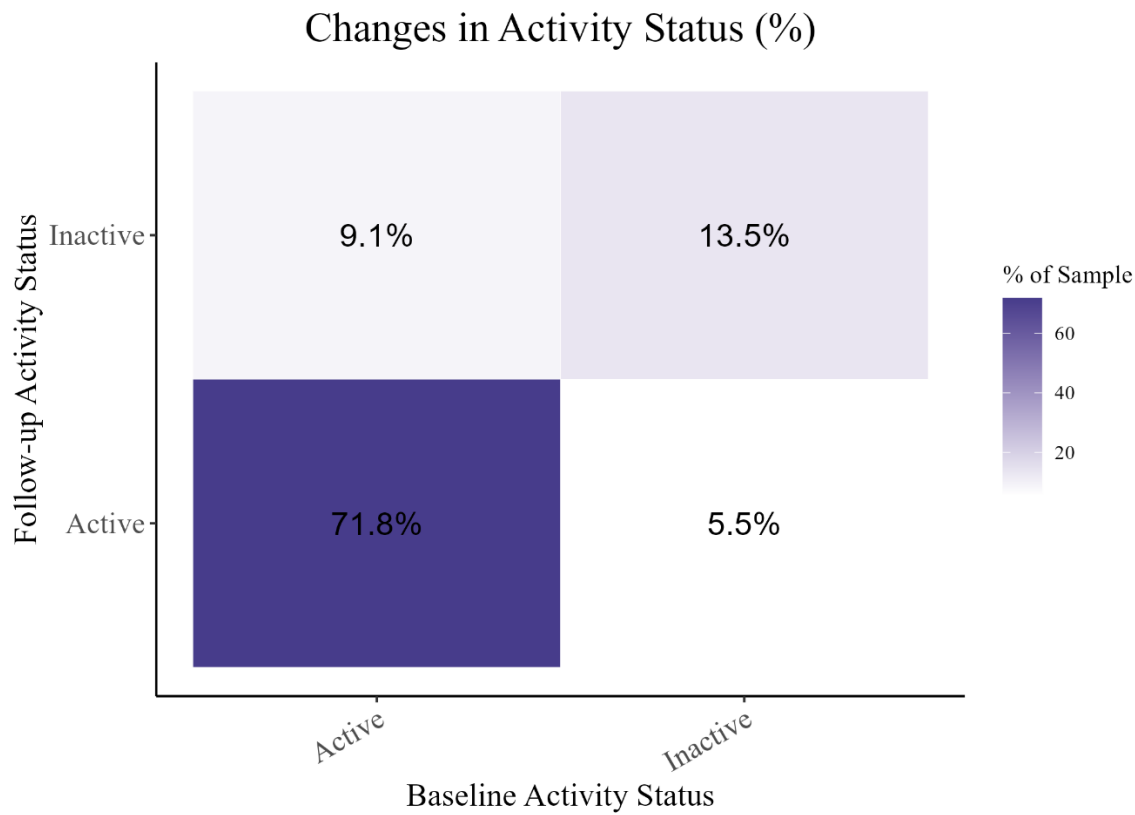
<i>Predictors</i>	<b>Sexual interest</b>			<b>Activity</b>			<b>Intercourse</b>			<b>Satisfaction</b>		
	<i>Est.</i>	<i>SE</i>	<i>p</i>	<i>OR</i>	<i>SE</i>	<i>p</i>	<i>Est.</i>	<i>SE</i>	<i>p</i>	<i>Est.</i>	<i>SE</i>	<i>p</i>
Gender	-0.60	0.07	<.001	1.04	0.21	.849	-0.08	0.04	.032	0.24	0.09	.007
Age (A)	-0.02	0.01	.004	0.98	0.02	.370	-0.01	0.00	.142	-0.00	0.01	.761
Age (P)	-0.01	0.01	.305	0.97	0.02	.140	-0.01	0.00	.014	-0.01	0.01	.185
Race (A)	-0.57	0.32	.080	0.40	0.35	.302	-0.01	0.20	.971	-0.23	0.38	.540
Race (P)	-0.08	0.31	.796	0.25	0.23	.128	-0.06	0.20	.764	0.21	0.35	.550
Education (A)												
< Upper sec.	-0.16	0.07	.034	0.56	0.12	.009	-0.13	0.05	.013	0.10	0.10	.328
Tertiary	0.20	0.08	.012	1.47	0.44	.190	0.07	0.05	.220	-0.00	0.09	.991
Education (P)												
< Upper sec.	-0.06	0.07	.393	0.88	0.20	.564	-0.05	0.05	.377	0.03	0.10	.748
Tertiary	0.07	0.08	.398	1.25	0.36	.436	0.05	0.05	.332	-0.09	0.09	.335
Wealth (1 <sup>st</sup> )	0.01	0.08	.885	0.96	0.24	.861	0.03	0.06	.652	0.05	0.10	.622
Wealth (3 <sup>rd</sup> )	0.14	0.07	.053	1.50	0.38	.111	0.04	0.06	.494	-0.04	0.08	.647
Marital status	-0.09	0.16	.582	1.79	1.10	.345	0.09	0.13	.499	-0.03	0.16	.859
Closeness (A)	-0.04	0.06	.518	1.34	0.25	.112	0.00	0.04	.923	0.27	0.09	.004
Closeness (P)	0.07	0.06	.240	1.06	0.20	.755	0.02	0.04	.598	-0.08	0.09	.382
Depression (A)	0.04	0.02	.047	0.99	0.06	.927	0.00	0.01	.788	-0.02	0.03	.416
Depression (P)	-0.01	0.02	.752	1.03	0.06	.609	0.00	0.01	.847	-0.02	0.03	.395
Baseline outcome	0.59	0.02	<.001	23.88	4.71	<.001	0.58	0.02	<.001	0.40	0.03	<.001
Slowness (A)	0.03	0.09	.741	0.70	0.18	.178	-0.00	0.06	.960	-0.31	0.18	.086
Slow (P)	0.11	0.09	.235	0.91	0.24	.714	-0.08	0.06	.202	0.10	0.16	.529
Slow (A) × Gender										0.42	0.24	.079
Slow (P) × Gender										-1.16	0.25	<.001
<i>N</i>	1382			1399			1382			733		

**Table S10.** Results From Models with Gait Speed Predicting Sexual Experiences at Follow-up

<i>Predictors</i>	<b>Sexual interest</b>			<b>Activity</b>			<b>Intercourse</b>			<b>Satisfaction</b>		
	<i>Est.</i>	<i>SE</i>	<i>p</i>	<i>OR</i>	<i>SE</i>	<i>p</i>	<i>Est.</i>	<i>SE</i>	<i>p</i>	<i>Est.</i>	<i>SE</i>	<i>p</i>
Gender	-0.58	0.07	<.001	1.03	0.21	.888	-0.07	0.04	.044	0.16	0.08	.067
Age (A)	-0.02	0.01	.015	0.98	0.02	.298	-0.01	0.00	.187	-0.00	0.01	.837
Age (P)	-0.01	0.01	.256	0.97	0.02	.155	-0.01	0.00	.010	-0.01	0.01	.202
Race (A)	-0.55	0.32	.086	0.40	0.36	.303	-0.02	0.20	.923	-0.16	0.38	.681
Race (P)	-0.04	0.31	.901	0.24	0.21	.104	-0.05	0.20	.803	0.25	0.36	.483
Education (A)												
< Upper sec.	-0.14	0.08	.054	0.56	0.12	.008	-0.12	0.05	.017	0.11	0.10	.296
Tertiary	0.20	0.08	.015	1.48	0.44	.189	0.06	0.05	.236	0.01	0.09	.952
Education (P)												
< Upper sec.	-0.05	0.07	.487	0.88	0.20	.556	-0.05	0.05	.381	0.02	0.10	.853
Tertiary	0.06	0.08	.425	1.26	0.36	.429	0.05	0.05	.346	-0.11	0.10	.269
Wealth (1 <sup>st</sup> )	0.04	0.08	.597	0.92	0.22	.735	0.03	0.06	.683	0.05	0.10	.652
Wealth (3 <sup>rd</sup> )	0.13	0.07	.067	1.49	0.38	.119	0.04	0.06	.536	-0.03	0.08	.767
Marital status	-0.08	0.16	.613	1.72	1.05	.375	0.08	0.13	.538	-0.07	0.17	.698
Closeness (A)	-0.04	0.06	.521	1.33	0.25	.118	0.01	0.04	.900	0.28	0.09	.003
Closeness (P)	0.07	0.06	.267	1.07	0.20	.730	0.02	0.04	.639	-0.08	0.09	.397
Depression (A)	0.05	0.02	.014	0.99	0.06	.815	0.00	0.01	.743	-0.02	0.03	.487
Depression (P)	-0.01	0.02	.804	1.03	0.06	.629	0.00	0.01	.923	-0.02	0.03	.390
Baseline outcome	0.59	0.02	<.001	24.02	4.74	<.001	0.58	0.02	<.001	0.39	0.03	<.001
Speed (A)	0.47	0.20	.019	1.16	0.73	.808	0.08	0.13	.545	0.28	0.35	.418
Speed (P)	-0.20	0.20	.306	1.24	0.78	.732	0.07	0.13	.623	0.07	0.35	.850
Speed (A) × Gender										-0.17	0.49	.724
Speed (P) × Gender										0.98	0.48	.041
<i>N</i>	1382			1399			1382			733		

**Figure S1**

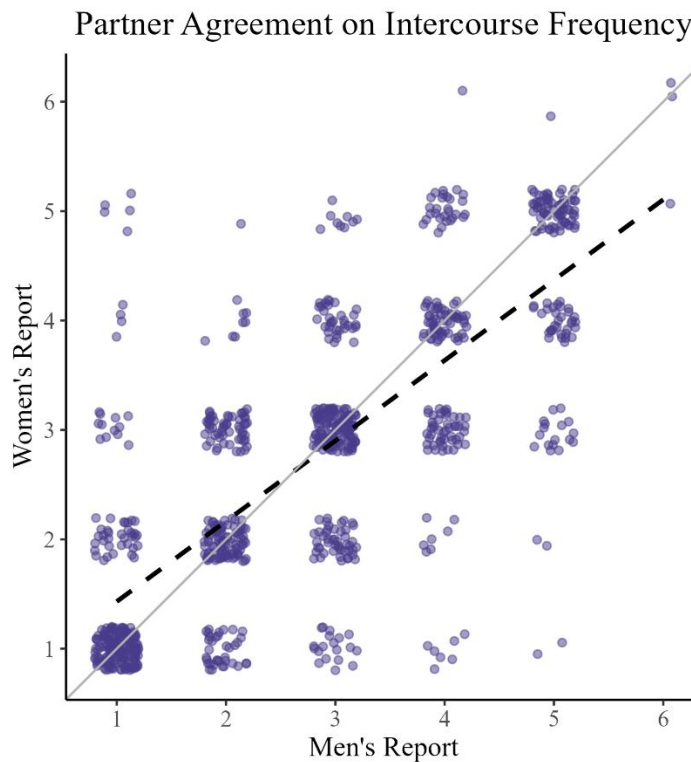
Changes in Sexual Activity Across Waves



*Notes.* Each cell shows the percentage of the total sample falling into each transition category from baseline to follow-up.

**Figure S2**

## Partner Agreement on Sexual Intercourse Frequency at Baseline



*Notes.* Responses to the question “How many times have you had or attempted sexual intercourse (vaginal, anal, or oral sex) during the past month?” are shown. Response options were: 1 (*not at all*), 2 (*once in the past month*), 3 (*2 or 3 times in the past month*), 4 (*once a week*), 5 (*2 or 3 times a week*), and 6 (*once a day or more*). The solid grey line represents perfect agreement, while the dashed line shows the best linear fit predicting women’s scores from men’s scores. Fifty-six percent of couples were in perfect agreement (i.e., on the solid line). The zero-order correlation between men’s and women’s reports was .74, indicating high rank-order similarity.