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What Keeps Passion Alive? Sexual Satisfaction Is Associated With Sexual Communication, Mood Setting, Sexual Variety, Oral Sex, Orgasm, and Sex Frequency in a National U.S. Study

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Manuscripts

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What Keeps Passion Alive?

Sexual Satisfaction is Associated with Sexual Communication, Mood Setting, Sexual Variety, Oral
Sex, Orgasm, and Sex Frequency in a National U.S. Study

WHAT KEEPS PASSION ALIVE? 2

Abstract

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Passion and sexual satisfaction typically diminish in longer-term relationships, but this decline is not inevitable. We identified the attitudes and behaviors that most strongly differentiated sexually satisfied from dissatisfied men and women who had been together for at least three years ($N = 38,747$). Data were collected in 2006 from cohabiting and married men and women via an online survey on a major national U.S. news website. The vast majority of these participants reported being satisfied with their sex life during their first six months together (83% W; 83% M).

Satisfaction with their current sex life was more variable, with approximately half of participants reporting overall satisfaction (55% W; 43% M), and the rest feeling neutral (18% W; 16% M) or dissatisfied (27% W; 41% M). More than one in three respondents (38% W; 32% M) claimed their sex life was as passionate now as in the beginning. Sexual satisfaction and maintenance of passion were higher among people who had sex most frequently, received more oral sex, had more consistent orgasms, and incorporated more variety of sexual acts, mood setting, and sexual communication. We discuss implications of these findings for research and for helping people revitalize their sex lives.

WHAT KEEPS PASSION ALIVE? 3

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3 Keeping sexual activity fresh and lively as relationships progress is important to many men
4 and women, but couples can find it challenging to maintain sexual satisfaction over a long period of
5 time (Christopher & Sprecher, 2000). Maintaining passion over time is considered an even more
6 elusive goal, and it is believed that only a small subset of people sustain passion in long-term
7 relationships (Hatfield, Pillemer, O'Brien, & Le, 2008; O'Leary et al., 2012). To keep their sex
8 lives from fizzling, couples employ a variety of strategies, including communicating their desires to
9 their partners, trying new sexual positions and activities, and consulting sexual self-help magazines,
10 books, and videos. Yet, little is known about the efficacy of such strategies in promoting greater
11 feelings of passion and sexual satisfaction in their relationship.
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24 The importance of sexual satisfaction in relationships makes it critical to understand the
25 attitudes and behaviors that enhance people's sexual lives. Drawing on a large U.S. dataset, the
26 primary goal of the current study was to examine behaviors and attitudes of heterosexual men and
27 women who are sexually satisfied versus those who are sexually dissatisfied. We draw attention to
28 common romantic and sexual behaviors that are rarely assessed in the literature but are likely
29 important contributors to sexual satisfaction and maintaining sexual passion. These include
30 intimate behaviors (e.g., cuddling, kissing, laughing together during sexual activity), incorporating
31 sexual variety (e.g., trying new sexual positions; wearing lingerie), and setting a romantic/sexual
32 mood (e.g., lighting candles; playing music). We also examined commonly assessed behaviors that
33 have been the focal point of previous research (e.g., frequency of sex, oral sex, and orgasm).
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48 **Potential Contributors to Sexual Satisfaction: Less Commonly Studied Behaviors**

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50 There are many sexual and affectionate behaviors couples incorporate into their sex lives,
51 but the prevalence and importance of these behaviors for enhancing sexual satisfaction is rarely
52 documented. For instance, in cultures where kissing is part of the romantic-sexual repertoire, it is
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WHAT KEEPS PASSION ALIVE? 4

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3 an important part of arousal and sustaining feelings of closeness before, during, and after sex acts
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5 (Jankowiak, Volshe, & Garcia, 2015). However, few studies have examined this intimate act,
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8 despite the pioneering work of Alfred Kinsey and associates who showed considerable social class
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10 differences in frequency of kissing, even distinguishing between lip and “deep” or tongue kissing
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12 (Kinsey, Pomeroy, & Martin, 1948; Kinsey, Pomeroy, Martin, & Gebhard, 1953). Both men and
13
14 women report higher sexual satisfaction when they report more frequent kissing, cuddling,
15
16 touching, and caressing with their partner (Heiman et al., 2011). Yet, few studies have explicitly
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18 studied “after play” even though it is known that most men and women desire affectionate behavior,
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20 such as “pillow talk” (Denes, 2012) or kissing and cuddling with a partner after sexual activity
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22 (Hughes & Kruger, 2011; Muise, Giang, & Impett, 2014; van Anders, Edelman, Wade, & Samples-
23
24 Steele, 2013).
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29 Extent of foreplay and length of sexual encounters also matter for sexual satisfaction (Muise
30
31 et al., 2014), although few studies track these variables. Perhaps most important, for women,
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33 having more foreplay increases the likelihood of orgasm (Singh, Meyer, Zambarano, & Hurlbert,
34
35 1998), but interpretation is difficult because most researchers do little to delineate what goes on
36
37 during the catch-all phrase “foreplay.” Recent studies based on representative national samples
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39 showed that genital stimulation and oral sex during last sexual encounter were associated with
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41 greater sexual satisfaction and pleasure (de Visser, Smith, Rissel, Richters, & Grulich, 2003;
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43 Herbenick et al, 2010c).
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48 Extending the duration of sexual activity by engaging in different intercourse positions is
49
50 likely a common practice, as was suggested by Alex Comfort (1972) in his groundbreaking sex
51
52 manual *Joy of Sex*. Yet relatively little research has been done to support or negate this claim.
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55 Nonetheless, human sexuality textbooks often recommend variety in sexual repertoire as a way to
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WHAT KEEPS PASSION ALIVE? 5

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3 enhance sexual satisfaction, including trying different sex positions and other activities. One of the
4 best-selling textbooks, in its twelfth edition, includes two pages under the subheading “Sexual
5 Variety: An Important Ingredient,” but provides no citations to supporting studies (Crooks & Baur,
6 2014). Early research on specific sexual acts found that women desired more activities that
7 demonstrate love and intimacy (e.g., talking more lovingly, being more complimentary), whereas
8 men focused on sexual activity itself, desiring more partner initiative, rough play, and talking dirty
9 (Hatfield, Sprecher, Pillemer, Greenberger, & Wexler, 1988).

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20 While sexual variety is deemed important for sexual satisfaction, evidence on the
21 effectiveness of specific forms of variety, such as use of sex toys or watching pornography together,
22 is lacking. In a representative sample of heterosexual women aged 18-60 in the U.S., 40% had used
23 a vibrator with a partner during sex play/foreplay (Herbenick et al, 2010a). Interview studies
24 examined how women feel about sex toys (Fahs & Swank, 2013), but elaboration of the range of
25 sex toys and sex aids available to enhance a couple’s experience is left to writers of sex self-help
26 books (e.g., Castleman, 2008). Some newer studies included data on using pornography together as
27 a sex stimulant for couples (Poulsen, Busby, & Galovan, 2013). Similarly, the prevalence of anal
28 intercourse has been widely studied, but the relationship between anal sex and sexual satisfaction is
29 largely unexamined, and relatively little scholarly attention has been given to anal sexual behaviors
30 other than anal intercourse (see Agnew, 2000; McBride & Fortenberry, 2010). Sex therapists, on the
31 other hand, have contributed practical knowledge. For example, based on volunteers who
32 expressed interest in experiencing more pleasure from anal stimulation, Morin (2010) contributed a
33 popular self-help guide to disseminate information on anal eroticism.

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53 Missing most of all from the scientific literature are data on whether couples find ways to
54 set aside time for sexual activity, and whether taking time to set a romantic mood affects sexual
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WHAT KEEPS PASSION ALIVE? 6

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3 satisfaction. Going on a romantic getaway is one way to change the scene for different, or perhaps
4 more leisurely, lovemaking, at least according to common sexual self-help advice. But how many
5 couples do this? An alternative is a “date night” where couples are reminded to set the scene and
6 spend time focusing on each other and their romantic/sexual life as a couple. But little is known
7 about whether setting a mood, such as dimming the lights or turning on favorite music, matter for
8 sustaining satisfaction and passion. To really understand how couples can sustain passion over time,
9 we need to know more about what behaviors couples engage in, and if these behaviors are actually
10 associated with sexual satisfaction.
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Potential Contributors to Sexual Satisfaction: More Commonly Studied Behaviors

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25 Frequency of vaginal intercourse, oral sex, and orgasm have been established as contributors
26 to sexual satisfaction. Couples who have sex more often report greater satisfaction with their sex
27 life (Laumann, Gagnon, Michael, & Michaels, 1994), but the “honeymoon effect” of declining sex
28 frequency can begin after a relatively short time together (Call, Sprecher, & Schwartz, 1995).
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34 Drawing a distinction between passionate and companionate love, intimate relationship experts
35 attribute part of the decline to the dimming of passion after the exciting early days of falling in love
36 (Hatfield & Rapson, 1993); their assumptions are often rooted in Sternberg’s (1986) triangular
37 theory of love, in which he asserted that passion develops rapidly and intensely in the early stages
38 of love relationships and then subsides almost as quickly, leaving couples who do not experience
39 growth in both intimacy and commitment with vulnerable relationships.
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49 Christopher and Sprecher (2000) concluded that sexual satisfaction and frequency of sex
50 both decline, but for reasons not well understood, sexual satisfaction does not decline as
51 dramatically as does frequency of sex. One possible intervening variable between intercourse
52 frequency and sexual satisfaction is consistency of orgasm. People who orgasm more frequently
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3 report more sexual satisfaction (Haavio-Mannila & Kontula, 1997; Sprecher & Cate, 2004).
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5 Despite changes in sexual frequency, certain specific sexual behaviors likely affect both sexual
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7 satisfaction and orgasm frequency. Oral sex (both fellatio and cunnilingus) is practiced by the
8
9 majority of U.S. men and women in relationships (Herbenick et al., 2010b; Kaestle & Halpern,
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11 2007). In the current study we assessed people's reports about their sex life currently versus in the
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13 beginning of their relationship to provide a new way to assess this honeymoon effect, and examined
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15 how frequency of sexual intercourse, oral sex, and orgasm were related to sexual satisfaction.
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20 Aside from sexual acts, sexual satisfaction is known to be associated with relationship
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22 satisfaction (Christopher & Sprecher, 2000; Sprecher, 2002). Recent research suggests that the
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24 relationship between sexual satisfaction and relationship satisfaction is reciprocal (Byers, 2005).
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26 Couples who enjoy pleasurable sex reap the reward of having more relationship satisfaction, but
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28 those who work on the intimacy of their relationship may find those traits carrying over to enhance
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30 their sex life.
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34 One way to promote sexual satisfaction is constructive communication (MacNeil & Byers,
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36 2005). People who employ sexual communication techniques (being open about sexual desires and
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38 fantasies; communicating about sexual likes and dislikes) are generally more satisfied with their sex
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40 lives (Montesi, Fauber, Gordon, & Heimberg, 2010). Although past research has examined sexual
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42 communication, we could not find a published and validated sexual communication scale that
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44 included an item regarding someone saying "I love you" during sex, which is consistent with the
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46 lack of research focus on intimate behaviors during sexual activity noted earlier. The current study
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48 assessed how six different examples of sexual communication were linked to sexual satisfaction.
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52 **Demographic and Control Variables**

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WHAT KEEPS PASSION ALIVE? 8

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3 The literature has produced conflicting findings on gender differences in sexual satisfaction.
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5 The most recent meta-analysis of 29 studies showed that men were more satisfied than women, but
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7 only slightly so ($d = .17$; Petersen & Hyde, 2010). Ethnicity, age (controlling for relationship
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9 length), and socioeconomic status are generally unrelated to sex frequency and satisfaction (for
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11 reviews, see Christopher & Sprecher, 2000; Sanchez-Fuentes, Santos-Iglesias, & Sierra, 2014;
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13 Rehman, Fallis, & Byers, 2013). Additionally, having children in the home can also negatively
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15 impact sexual satisfaction and frequency (Gray, Garcia, Crosier, & Fisher, 2015).
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Current Study

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21 Based on the existing literature, we proposed the following hypotheses. People will report
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23 more sexual satisfaction and behaviors enhancing their sex life in the early phase of their
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25 relationship than now (H1). Compared to sexually dissatisfied people, sexually satisfied people
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27 will: report more consistent orgasms and more frequent oral sex (H2), incorporate more acts of
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29 sexual variety in their sex lives (H3), incorporate more communication strategies (H4), and
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31 incorporate more mood setting techniques (H5). Sexually satisfied people will report more sexual
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33 acts, more positive emotions, and longer duration of sex during their last sexual encounter (H6),
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35 engage in the same or greater degree of positive practices during sex as they did in the beginning of
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37 their relationship (H7), make more successful use of self-help advice in magazines and books (H8),
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39 and report more positive sexual attitudes towards their sex lives (H9). Finally, we conducted
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41 exploratory analyses to determine what differentiates people high in sexual satisfaction whose
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43 passion has not waned from people high in sexual satisfaction but who have experienced
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45 diminished passion.
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Method

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Participants

The present study is based on secondary analyses of anonymous data collected via a survey posted on the official website of NBC News for ten days in 2006. ELLE magazine and NBCNews.com contributed to survey construction and jointly sponsored this project, as well as others on popular topics during the decade. Secondary data analysis of anonymized public or private datasets are IRB exempt at both Chapman University and according to U.S. federal guidelines (exemption category 4; National Institutes of Health, 2010).

In the overall sample, there were 72,008 heterosexual men and women (51% men, 49% women) ages 18-65. We focused our analyses on 38,747 people (59% men, 41% women) who fit the following criteria: completed the full survey via the NBCNews.com entry portal; indicated they were married, remarried, or living with their partner; and reported being with their partner for 3 or more years. The current paper and analyses focus on heterosexual participants (we examine sexual orientation differences in correlates of sexual satisfaction in a separate manuscript). The average age in the sample was 39.9 years ($SD = 10.0$), with men (42.4, $SD = 9.7$) approximately 6 years older than the women (36.3, $SD = 9.3$), $t(38745) = 62.83$, $p < .001$.

Men are overrepresented in the analyzed subsample of participants because a key inclusion criteria for our analyses was married and cohabiting people who had been in a relationship for 3 years or longer. There are more unmarried women than men in the population (88 unmarried men for every 100 married women) and men in the sample were older than women and therefore more likely to be married. Table 1 presents key demographics for the analyzed sample and for men and women separately.

Participants were invited to take the “ELLE/msnbc.com Sex and Love” survey and clicked on banner ads that appeared on the NBCNews.com website homepage and Health section of the

WHAT KEEPS PASSION ALIVE? 10

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3 website (the vast majority of the respondents came from the homepage, drawing in a broad and
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5 diverse audience). All respondents were provided with an opportunity to view the privacy
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7 agreement and asked for their birth year; those under age 18 were dismissed as too young to
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9 participate. The wording (or shorthand approximations of the wordings) for each of the individual
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11 items are shown in the tables (an Appendix that includes the survey items reported in this
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13 manuscript is available online as a supplementary file).
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18 Market research on NBCNews.com (formerly msnbc.com) shows that at the time of the
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20 survey it routinely ranked among one of the most popular websites in the United States. Its 58
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22 million unique monthly visitors include a broad diversity of people in terms of age, income, and
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24 political orientation (NBCNews.com Media Kit, 2012; note that msnbc.com, the general news
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26 website, was a different entity than MSNBC TV and had substantially different demographics,
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28 including approximately equal numbers of Democrat and Republican visitors). The authors were
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30 granted access to the several anonymous data sets for secondary data analysis, including the study
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32 reported here. Zip code data in one dataset showed that more than 95% of respondents came from
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34 the United States and, in a second dataset, over 98% reported living in the United States. The fact
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36 that the sample is almost exclusively U.S. residents is consistent with NBCNews.com's own market
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38 analyses of their website visitors (NBCNews.com Media Kit, 2012).
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44 Datasets on various topics garnered through this site between 2002 and 2010 have been used
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46 to conduct research on mate preferences (Fales et al., 2016), sexual jealousy (Frederick & Fales, in
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48 press), sexual regrets (Galperin et al., 2013), sexual experience (Frederick & Jenkins, 2015),
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50 consequences of visiting online sex sites (Grov et al., 2011), gender differences in beliefs about
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52 who should pay for dates (Lever, Frederick, & Hertz, 2015), attitudes towards female bosses
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54 (Elsesser & Lever, 2011), friendship (Gillespie, Frederick, Harari, & Grov, 2015; Gillespie, Lever,
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3 Frederick, & Royce, 2014), and aspects of body image (Frederick, Lever, & Peplau, 2007;
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5 Frederick, Peplau, & Lever, 2006, 2008; Frederick, Sandhu, Morse, & Swami, in press; Lever,
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7 Frederick, Laird, & Sadeghi-Azar, 2007; Lever, Frederick, & Peplau, 2006; Peplau et al., 2009).

8 9 10 **Measures**

11 12 **Sexual satisfaction and passion outcome variables**

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15 *Sexual satisfaction and sexual satisfaction groups.* We assessed beliefs about sexual
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17 satisfaction in the beginning of the relationship versus now. First we asked, “How satisfied were
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19 you with your sex life during your first six months together?” The next item, our central outcome
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21 variable, asked “How satisfied are you with your sex life now?” Participants provided their
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23 answers on a 7-point Likert scale (1 = Very Dissatisfied, 4 = Neutral, 7 = Very Satisfied). These
24
25 questions allowed us to test the extent to which people believe their sexual satisfaction is relatively
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27 lower or higher than in the past. We used their current ratings as a continuous variable in
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29 regression and ANOVA analyses (e.g., Table 2 and Figure 1). To validate this item, we conducted
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31 a separate study of 550 adults in a survey posted in the volunteers section of the Craigslist.org
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33 website and found that responses on this measure correlated highly ($r = .91$) with the Global
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35 Measure of Sexual Satisfaction Scale (Lawrance & Byers, 1995).
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41 A major goal was to create a readily accessible profile of attitudes and behaviors of sexually
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43 satisfied versus dissatisfied men and women. Based on their scores on the variable assessing sexual
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45 satisfaction now, we classified participants as being sexually *Dissatisfied* (1-3; $n = 13,666$), *Neutral*
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47 (4; $n = 6,476$), or *Satisfied* (5-7; $n = 18,605$). These groupings enabled us to compare the practices
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49 and attitudes of people with differing levels of sexual satisfaction.
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WHAT KEEPS PASSION ALIVE? 12

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Beliefs about passion. We assessed whether people believed passion had changed over time: “We have as much passion in our sex life as when we first started having sex” (1 = Strongly Disagree, 2 = Somewhat Disagree, 3 = Somewhat Agree, 4 = Strongly Agree).

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Beliefs about changes in sex life over time. To explore beliefs about changes in sex life over the duration of the relationship, we provided participants a list of feelings and behaviors and asked “Comparing your sex life early in your relationship to your sex life now, which of the following happened more often then, which happens more often now, and what has stayed about the same?” Participants responded with “more then,” “same,” “more now,” or “Not Applicable / Does not apply to us.” Abbreviated versions of the items are shown in Figure 2.

24 25 26 **Demographic variables**

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Demographic variables included gender, age, relationship length, education level, and number of children. Participants indicated if their relationship length was 3-5 years, 6-10 years, 11-20 years, > 20 years; these were recoded as 4, 8, 16, and 30 years, respectively. In order to retain the relative ordering of the education levels when using education as a predictor variable in regression analyses (Pasta, 2009), education was coded from lower (1 = some high school education or less) to higher (5 = graduate degree). For parental status, participants indicated the number of children in their home under age 21 years, ranging from 0 to 6+ (see Table 1).

43 44 45 **Frequency and consistency variables**

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Sex frequency. Participants were asked “How often do you typically have sex with your partner?” and the responses were recoded to reflect the approximate number of times each participant reported having sex each month (0 = Not at all, .50 = Once every few months, 1 = Once a month, 2 = Two or three times a month, 6 = Once or twice a week, 14 = Three to four times a week, 20 = Five or more times a week, and 32 = More than once a day).

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Oral sex frequency. Participants were asked two questions: “During your lovemaking in the past month, how often did you [*give oral sex to your partner*] / [*receive oral sex from your partner*]” (1 = Never, 2 = Rarely, 3 = About half of the time, 4 = Usually, 5 = Always).

Participants indicating “not applicable, we were not intimate” were excluded from analyses involving these variables. The full continuous variable was used in regression, and the scale was collapsed to make three categories (Never-Rarely, About half of the time, Usually-Always) when presenting some results to facilitate data presentation (e.g., Table 3).

Orgasm consistency. Participants were asked two questions: “During the past month, how often did [*you*] / [*your partner*] reach orgasm when you and he or she were intimate?” (1 = Never, 2 = Rarely, 3 = About half of the time, 4 = Usually, 5 = Always).

Sexual variety and communication variables

Acts of sexual variety. Participants were given a list of 17 different activities and were asked “Have you done any of the following in *the past year* to improve your sex life? If so, select all that apply”. The full list of activities is shown in Table 4. We coded affirmative responses as 1 for each activity, and created an acts of sexual variety variable by summing the responses (range 0-17; 0 = none of these activities, 17 = all of these activities).

Sexual communication. Participants were given a list of six different types of sexual communication and asked “In *the past month*, have you and your partner talked about sex in any of these ways? Please select all that apply.” The full list of communication strategies are shown in Table 4. We coded affirmative responses as 1, and created a communication variable by summing the responses for the 6 items (range 0-6).

Activities during last sexual encounter (DLS) variables

WHAT KEEPS PASSION ALIVE? 14

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3 We also examined event-level data, which may be less prone to recall biases. Participants
4 were asked about their activities during the last time they had sex. If these behaviors are
5 representative of what couples typically do, they may provide information about which practices are
6 linked to greater sexual satisfaction. Consistent with the idea that event-level data is informative
7 about general practices, 87% of women and 92% of men who received oral sex during their last
8 sexual encounter reported usually-always receiving oral sex in the past month. In contrast, reports
9 of oral sex during last encounter were lower if participants reported oral sex half of the time (49%
10 W; 59% M) and lowest if they reported oral sex never-rarely (9% W; 11% M) during the past
11 month. The full list of items can be seen in Table 5.
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24 ***Mood setting DLS.*** Five of the items described things people might have done to set the
25 mood (e.g., playing music in the background or lighting a candle). Participants could check all
26 items that applied. We coded affirmative responses as 1, and created a mood setting variable by
27 summing the responses for the 5 items (range 0-5).
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34 ***Sex acts DLS.*** Eight items described actions that people might have engaged in during their
35 last sexual encounter (e.g., gentle kissing). Participants could check all items that applied.
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38 ***Feelings DLS.*** Participants indicated the one option that best described how they felt
39 during their last sexual encounter (e.g., passionate; playful; pressured).
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43 ***Duration of Sex DLS.*** Participants were asked “how much time was spent on that occasion,
44 from the time physical contact began until it ended (including kissing, petting, etc.)?”
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48 **Reading sexual self-help magazines variable**

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50 We assessed men and women’s use of magazines for sex tips. Participants were asked “Do
51 you ever read magazine articles or books that promise to put the spark back in your sex life?” (see
52 response options in Table 6).
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Attitudes about sex life and relationship variables

A series of items assessed people's overall relationship satisfaction and attitudes about their sex life (e.g., I feel comfortable asking my partner for what I want in bed). The full list of items is presented in Table 6. Participants responded on a four point Likert scale (1 = Strongly Disagree, 2 = Somewhat Disagree, 3 = Somewhat Agree, 4 = Strongly Agree). To facilitate data presentation, we also identified the percentage of participants who disagreed (1-2) versus agreed (3-4) with the statements. Participants could indicate not applicable on these items ($Ns = 115-724$ across the items) and these participants were excluded from analyses using these items.

Results

Data Analysis Overview

Due to the large sample size, even minuscule effects emerged as statistically significant (e.g., β s as small as .02 and percentage differences as small as 1 percentage point), making effect size particularly important to emphasize. For regression analyses, we present the standardized regression coefficients (β) and elected to highlight statistically significant results in the text when they reflected β values greater than $|\text{.09}|$. We do not present results separately by ethnicity because a series of ANOVAs examining the effects of ethnicity on all of the continuous variables showed that, even when the effects were statistically significant, they were minuscule in size (all $\eta p^2 < .005$, except for education and age, $\eta p^2 = .01$).

We conducted regression analyses examining the predictors of sexual satisfaction and feeling passion during sex (Table 2). Model 1 includes all of the relevant predictors, including relationship satisfaction and sex frequency. Model 2 removes relationship satisfaction and sex frequency as predictors because sexual satisfaction is likely a component of relationship satisfaction and sex frequency is likely tightly intertwined with sexual satisfaction (people who are satisfied

WHAT KEEPS PASSION ALIVE? 16

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3 may choose to have more sex). The pattern of results was generally similar in Model 1 and Model
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6 2, except the effects of the other predictors were generally stronger when relationship satisfaction
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8 and sex frequency were removed. We show the results for both models in Table 2, but focus on the
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10 patterns found in Model 2 in the results. Skewness was low in all continuous variables ($< |1.6|$ for
11
12 all variables, and $< |1.0|$ for majority of variables), as was kurtosis ($< |2.0|$ for all variables, except
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14 for sex frequency = 2.4). Collinearity diagnostics revealed that multicollinearity was low for all
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16 predictors (all Tolerance values .50-1.0, all VIF values 1.0-2.0).
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20 We also divided the participants into groups of “Satisfied,” “Neutral,” and “Dissatisfied”
21
22 men and women to create profiles of the attitudes and behaviors of these different groups. We
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24 conducted Chi-square analyses comparing percentage of Satisfied versus Dissatisfied men and
25
26 women engaging in each behavior (see Tables 3-6).
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29 **Hypothesis 1. People Will Report More Satisfaction and Behaviors Enhancing Their Sex Life**
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31 **in the Early Phase of Their Relationship Than Now**
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34 Approximately equal percentages of men were Satisfied now (43%) as opposed to
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36 Dissatisfied now (41%), with the remainder being Neutral now (16%). In contrast, a majority of
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38 women were Satisfied now (55%), with fewer women Dissatisfied now (27%) or Neutral now
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40 (18%). From the lowest point (1) to the highest point (7) on the Likert scale, the percentage of men
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42 and women at each level of sexual satisfaction now were: 1 = Very Dissatisfied (15%; 10%), 2
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44 (12%; 7%), 3 (14%; 10%), 4 = Neutral (16%; 18%), 5 (18%; 18%), 6 (15%; 19%), 7 = Very
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46 Satisfied (10%; 17%). This is in sharp contrast to reports of how sexually satisfied these
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48 participants were early in the relationship, where 83% of men and 83% of women reported being
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50 Satisfied, 8% of men and 7% of women Neutral, and only 9% of men and 10% of women
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52 Dissatisfied.
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ANOVA analyses. Participants rated their sexual satisfaction now and their recollection of their sexual satisfaction during the first six months together. Using a 2 (Now vs. First 6 Months) X 2 (Gender) X 2 (Relationship Length) Mixed ANOVA, we examined whether people reported that their sexual satisfaction was higher now or in the first six months of their relationship. The results are shown in Figure 1. Consistent with the hypothesis, there was a main effect of Now versus First 6 Months, with people reporting substantially greater satisfaction in the first 6 months, $F(1, 38739) = 14323, p < .001, \eta^2 = .27, d = .68$. All other main effects and interactions were significant ($ps < .005$), but only the main effect of gender exceeded $\eta^2 = .01$ ($\eta^2 = .011$).

Frequency Distributions. We asked participants to report if certain practices and feelings were more common now versus when they first started having sex, or if things were about the same. People's reports were quite varied (Figure 2). Analyses for gender differences are reported in Table 6 (last column). Here we highlight a few key findings.

Many people reported that sex, foreplay, and oral sex were more frequent early in the first six months. One-third of women, however, stated they orgasmed more frequently now, and one-fourth reported having multiple orgasms more frequently now. Also notable is that more women felt less sexually inhibited now (38%) than in the early months of their relationship (24%).

Feeling desire from partners appears to be more of a problem for men than for women. Three-fifths of men reported feeling more desired by their partner early in their relationship compared to two-fifths of women. Close to two-thirds of men, however, reported more desire or the same level of desire for their partner now as in the past compared to only half of women. Notably, more women (36%) reported feeling emotional closeness during sex now than in the first six months of their relationship (27%), whereas slightly more men (31%) felt closer in those early days compared to now (27%). Very few men and women said there was more hugging and

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3 cuddling now in their relationship, with most men and women saying there is the same amount
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5 (43%; 43%) or that there was more early on (38%; 38%).
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8 **Hypothesis 2. Satisfied People Will Report More Consistent Orgasms and More Frequent** 9 10 **Oral Sex than Dissatisfied People**

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12 Consistent with the hypotheses, men were more sexually satisfied and reported more
13 passion when they reported more consistent orgasms ($\beta = .11$; $\beta = .07$), when their partners had
14 more consistent orgasms ($\beta = .11$; $\beta = .12$), and when they received oral sex more often ($\beta = .11$; β
15 = $.07$; Table 2). Consistent with the hypotheses, women who reported more consistent orgasms
16 were more likely to be satisfied with their sex lives and reported more passion in their sex life ($\beta =$
17 $.27$; $\beta = .22$). With the controls in the model, however, oral sex frequency and partner's
18 consistency of orgasm did not emerge as strong predictors.
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29 These patterns were seen in the consistency of orgasm and oral sex among dissatisfied and
30 satisfied men and women (Table 3). Among men, satisfied men were more likely than dissatisfied
31 men to say that they usually-always orgasmed (98% vs. 91%), and that their partner did as well
32 (79% vs. 61%). Satisfied men were more likely than dissatisfied men to usually-always receive
33 oral sex (31% vs. 15%) and to give oral sex (56% vs. 37%). Among women, satisfied women were
34 more likely than dissatisfied women to say that they usually-always orgasmed (78% vs. 41%), and
35 that their partner did as well (98% vs. 80%). Satisfied women were more likely than dissatisfied
36 women to usually-always receive oral sex (30% vs. 18%) and to give oral sex (30% vs. 24%).
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48 **Hypothesis 3. Satisfied People Incorporate More Acts of Sexual Variety in their Sex Life than** 49 50 **Dissatisfied People**

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52 Consistent with the hypothesis, men and women who reported more acts of sexual variety
53 reported more sexual satisfaction ($\beta = .18$ men; $\beta = .10$ women) and passion ($\beta = .14$; $\beta = .10$
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women; Table 2). Figure 3 shows the mean levels of sexual satisfaction for men and women according to number of acts of sexual variety performed.

Sexually satisfied men and women were more likely to engage in almost all of the acts of sexual variety than dissatisfied men and women (Table 4, top). In terms of the biggest percentage point differences, satisfied men and women were more likely than dissatisfied men and women to say that they: tried a new sexual position, wore sexy lingerie, took a shower/bath, talked about or acted out fantasies, gave or had a massage, went on a romantic getaway, tried anal stimulation, made a date night to have sex, or used a sex toy together.

Hypothesis 4. Satisfied People Will Incorporate More Communication Strategies than Dissatisfied People

Regression analyses. Consistent with the hypothesis, men and women who reported using more communication strategies were more sexually satisfied ($\beta = .18$ men; $\beta = .18$ women) and reported more passion ($\beta = .14$ men; $\beta = .16$ women; Table 2) than men and women who reported fewer communication strategies. Figure 4 shows the mean levels of sexual satisfaction for men and women according to number of communication strategies they employed.

Sexually satisfied men and women were more likely to use five of the six communication strategies than dissatisfied men and women (Table 4, bottom), and the differences were marked. In terms of these five types of communication, between 33-56% of satisfied men and women used each type compared to only 11-30% of dissatisfied men and women. The only exception was that very few participants gently criticized how their partner did something in bed.

Hypothesis 5. Satisfied People Will Incorporate More Mood Setting Techniques DLS than Dissatisfied People

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4 Consistent with the hypothesis, during their last sexual encounter, men and women who
5 used more mood setting techniques were more sexually satisfied ($\beta = .20$ men; $\beta = .20$ women) and
6 reported more passion ($\beta = .20$ men; $\beta = .22$ women; Table 2) than men and women who used
7
8 fewer mood setting techniques. Satisfied men and women were more likely to use all of the mood
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10 setting techniques than were dissatisfied men and women (Table 5, top).
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15 **Hypothesis 6. Satisfied People Will Report More Sexual Acts, More Positive Emotions, and**
16
17 **Longer Duration of Sex During Their Last Sexual Encounter than Dissatisfied People**
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20 Consistent with the hypothesis, sexually satisfied men and women were more likely than
21 sexually dissatisfied men and women to engage in all of the sexual acts listed, including gentle
22 kissing (+17%; +27%), deep kissing (+23%; +31%), and changing positions during sexual
23
24 intercourse (+28%; +27%; Table 5, middle).
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29 Satisfied men and women were more likely than dissatisfied men and women, respectively,
30 to say their last encounter was passionate, loving and tender, or playful (Table 5, middle). Overall,
31
32 women were more likely than men to say they were just going through the motions for their
33
34 partner's sake (21% vs. 7%), and dissatisfied women were much more likely than satisfied women
35
36 to say they were just going through the motions (43% vs. 7%). Men were more likely than women
37
38 to say they were just happy to be getting a release from tension (32% vs. 14%). Dissatisfied men
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40 were much more likely than satisfied men to see their last sexual encounter as a release from
41
42 tension (47% vs. 15%).
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48 Sexually satisfied men and women also reported that their last sexual encounter lasted
49
50 longer than did dissatisfied men and women (Table 5, bottom). Satisfied men and women were
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52 more likely than dissatisfied men and women to say their sexual encounter lasted more than 30
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54 minutes, and were less likely to say it lasted fifteen minutes or less.
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3 **Hypothesis 7. Satisfied People Will Report Engaging in the Same or a Greater Degree of**
4 **Positive Practices During Sex as They Did in the Beginning of Their Relationship than**
5 **Dissatisfied People**
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10 Consistent with the hypothesis, sexually satisfied men and women were more likely than
11 dissatisfied men and women to report the same or a greater level of positive sexual practices now as
12 during the beginning of their relationship (Table 6, top). Sexually satisfied men and women were
13 more likely than dissatisfied men and women, respectively, to report feeling desire for their partner
14 and feeling desired by their partner. They also engaged in more foreplay, sex, receiving oral sex,
15 giving oral sex, reaching of orgasm during sex, and having more than one orgasm during sex. This
16 pattern extended to intimacy during sex: sexually satisfied participants had higher levels of
17 emotional closeness and hugging/cuddling after sex.
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29 **Hypothesis 8. Satisfied People Will Make More Successful Use of Magazines and Books than**
30 **Dissatisfied People**
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34 Consistent with the hypothesis, sexually satisfied men and women were more likely than
35 dissatisfied men and women to make successful use of sex advice found in magazines and books
36 (Table 6, middle). They were not more likely to read advice with suggestions for ways to keep sex
37 fresh or lively, but they were more likely to say they read sources for this type of advice, tried some
38 of the suggestions, and found them effective. They were less likely to say they simply read such
39 advice but did not test out the ideas proposed.
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48 **Hypothesis 9. Satisfied People Will Report More Positive Sexual Attitudes than Dissatisfied**
49 **People**
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53 Consistent with the hypothesis, sexually satisfied men and women were more likely than
54 dissatisfied men and women to have positive attitudes about their sex life and their relationships
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WHAT KEEPS PASSION ALIVE? 22

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3 with their partner (Table 6, bottom). They were more likely to report feeling happy with their
4 relationship, comfortable asking their partner for what they want in bed, satisfied with the number
5 of sexual positions they use with their partner, and that their sex life was as passionate and
6 spontaneous now as it was in the beginning. They were less likely to report that their sex life was
7 predictable, that they found their partner more physically attractive in the beginning, that they did
8 not feel good enough in bed with their partner, and that their partner did not know how to excite
9 them.
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20 For men, there was little variation in the importance they placed on having an exciting sex
21 life. Nearly all men felt that having an exciting sex life was important, regardless of their current
22 sexual satisfaction, although men who were neutral in satisfaction scored a bit lower in the
23 importance placed on an exciting sex life than other men. For women, however, there was more
24 variation. Satisfied women were most likely to place importance on an exciting sex life.
25 Interestingly, women neutral in satisfaction were less likely to place importance on an exciting sex
26 life than satisfied and dissatisfied women. For dissatisfied women, one reason for their
27 dissatisfaction may be that they were not experiencing something important to them, whereas
28 neutral women may place less importance on sex, whether exciting or not.
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41 **Profile of the Subsample of Satisfied People Who Reported Enduring Passion**

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43 Finally, we examined what differentiated sexually satisfied men and women who reported
44 no decline in passion from sexually satisfied men and women who reported lower passion now.
45 The high passion-high sexual satisfaction men ($n = 6,159$) and women ($n = 5,272$) were more
46 likely than lower passion-high sexual satisfaction men ($n = 3,833$) and women ($n = 3,324$) to have
47 more frequent sex (men's $d = .54$; women's $d = .59$), more consistent orgasm ($d = .08$; $d = .34$),
48 received more oral sex ($d = .29$; $d = .36$), engaged in more mood setting ($d = .41$; $d = .44$), engaged
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3 in more communication ($d = .40$; $d = .36$), engaged in more acts of sexual variety ($d = .34$; $d = .46$),
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5 and were more satisfied with their relationships ($d = .50$; $d = .50$, $p < .001$). All differences were
6
7 significant at the $p < .001$ level (except differences in male orgasm frequency, which was not
8
9 significant). The groups had similar relationship lengths ($d = .10$, $p = .02$; $d = .02$, $p = .34$).
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12 Discussion

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15 Using a large U.S. sample of men and women in relationships for three or more years, we
16
17 examined a wide variety of factors and to see whether they contribute to maintaining sexual
18
19 satisfaction. It is clear most people felt that their sexual satisfaction and passion declined over time.
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21 The drop in sexual passion is consistent with studies finding a decline in feelings of passionate love
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23 over time (Hatfield et al., 2008). But perhaps more interesting is the fact that our data call into
24
25 question the application of Sternberg's (1986) thesis that passion quickly subsides. Our data show
26
27 that, if properly nurtured, passion can last for decades. Nearly two-thirds of sexually satisfied
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29 respondents reported that their sex lives were as passionate as in early days together; beyond that
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31 global statement, over one-third of sexually satisfied men and women selected "passionate" as the
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33 single best word (out of six) to describe their most recent sexual encounter.
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39 We believe our data also help answer a few questions important in current sexology. In their
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41 literature review, Christopher and Sprecher (2000) concluded that the field does not really
42
43 understand why, as relationships mature, sexual satisfaction does not diminish as steeply as
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45 frequency of sexual activity. Our data suggest that items that measure the emotional component of
46
47 sexual encounters deserve more study to help understand whether improved quality may balance
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49 reduced quantity of sex. One in three women, but also more than one in four men, said they feel
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51 more emotional closeness during sex now than at the start of their relationship. To name just a few
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53 items, hugging, cuddling, afterplay, and saying "I love you," can be part of sex and as deserving of
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WHAT KEEPS PASSION ALIVE? 24

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3 study as climaxing. This is consistent with findings showing that both men and women rate sexual
4 activity in more committed relationship contexts as more sexually and emotionally satisfying than
5 in more uncommitted contexts (Mark, Garcia, & Fisher, 2015).
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10 Further limiting our understanding is the narrow number of sex behaviors that are measured
11 in most studies. Readers of the National Health and Social Life Survey (NHSL; Laumann et al.,
12 1994) might ask *why* people were so content with their sex lives in light of the finding that 87% of
13 the married Americans in that representative sample claimed to be “extremely” or “very physically
14 pleased” by their sexual relationship, while at the same time their answers to behavioral items drew
15 a portrait of somewhat routinized sex. With the addition of questions on mood setting and on a
16 wider variety of sex and intimate behaviors, our data lead us to question how routine people’s sex
17 lives really are. Take a single example: anal intercourse is widely studied because it entails health
18 risks, whereas prevalence of anal stimulation is virtually unknown. When asked just about the past
19 year, twice as many of our respondents had engaged in anal stimulation as anal intercourse (30% vs.
20 14%). Some couples’ active efforts to keep sex lively focus on quality and variety over quantity,
21 but we cannot know the extent to which this is true unless we ask a broader spectrum of questions,
22 including many behavioral items unrelated to health outcomes and risks such as pregnancy and
23 disease.
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43 Our survey found a smaller proportion of respondents reporting high levels of sexual
44 satisfaction than the NHSL, perhaps because our respondents were first forced to contrast sex now
45 with sex earlier. In the NHSL, a significantly larger portion of men more satisfied than women,
46 while the largest meta-analysis to date (Peterson & Hyde, 2010) found men only slightly more
47 satisfied than women. Our survey revealed the opposite. Given the small size of the overall gender
48 difference, this may simply reflect normal variation in sample means across studies. This gender
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3 difference, however, was consistent across many items, including the eleven items reported in
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5 Figure 2. There was not one item where men reported aspects of their sex life were better “now”
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7 versus “then,” whereas women named four such items: lower inhibition, more single orgasms, more
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9 multiple orgasms, and feeling emotionally closer during sex now than at the beginning of the
10
11 relationship. Our data may also suggest that more women have become empowered to have sex
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13 when they want it, rather than out of a sense of duty.
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17 Taking the time to set the mood, sexual variety, and communication were important
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19 predictors of sexual satisfaction for both men and women. The current findings suggest that the
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21 profiles of sexually satisfied men and women are fairly similar, but that certain factors were of
22
23 particular importance to each gender. Frequency of receiving oral sex was important for men;
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25 frequency of oral sex appeared to be less important for women, but that is due in part to the fact that
26
27 orgasm consistency was also included as a predictor for women, and oral sex frequency and orgasm
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29 frequency can be highly overlapping for women. Consistency of orgasm is more much variable
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31 across women than across men (Garcia, Lloyd, Wallen, & Fisher, 2014), allowing it to be a
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33 compelling predictor of sexual satisfaction.
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38 **Limitations and Strengths**

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40 Self-selection into surveys has been a standard problem in studies conducted with college
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42 and community samples, and now notably in many Internet surveys. The generalizability of the
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44 current findings is limited by the fact that participants were visitors to a news website who self-
45
46 selected into this sample. However, the study was promoted as being on “sex and love” in an
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48 attempt to draw in a diverse range of men and women across socio-demographics and not merely
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50 those with a particular interest in sexual satisfaction. Internet samples have the advantage of being
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52 more diverse with respect to gender, sexual orientation, age, socioeconomic status, and geographic
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WHAT KEEPS PASSION ALIVE? 26

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3 region, than convenience samples of students (Gosling & Mason, 2015; Gosling, Vazire,
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5 Srivastava, & John 2004). However, in our survey, as is true in many Internet surveys, respondents
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7 had more formal education than the U.S. population; in the 2014 census, 32% of Americans had
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9 college degrees or higher, in contrast to 56% of our respondents. Surveys can be completed with
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11 ease from the privacy of respondents' homes or workplaces, reaching individuals who would not
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13 otherwise have the opportunity to participate in research (for a detailed discussion of the advantages
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15 and disadvantages of Internet research, see Reips & Birnbaum, 2011).
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20 Our large sample size enabled us to conduct regression analyses with a large number of
21
22 predictor variables, and also provided sufficient power to examine profiles of sexually satisfied men
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24 and women after segmenting them into high/low sexual satisfaction categories. However, the
25
26 current study is correlational in nature, and while theory and previous literature indicate a likely
27
28 causal direction, the data presented here do not provide support for causal claims. Sexual
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30 satisfaction and passion are not intrinsically stable properties of a relationship, and despite reasons
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32 to believe they generally decline, these properties may fluctuate in response to other situational
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34 factors not assessed in the current study.
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39 Another limitation was that the study relied on a single-item measure of current sexual
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41 satisfaction, although many studies have similarly relied on global measures (notably, Laumann et
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43 al., 1994). Indeed, measurement of sexual satisfaction has been complex in the academic literature,
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45 with several slightly different validated scales available that capture various multidimensional
46
47 aspects of sexual satisfaction (Mark, Herbenick, Fortenberry, Sanders, & Reece, 2014). For
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49 assessing unidimensional aspects of sexual satisfaction, however, a single-item measure tends to
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51 perform well in psychometric comparisons and also has the practical benefit of being succinct
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53 (Mark et al., 2014). The fact that the single-item measure used correlated highly with a validated
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3 measure in a separate sample ($r = .91$) increases confidence in the present results. Further, we
4 assessed behaviors not routinely measured in the composite measures of past research, such as a
5 diverse array of acts of sexual variety, mood setting techniques, expressions of intimacy and love
6 during sex, and efficacy of using sex help books and magazines. Existing composite measures do
7 not include any assessment of sexual satisfaction now relative to early in the relationship, although
8 we recognize that respondents' recall can be faulty or inflated based on stereotypes that early
9 months of romantic relationships are typically passionate. We included several items to examine
10 differences between how people thought about their current sex life compared to those earliest
11 months together, allowing for the possible perception that their sex life now is just as passionate, or
12 even more so.
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27 **Conclusion**

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29 The current study extends the extant literature on sexual satisfaction. These data help
30 establish the relative importance of predictors not only of sexual satisfaction but also lasting
31 passion. An important contribution of the current study is that it enhances understanding of the
32 factors that contribute to high (and sustained) sexual satisfaction and even passion in individuals
33 who have been in a romantic relationship for three years or longer.
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41 We end by trying to bridge some of the gap between sex research and relationship advice.
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43 Our results indicate some ways that may improve a sagging sex life: Take time to use more foreplay
44 before sex even starts (e.g., a sexy text during the day) and to make time for intimacy by setting up
45 "date nights," romantic getaways, and for setting the mood. Taking time with foreplay, including
46 gentle and deep kissing, can heighten arousal and passion. Mixing it up is an important part of
47 variety for both men and women: wearing lingerie, giving a massage, and talking about fantasies
48 can spice up a sex life. Expressing love and cuddling after sex can boost overall feelings of sexual
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WHAT KEEPS PASSION ALIVE? 28

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3 satisfaction. When couples run out of ideas, reading sex advice books and magazines, and actually
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5 trying out the ideas even if just for the purposes of experimenting with something new together,
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7 could help enhance overall sexual satisfaction. In sum, over time individuals and couples can, and
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9 many do, keep passion alive.
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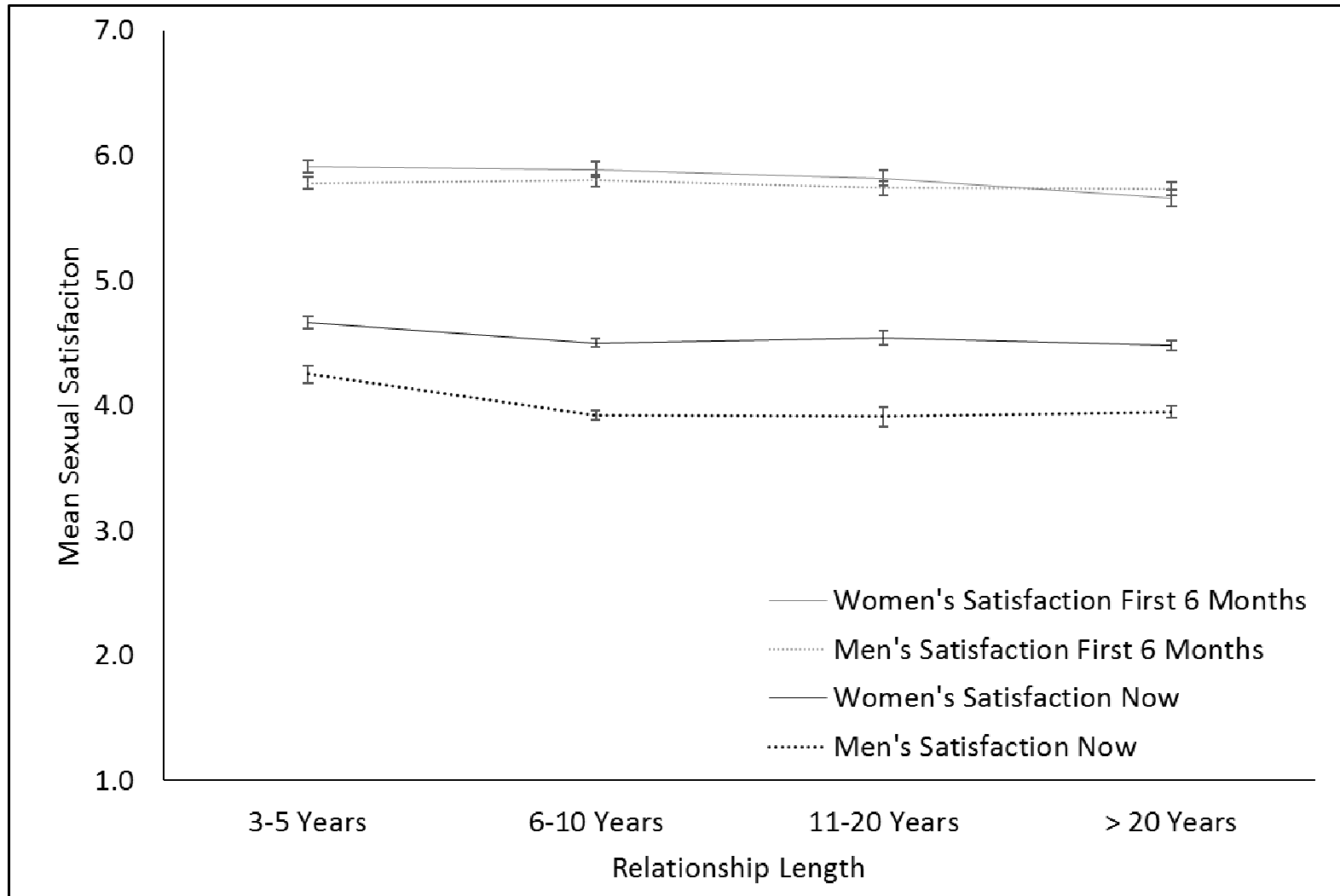


Figure 1. Men and women reports of their sexual satisfaction now versus their recollection of their sexual satisfaction during the first six months of their relationship.

Note. Error bars represent 95% confidence intervals.

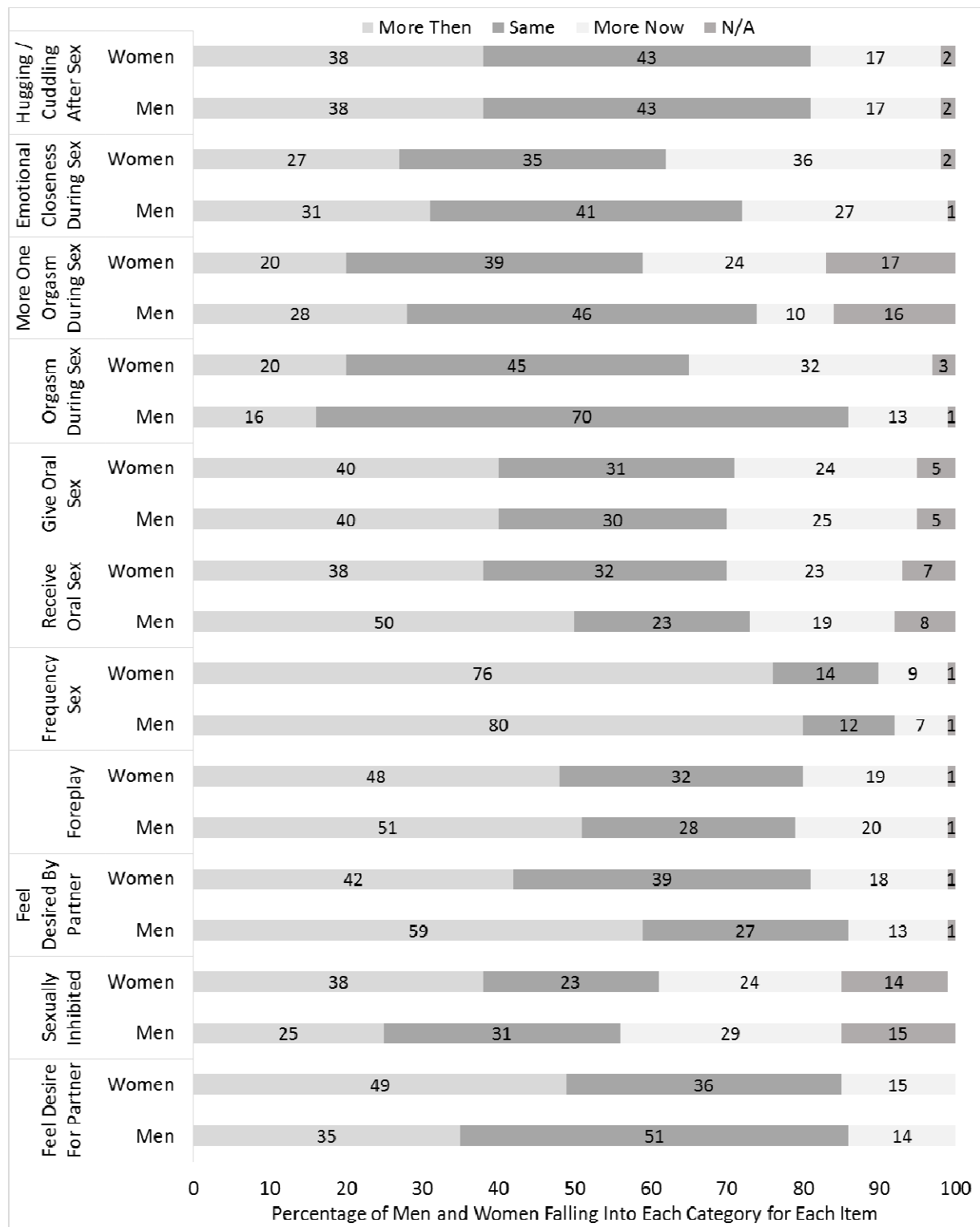


Figure 2. Men's and women's reports of whether the behavior/feeling was more common when they first started having sex than now (then), same as now (same), more so now (more now), or not applicable (N/A).

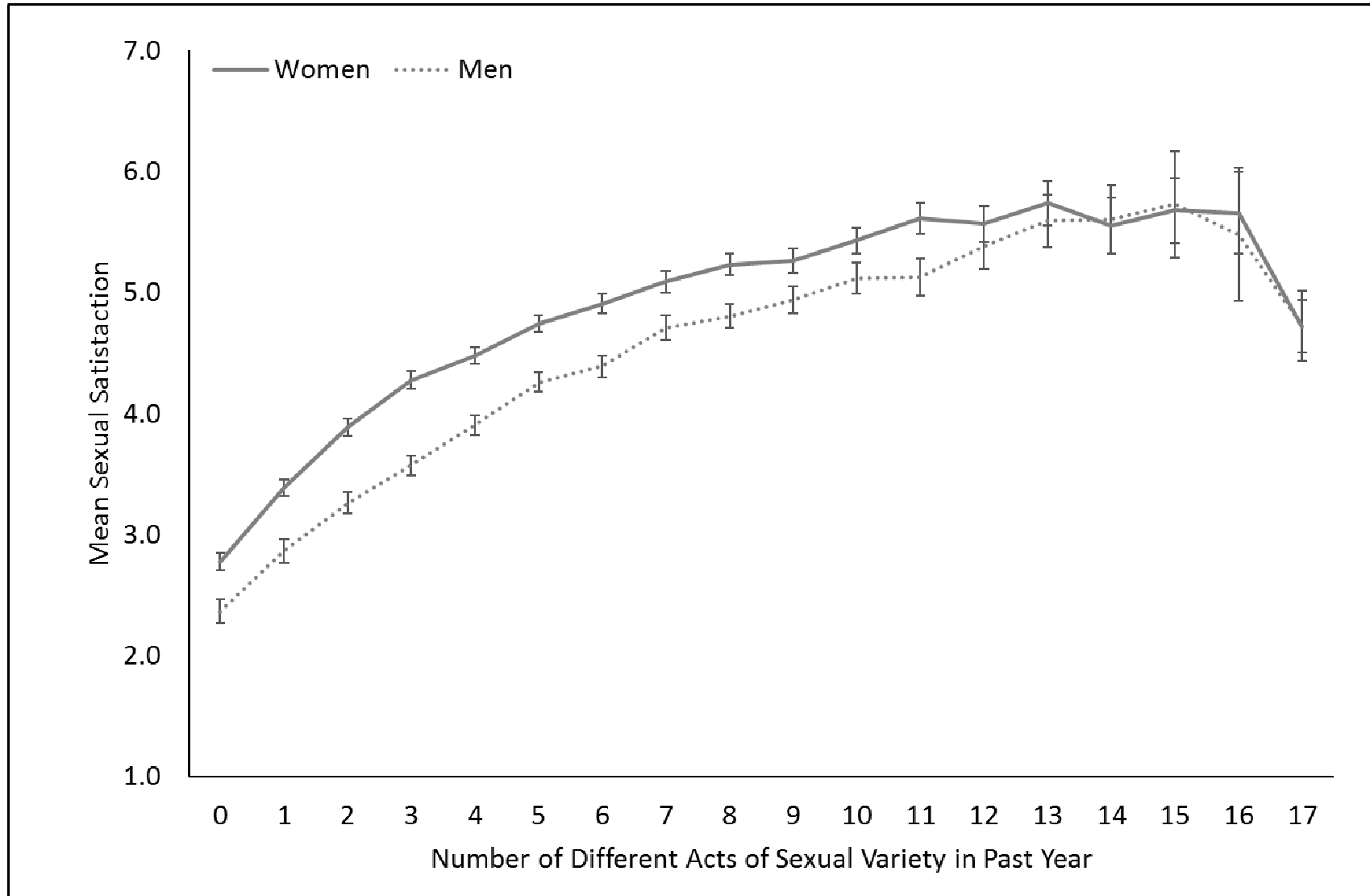


Figure 3. Degree of sexual satisfaction among men and women who engaged in different numbers of acts of sexual variety in the past year.

Note. Error bars represent 95% confidence intervals.

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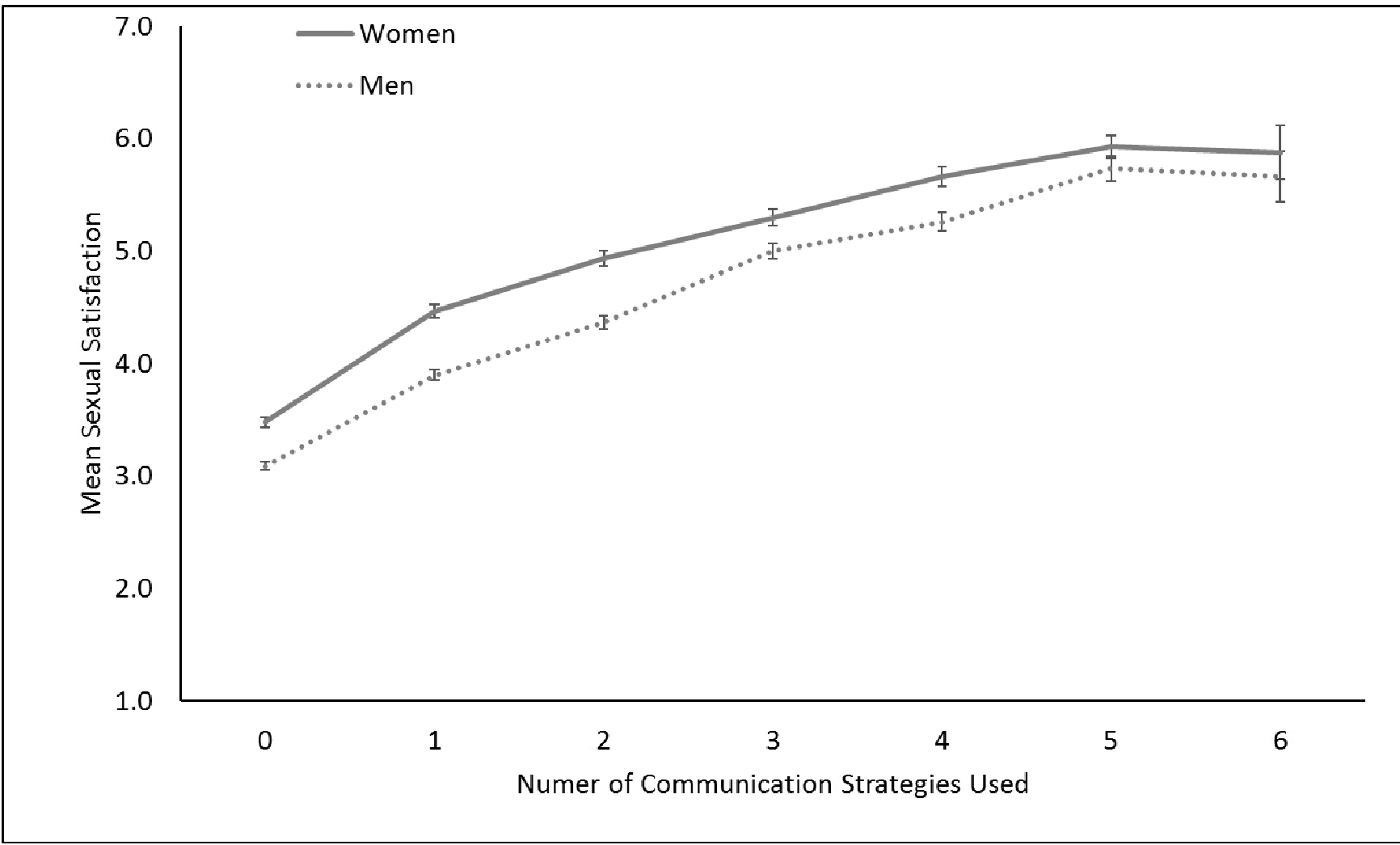


Figure 4. Degree of sexual satisfaction among men and women who used different numbers of communication strategies.
Note. Error bars represent 95% confidence intervals.

Table 1. Key demographics for analyzed sample (N = 38,747).

	Overall	Men	Women		Overall	Men	Women
	%	%	%		%	%	%
	(N)	(N)	(N)		(N)	(N)	(N)
Ethnicity				Gender		59	41
White	88	86	88		(23,022)	(15,725)	
	(34,100)	(13,537)	(20,563)	Relationship			
Black	2	2	2	Status			
	(882)	(389)	(493)	Cohabiting	10	16	6
Hispanic	3	4	3		(3,986)	(2,558)	(1,428)
	(1,295)	(659)	(636)	Married	83	77	87
Asian	2	2	2		(32,168)	(12,119)	(20,049)
	(674)	(280)	(394)	Remarried	7	7	7
Native	1	1	1		(2,593)	(1,048)	(1,545)
American	(186)	(98)	(88)	Relationship			
Other	1	1	1	Length			
	(221)	(107)	(114)	3-5 Years	19	26	14
Biracial	1	1	1		(7,314)	(4,174)	(3,140)
	(411)	(225)	(186)	6-10 Years	25	30	22
Prefer Not to	2	3	2		(9,805)	(4,671)	(5,134)
Say	(978)	(430)	(548)	11-20 Years	33	29	35
					(12,557)	(4,516)	(8,041)
Education				> 20 Years	23	15	29
Some High	1	1	1		(9,071)	(2,364)	(6,707)
School or Less	(270)	(156)	(114)	Children			
High School	9	13	7	Under 21			
	(3,587)	(2,007)	(1,580)	No	35	40	32
Graduate	34	40	29		(13,615)	(6,217)	(7,398)
Some College /	(13,042)	(6,346)	(6,696)	Yes	65	60	68
Associates	36	33	38		(25,132)	(9,508)	(15,624)
	(14,004)	(5,112)	(8,892)				
College Degree	20	13	25				
	(7,844)	(2,104)	(5,740)				
Graduate							
Degree							

Table 2. *Predictors of Sexual Satisfaction and Passion among Men and Women.*

	Sexual Satisfaction				Passion			
	Model 1		Model 2		Model 1		Model 2	
	Men	Women	Men	Women	Men	Women	Men	Women
	β	β	β	β	β	β	β	β
Age	.08	.04	.07	.02	.07	.07	.07	.05
Relationship Length	.02	.04	.03	.04	.02	.01	.03	.01
Education	-.01	.01	-.01	.00	-.03	-.04	-.03	-.05
Kids Under 21	.01	.02	.01	.01	.01	.02	.01	.02
Your Orgasm	.05	.19	.11	.27	.02	.15	.07	.22
Partner Orgasm	.08	.03	.11	.08	.09	-.01	.12	.03
Receive Oral	.07	.03	.13	.03	.05	.01	.10	.01
Give Oral	.01	.02	-.01	.04	.03	.06	.01	.08
Sexual Variety (0-17)	.07	.03	.18	.10	.05	.04	.14	.10
Mood Setting (0-5)	.10	.10	.20	.20	.13	.15	.20	.22
Communication (0-5)	.07	.07	.18	.18	.07	.06	.17	.16
Relationship Sat.	.39	.38	-	-	.27	.25	-	-
Sex Frequency	.30	.27	-	-	.29	.28	-	-
<i>df</i>	13	13	11	11	13	13	11	11
<i>N</i>	20,581	14,386	20,612	14,389	20,541	14,360	20,564	14,368
<i>F</i>	1,848	1,161	805	599	1,071	731	632	481
<i>Adj R</i> ²	.54	.51	.30	.31	.40	.40	.25	.27

Note. All β values greater than $|\text{.03}|$ were significant at the $p < .001$ level, and all of the regression models were as well. Positive β s indicate that participants who scored higher on the predictor variables were more sexually satisfied (e.g., in Model 1, women who reported more consistent orgasms reported greater sexual satisfaction, $\beta = .19$). Model 1 includes relationship satisfaction and sex frequency as predictors, whereas Model 2 does not.

Table 3. *Orgasm Consistency and Frequency of Oral Sex and Sex Among Sexually Satisfied, Neutral, and Dissatisfied Men and Women.*

	Men				Women				Gender Diff.		
	Sat.	Neut.	Dis.	χ^2	Sat.	Neut.	Dis.	χ^2	M	W	χ^2
Participant Orgasms in Past Month											
Usually/Always	98	94	91	612	78	54	41	2,315	95	66	7,633
About half of the time	1	4	4		15	22	19		3	17	
Never/Rarely	1	2	5		7	24	42		2	18	
Partner Orgasms in Past Month											
Usually/Always	79	66	61	1,343	98	95	80	431	71	96	6,833
About half of the time	14	18	14		2	3	4		14	2	
Never/Rarely	7	16	25		1	2	6		15	2	
Participant Received Oral Sex Past Month											
Usually/Always	31	20	15	1,889	30	23	18	711	23	30	119
About half of the time	26	20	14		27	21	17		21	27	
Never/Rarely	43	60	71		43	56	64		56	50	
Participant Gave Oral Sex Past Month											
Usually/Always	56	29	37	1,063	30	24	24	727	37	28	308
About half of the time	15	22	25		31	21	19		25	27	
Never/Rarely	29	49	38		39	55	57		38	45	
Sex Frequency											
3+ times per week	30	6	2	8,276	36	8	6	4,963	15	23	552
1-2 times per week	49	37	15		45	37	17		33	36	
< 1 time per week	21	56	76		19	54	70		49	39	
Never	0	1	7		0	1	7		3	2	

Note. Chi-Square analyses tested if the proportion of people responding in each category differ depending on sexual satisfaction. All analyses were significant at the $p < .001$ level. Percentages indicate the percent of people who fell into each category at each level of sexual satisfaction. For example, among sexually satisfied men, 98% reported always/usually having orgasms during sex, 1% about half the time, and 1% never/rarely.

Table 4. *Acts of Sexual Variety and Sexual Communication Among Sexually Satisfied, Neutral, and Dissatisfied Men and Women.*

	Men				Women				Overall		
	Sat.	Neut.	Dis.	χ^2	Sat.	Neut.	Dis.	χ^2	M	W	χ^2
Acts of Sexual Variety Past Year (% Yes)											
At least one of us got a mini-massage or backrub	72	58	48	1,162	68	53	40	952	60	58	24
One of us wore sexy lingerie/underwear	67	48	33	2,179	71	55	45	816	50	61	418
Took a shower or bath together	64	50	35	1,639	66	49	37	1,025	50	55	115
Made a "date night" to be sure we had sex	63	53	41	919	55	47	37	376	53	49	50
Tried a new sexual position	59	36	22	2,768	63	38	25	1,780	40	48	273
Went on a romantic getaway	53	39	30	1,071	47	34	28	485	41	40	n.s.
Used a vibrator or sex toy together	48	39	28	842	47	37	30	352	39	40	14
Tried anal stimulation	42	28	19	1,211	37	25	19	458	30	30	n.s.
Viewed pornography together	40	29	19	1,068	45	35	28	354	30	39	332
Talked about or acted out our fantasies	40	22	14	1,705	37	21	16	699	27	28	n.s.
Had anal intercourse	25	15	10	735	26	18	14	232	17	21	93
Had sexual contact in a public place	23	10	6	1,316	19	10	6	458	14	14	n.s.
Integrated food into sex (e.g., chocolate/whipped cream)	22	13	8	801	22	13	9	429	15	17	25
Tried light S&M (e.g., restraints, spanking)	18	9	6	756	21	12	9	351	12	16	148
One of us took Viagra or a similar drug	17	14	12	66	9	9	10	n.s.	15	9	248
Videotaped our sex or posed for pictures in the nude	15	9	5	577	13	8	5	228	10	10	n.s.
Invited another person into bed with us	6	3	2	205	3	2	2	19	4	3	24
Communication Past Month (% Yes)											
I asked for something I wanted in bed	51	33	28	1,126	42	18	15	1,254	39	30	295
One of us praised other about something they did in bed	50	22	12	3,434	56	24	14	2,489	30	39	301
My partner asked for something they wanted in bed	37	15	8	2,589	50	30	21	1,178	22	39	1,323
One of us asked for feedback on how something felt	34	18	13	1,237	33	18	12	812	23	25	22
One of us called/emailed to tease doing something sexual	33	17	11	1,513	40	19	14	1,071	22	29	281
One us gently criticized how other did something in bed	7	7	7	n.s.	7	8	7	n.s.	7	7	n.s.

Note. Chi-Square analyses tested if the percentage of people responding yes to each item differed according to level of sexual satisfaction. Chi-square values are listed for all statistically significant effects. Percentages indicate the percent of people who said yes to each item. For example, among sexually satisfied men, 72% reported getting a mini-massage or backrub (28% did not). The last column "overall" compares men's and women's reports.

Table 5. Reports of Events During Last Sexual Encounter (DLS) Among Sexually Satisfied, Neutral, and Dissatisfied Men and Women.

	Men				Women				Overall		
	Sat.	Neut.	Dis.	χ^2	Sat.	Neut.	Dis.	χ^2	M	W	χ^2
What Happened DLS: Mood Setting (% Yes)											
At least one of us said "I love you"	75	60	49	1,327	74	54	44	1,148	62	62	n.s.
We engaged in sexy talk	44	20	13	2,436	46	19	13	1,663	27	32	110
Laughed about something funny happened during sex	28	17	11	877	36	20	14	782	19	28	387
Lit a candle or dimmed the lights	23	14	11	502	20	11	9	327	17	16	n.s.
Played music in the background	14	8	6	355	11	6	6	134	10	9	16
What Happened DLS: Acts (% Yes)											
Vaginal intercourse	95	92	90	168	96	93	91	122	92	94	36
Manual stimulation of genitals	89	81	73	768	87	73	66	768	81	79	43
Gentle kissing	84	75	67	696	81	64	54	1,094	76	71	110
Deep kissing	69	55	46	1,130	70	49	39	1,223	57	58	n.s.
Changed positions during sexual intercourse	65	47	37	1,656	69	52	42	912	50	58	246
Gave oral sex	50	40	35	464	48	35	33	360	42	42	n.s.
Received oral sex	49	37	27	1,067	43	35	28	288	38	38	n.s.
Anal intercourse	6	3	2	195	5	3	2	55	4	4	n.s.
ONE Best Describes Feelings DLS (% in each cat.)											
Passionate	40	16	12	5,531	34	9	7	4,554	25	22	2,958
Loving and tender	26	21	12		30	18	12		19	23	
Playful	15	13	6		17	13	7		11	13	
Happy to be getting release from tension	15	37	47		10	17	19		32	14	
Just going through the motions for my partner's sake	1	9	13		7	35	43		7	21	
I felt pressured into having sex by my partner	1	2	2		1	5	7		2	3	
Length of Sex DLS (% in each cat.)											
1+ Hour	12	4	4	1,640	9	3	3	1,875	7	6	63
30-60 minutes	37	26	22		36	22	16		29	28	
15-30 minutes	42	47	44		42	44	39		43	42	
15 minutes or less	11	23	30		13	31	42		21	24	

Table 5 Note. For the top two questions, Chi-square analyses tested if the percentage of people responding yes for each item differed according to level of sexual satisfaction. Chi-square values are listed for all statistically significant effects. For the bottom two questions, percentages indicate the percent of people who fell in each category at each level of sexual satisfaction.

Table 6. *Beliefs and Attitudes About Sex Life Among Sexually Satisfied, Neutral, and Dissatisfied Men and Women.*

	Men				Women				Overall		
	Sat.	Neut.	Dis.	χ^2	Sat.	Neut.	Dis.	χ^2	M	W	χ^2
More or Same Now as In Beginning (% Agree)											
Feel desire for your partner	76	58	56	1,226	67	32	30	2,285	65	51	916
Feel sexually inhibited (negative trait)	65	80	83	2,555	55	68	72	1,055	75	62	749
Feel desired by your partner	65	35	18	4,904	74	48	32	2,409	41	58	1,072
Foreplay	69	45	30	3,588	67	39	30	2,253	49	52	73
Frequency of sex	36	11	6	3,423	36	10	8	1,941	20	24	94
Frequency receiving oral sex	68	44	34	3,289	74	54	44	1,662	50	62	713
Frequency giving oral sex	74	58	46	2,037	71	53	43	1,301	60	60	12
Frequency reach orgasm during sex	94	85	72	2,676	93	75	58	3,111	84	80	2,837
More than one orgasm during sex	81	71	62	1,856	90	76	65	2,284	71	80	1,610
Emotional closeness during sex	89	71	46	5,329	90	62	46	3,860	69	72	412
Hugging/cuddling after sex	80	62	44	3,296	80	57	46	2,215	62	67	117
Read Magazines and Try Out Ideas? (% in each cat.)											
Yes, and some ideas worked for us	20	9	5	1,421	24	11	7	912	13	17	340
Yes, we've tried some ideas, but didn't work for us	4	5	6		4	7	8		5	6	
Yes, but we never really test out the ideas	19	28	33		24	34	40		26	30	
No	57	58	56		49	48	45		57	48	
Attitudes About Sex Life (% Agree)											
I feel happy with my relationship overall	98	90	57	5,275	98	85	55	3,790	80	84	90
It is important to me to have exciting sex life	94	88	94	167	84	66	77	465	93	79	1,682
I feel comfortable asking my partner for what I want in bed	87	65	43	4,143	90	70	53	2,131	65	76	529
I am satisfied with variety of sexual positions w/ partner	75	43	23	5,302	87	61	38	3,339	49	69	1,626
Our sex life is predictable	71	88	85	775	65	85	86	890	79	74	143
Sex life is as passionate now as in beginning	62	14	7	7,366	61	10	7	4,615	32	38	138
Sex life is as spontaneous now as in beginning	43	9	4	4,687	47	9	7	2,941	22	29	257
I found partner more physically attractive in beginning	32	44	49	606	25	42	53	1,028	41	35	124
I feel like I'm not good enough in bed with my partner	22	37	40	792	21	41	41	729	32	30	13
I feel that my partner doesn't know how to excite me	18	42	61	3,780	13	42	62	3,410	39	31	245

Note. Chi-Square analyses tested if the percentage of people responding yes, responding in each category, or who agreed with the items differed according to level of sexual satisfaction. Chi-square values are listed for all statistically significant effects.