

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/306518734>

# Sexual History and Present Attractiveness: People Want a Mate With a Bit of a Past, But Not Too Much

Article in *The Journal of Sex Research* · November 2017

DOI: 10.1080/00224499.2016.1232690

---

CITATIONS

14

---

READS

3,417

3 authors, including:



**Steve Stewart-Williams**

The University of Nottingham Malaysia Campus

51 PUBLICATIONS 1,612 CITATIONS

[SEE PROFILE](#)



**Andrew G Thomas**

Swansea University

25 PUBLICATIONS 308 CITATIONS

[SEE PROFILE](#)

Some of the authors of this publication are also working on these related projects:



Mating research [View project](#)



Digit ratio (2D:4D) and belief in non-scientifically supported phenomena [View project](#)



## Sexual History and Present Attractiveness: People Want a Mate With a Bit of a Past, But Not Too Much

Steve Stewart-Williams, Caroline A. Butler & Andrew G. Thomas

To cite this article: Steve Stewart-Williams, Caroline A. Butler & Andrew G. Thomas (2016): Sexual History and Present Attractiveness: People Want a Mate With a Bit of a Past, But Not Too Much, The Journal of Sex Research, DOI: [10.1080/00224499.2016.1232690](https://doi.org/10.1080/00224499.2016.1232690)

To link to this article: <http://dx.doi.org/10.1080/00224499.2016.1232690>



Published online: 02 Nov 2016.



Submit your article to this journal [↗](#)



View related articles [↗](#)



View Crossmark data [↗](#)

## **Sexual History and Present Attractiveness: People Want a Mate With a Bit of a Past, But Not Too Much**

**Steve Stewart-Williams**

*School of Psychology, University of Nottingham Malaysia Campus*

**Caroline A. Butler**

*School for Policy Studies, University of Bristol*

**Andrew G. Thomas**

*Department of Psychology, Swansea University*

*The aim of this study was to explore how people's sexual history affects their attractiveness. Using an Internet survey, 188 participants rated their willingness to engage in a relationship with a hypothetical individual with a specified number of past sexual partners, ranging from 0 to 60+. The effect of past partner number was very large. Average willingness ratings initially rose as past partner number rose, but then fell dramatically. For short-term relationships, men were more willing than women to get involved (although the difference was not large). For long-term relationships, in contrast, there was virtually no sex difference. Thus, contrary to the idea that male promiscuity is tolerated but female promiscuity is not, both sexes expressed equal reluctance to get involved with someone with an overly extensive sexual history. Finally, participants with an unrestricted sociosexual orientation (high SO participants) were more tolerant than low SO participants of prospective mates with higher numbers of past sexual partners but were also less tolerant of prospective mates with low numbers of past sexual partners.*

Research on mate preferences is one of the most active and fruitful areas in psychological science. To date, though, only a handful of studies have examined how a person's attractiveness is affected by their sexual history (see, e.g., Epstein, Klinkenberg, Scandell, Faulkner, & Claus, 2007; Jones, 2015; O'Sullivan, 1995). This is a potentially important topic, however. In all but the most conservative societies, any two adults embarking on a relationship are likely to have a more or less extensive résumé of past romantic experiences: first loves, unrequited loves, old flames, drunken mistakes, and so on. Depending on the details, a prospective mate's sexual history may be a matter of indifference, it may arouse strongly negative feelings, or it may even enhance the person's attractiveness. The present study explored three questions related to this issue. The first was how the number of sexual partners an individual has had affects people's willingness to get romantically involved with that individual. The second was whether there are sex differences in this domain, in either a long-term or a short-term relationship context. And the third was whether the impact of a prospective mate's sexual history is moderated

by the evaluator's sociosexual orientation (i.e., the extent to which the evaluator is willing to engage in sex outside the confines of a committed romantic relationship).

### **Number of Past Sexual Partners**

Arguably, one of the most important variables determining whether people respond positively or negatively to a prospective mate's sexual history is the number of sexual partners the prospective mate has had. In prior research, the expectation has generally been that "less is more"—in other words, that a higher number of past partners tends to harm an individual's attractiveness. Some findings are consistent with this expectation. O'Sullivan (1995), for instance, found that hypothetical individuals with higher numbers of past partners were generally viewed as less desirable, both as dating partners and as spouses. A limitation of the research in this area, however, is that it tends to look at a relatively small range of possible past partner numbers. So, for example, O'Sullivan looked only at 2 versus 13 past partners for men and 1 versus 7 past partners for women; she did not inquire about prospective mates who had no sexual experience at all or about those who had much higher numbers of past partners. It is important to consider these possibilities, however, because there are good reasons to

---

Correspondence should be addressed to Steve Stewart-Williams, School of Psychology, University of Nottingham Malaysia Campus, Jalan Broga, 43500 Semenyih, Selangor Darul Ehsan, Malaysia. E-mail: [steve.stewart-williams@nottingham.edu.my](mailto:steve.stewart-williams@nottingham.edu.my)

think that the relationship between past partner number and attractiveness is more complex than the simple less-is-more hypothesis would suggest.

On the one hand, some sexual history may be better than none, at least in cultures where premarital sex is deemed acceptable. In such cultures, an adult who has never had a sexual partner might be seen as lacking certain social or relationship skills (Gesselman, Webster, & Garcia, 2016). The phenomenon of *mate-choice copying* may also be relevant. Mate-choice copying occurs when one individual (A) finds another individual (B) more attractive simply because other individuals find B attractive as well. Mate-choice copying has mainly been documented in females, both in humans and in other animals (Dugatkin & Godin, 1992; Jones, DeBruine, Little, Burriss, & Feinberg, 2007). There is, however, evidence that it occurs in human males as well (Little, Burriss, Jones, DeBruine, & Caldwell, 2008; Place, Todd, Penke, & Asendorpf, 2010). These considerations lead us to predict that, at least in relatively liberal cultures, someone who has had more sexual partners will generally be considered more attractive than some one who has had fewer.

On the other hand, beyond a certain point, higher numbers of past partners may start harming a person's desirability, even in the most liberal of cultures. There are several reasons for this. First, the more sexual partners a person has had, the more likely that person is to have contracted a sexually transmitted disease (Epstein et al., 2007). In addition, a prospective mate with an overly extensive sexual history is statistically a poor bet as a faithful, committed long-term mate (Thompson, 1983; Weiss & Slosnerick, 1981). Such a track record suggests a short-term or promiscuous mating orientation, and there is reason to suspect that our species may have evolved a dispreference for long-term mates with such an orientation. A strong case has been made that humans evolved to form pair bonds: deep emotional ties that last for months, years, or occasionally even for life (Geary & Flinn, 2001; Gettler, McDade, Feranil, & Kuzawa, 2011; Gray & Anderson, 2010; Stewart-Williams & Thomas, 2013). The fact that we evolved this tendency suggests that pair bonding was adaptive for our ancestors through our evolutionary history, presumably because it provided a context for the rearing of shared offspring. Because successful pair bonding was adaptive, people may possess an evolved aversion to traits signaling poor pair bonding prospects, including a short-term mating orientation. Taking into account these countervailing forces, our expectation is that, as a prospective mate's number of past sexual partners increases, their attractiveness will initially increase with it but that after a certain point, there will be a precipitous drop in attractiveness ratings.

### Sex Differences and Relationship Duration

The above considerations apply to both sexes. There is reason to suspect, however, that in certain circumstances, men and women will differ in how they react to a prospective mate's past history. The traditional expectation here is encapsulated in

the notion of the *sexual double standard*. This refers to the widely held belief that people deem male promiscuity and sexual experimentation acceptable but female promiscuity and sexual experimentation unacceptable (see, e.g., Jones, 2015; O'Sullivan, 1995). If true, this would imply that a high number of past sexual partners would have a more negative impact on women's desirability as a long-term mate than on men's.

Contrary to popular belief, the evidence for the sexual double standard is equivocal in the modern western world. The early evolutionarily informed research on this topic started from the assumption that the double standard was real but that it was more than a mere cultural invention. Instead, the double standard emerged from the fact that our male ancestors faced the adaptive challenge of paternity uncertainty, whereas our female ancestors did not. Based on this assumption, Buss (1989) predicted that men in all cultures would tend to value chastity (i.e., virginity) in a marital partner more than would women. However, in a large cross-cultural survey of human mate preferences, Buss found only partial support for this hypothesis. Averaging across the 37 samples in the study, chastity was rated relatively unimportant both by women and by men. There *was* an overall sex difference in the predicted direction, but it was small. Breaking down the data by sample, the expected sex difference appeared in only 23 of the 37 samples (62%). In the remainder, there was no difference either way. In western nations especially, there was little evidence for the strong sexual double standard embodied in the expectation that women but not men must be virgins on their wedding night.

Other research has addressed the issue of whether there is a weaker form of the sexual double standard in the west, such that some past sexual activity is acceptable for both sexes but promiscuity acceptable for men only. Again, the evidence is mixed, with some studies finding evidence for this asymmetry but others finding none. O'Sullivan (1995), for instance, predicted that women with high numbers of casual sexual partners would be evaluated more negatively than men but did not find any such difference. Similarly, Allison and Risman (2013) found that around 48% of college students lost respect for both sexes equally if they hooked up "a lot," 27% lost respect for neither sex, 12% held a traditional double standard, and 13% held a reverse double standard (i.e., lost more respect for men than for women; see also Kreager & Staff, 2009; Mark & Miller, 1986; Marks & Fraley, 2005).

The mixed evidence suggests that we may need to rethink the issue of how past sexual activity affects women versus men's attractiveness. One variable that might be useful in this respect is the temporal context of the relationship—that is, whether it is a long-term relationship (e.g., a committed pair bond or marriage) or a short-term relationship (e.g., a one-night stand or brief affair). Although the long-term/short-term distinction has been the subject of extensive research, it has not yet been applied specifically to the question of people's responses to a prospective mate's sexual history. Our expectation is that, when it comes to long-term relationships, the sexes will differ

little in their responses but that when it comes to short-term relationships, they will differ much more.

This expectation derives from well-established evolutionary principles. A general rule in the animal kingdom is that, in species in which one sex invests a great deal in offspring but the other invests very little, the sexes tend to be sexually dimorphic, whereas in species in which males and females form pair bonds and both sexes provide parental care for their young, they tend to be more monomorphic (Trivers, 1972). Which category do humans fall into? According to many evolutionary psychologists, we fall into both (Buss & Schmitt, 1993; Gangestad & Simpson, 2000). Although our most common mating arrangement is social monogamy, humans are naturally capable of engaging in either long- or short-term relationships, depending on our social circumstances. In the evolutionary past of our species, long-term mating was generally associated with biparental care. Although women usually invested more than men into offspring, men typically invested a great deal, especially during pregnancy and early infancy (Marlowe, 2003) and in terms of resource procurement rather than hands-on childcare (Hames, 1988). As such, in a long-term mating context, we might expect men and women to be relatively monomorphic in their behavior (Stewart-Williams & Thomas, 2013).

When it comes to short-term mating, on the other hand, the situation is very different. In our evolutionary past, short-term mating typically involved considerably less investment for men than women. Women's minimum obligatory investment was a 9-month pregnancy plus several years of breastfeeding; men's was the time and effort it took to court and impregnate the woman. Therefore, in a short-term context, we might expect the sexes to be more psychologically dimorphic.

In various domains, this is indeed what is found. So, for example, although men and women are, on average, about equally interested in long-term relationships and about equally choosy about long-term mates (Buss & Schmitt, 1993; Kenrick, Sadalla, Groth, & Trost, 1990), men are typically more willing than women to engage in short-term sexual liaisons and are typically less choosy about partners for low-commitment sex (Buss & Schmitt, 1993; Clark & Hatfield, 1989; Schmitt, 2005). Applied to the issue of a prospective mate's sexual history, the expectation would be that, for long-term relationships, men and women would be about equally willing to get involved with a given individual with a given sexual history but that for short-term relationships, men would be more willing than women.

### The Role of Sociosexuality

In discussing sex differences in sexual behavior, it is easy to overlook the substantial variation found within each sex. One of the dimensions on which individuals vary is directly relevant to the present study: the extent to which they have a long-term versus a short-term mating orientation. If we are correct in thinking that a distaste for mates with a high number of past sexual partners is ultimately grounded in their unsuitability as long-term mates, it might be expected that, regardless of sex,

people with a short-term mating orientation would be relatively less concerned about how many sexual partners a prospective mate has had. This is because, for people who are unlikely to invest heavily in a relationship anyway, the potential costs associated with involvement with a poor long-term prospect are low.

One way to conceptualize people's long-term versus short-term inclinations is in terms of *sociosexual orientation* (SO; Gangestad & Simpson, 1990). SO indexes people's willingness to engage in sexual activity in the absence of a committed long-term relationship: People with low or "restricted" SO are less willing to engage in such activity; people with high or "unrestricted" SO are more willing. SO provides a convenient means to test the idea that people's concern about a potential mate's sexual history relates to long-term pair-bonding prospects. If this idea is accurate, it follows that people with high SO will tolerate higher numbers of past sexual partners than those with low SO. In addition, the former's willingness to get involved with a given individual may decline less rapidly as that individual's number of past partners increases.

### Hypotheses

Based on the above considerations, we sought to test three main hypotheses.

1. In assessing a hypothetical individual as a prospective mate, people's willingness to get involved with that individual will follow a curvilinear pattern: As the prospective mate's number of past sexual partners increases, people's willingness to get involved will increase with it for a while, but then, after a certain point, will fall.
2. In assessing a hypothetical individual as a long-term mate, men and women will be similarly willing to get involved. In contrast, in assessing a hypothetical individual as a *short-term* mate, men will be more willing than women.
3. Compared to people who favor high-commitment relationships, those who favor low-commitment relationships will be more willing to get involved with prospective mates with higher numbers of past sexual partners.

### Method

#### Participants

Participants were recruited from the subject pool at Swansea University in Wales and via the social network website Facebook, using a targeted ad shown exclusively to UK users aged 18 to 30. The ad explained that participants were sought for a brief study on mate preferences, and cautioned that the study included questions of a sexual nature. The final sample consisted of 188 heterosexual individuals: 84 men and

104 women. The age range of the sample was 18 to 35 years ( $M = 21.16$ ;  $SD = 2.49$ ). (Participants older than 30 presumably came from the university subject pool rather than the age-targeted Facebook ad.) The mean age of the men ( $22.07$ ,  $SD = 2.73$ ) was significantly higher than that of the women ( $20.42$ ,  $SD = 2$ ),  $t_{186} = 4.77$ ,  $p < .01$ ; two-tailed. Participants' SO was measured with the Sociosexuality Orientation Inventory–Revised (SOI-R; Penke & Asendorpf, 2008; described below). The mean SO score for the sample was  $36.15$  ( $SD = 13.74$ ), with men scoring significantly higher ( $M = 43.2$ ,  $SD = 12.75$ ) than women ( $M = 30.5$ ,  $SD = 11.8$ ),  $t_{180} = 6.96$ ,  $p < .01$ ; two-tailed. A small majority of participants (61%) reported that they were currently in a relationship. The average level of religiosity of the sample was low: On a 1-to-5 scale where 1 represented “very religious,” 3 represented “neither religious nor non-religious,” and 5 represented “very non-religious,” 80.9% of participants chose 3, 4, or 5, and the mean religiosity score was  $3.74$  ( $SD = 1.17$ ). The vast majority of participants identified as Caucasian (95.7%); the remainder identified as South Asian, East Asian, or “other” (<2% in each category).

## Materials and Procedure

The materials and procedures for the study were approved in full by the Swansea University Psychology Department Ethics Committee. Participants accessed an online survey via an Internet link. The link took them to an information page that briefed them about the study. The consent procedure involved clicking a second link that led to the questionnaires; by clicking this link, participants confirmed that they were 18 years of age or older. After completing some basic demographic and biographical items (including an item asking how many sexual partners they themselves had had), participants were presented with two main questionnaires.

**Willingness to get involved.** The willingness-to-get-involved questionnaire consisted of two items. In the first, participants were asked to indicate their willingness to engage in a long-term relationship with a hypothetical individual; in the second, they were asked to indicate their willingness to engage in a short-term relationship. Examples were given of both relationship types; following Buss and Schmitt (1993), the long-term examples were “long-term relationship or marriage” and the short-term examples were “one-night stand or brief fling.” The first item began with the question: “How willing would you be to get involved in a long-term, committed relationship with someone who had \_\_\_ sexual partners in the past?” Participants responded to this question for each of 16 cases: 0, 1, 2, 3, 4, 5 or 6, 7 or 8, 9–11, 12–14, 15–18, 19–22, 23–30, 31–40, 41–50, 51–60, and 60+ partners. Responses to each of the items were registered on a 9-point Likert-type scale, ranging from 1 (“very unwilling”) to 9 (“very willing”). The second item started with the question: “How willing would you be to get involved in a short-term, uncommitted relationship with someone who had

had \_\_\_ sexual partners in the past?” Participants responded to each of the same 16 options.

**Sociosexuality inventory.** Next, all participants completed the SOI-R (Penke & Asendorpf, 2008). The SOI-R is a widely used, well-validated 9-item measure that locates respondents on a continuum spanning from restricted to unrestricted SO. Those at the restricted end of the spectrum prefer to have sex only within the context of an emotionally close relationship, whereas those at the unrestricted end do not feel the need to be emotionally close to someone in order to engage in sexual intercourse with them (Gangestad & Simpson, 1990; Simpson & Gangestad, 1991).

All responses were strictly anonymous: They were saved to a secure file without any identifying information. Having completed the questionnaires, participants received an on-screen debrief. Participants were not compensated for their involvement in the study.

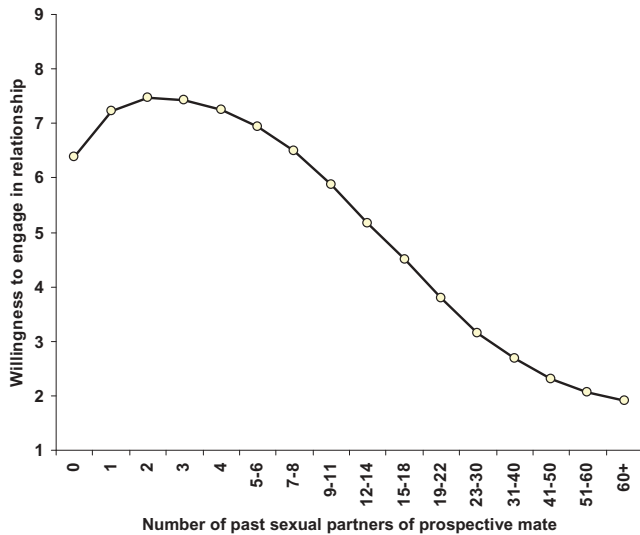
## Results

An estimation maximization (EM) missing values analysis was used to impute the values of missing items (between 1% and 3% of the expected responses were missing across the different items). It was judged that the results would be more accurate if a small number of responses was imputed than if a larger number of responses was excluded from the analysis, as would occur if listwise or pairwise deletion methods were used. The EM method was used in preference to mean substitution, as the latter truncates the standard deviation of the data (Little & Rubin, 1987). As noted, the male participants were significantly older than the female; consequently, age was included as a covariate for all tests.

The three hypotheses were assessed using the items probing participants' willingness to get involved with a hypothetical individual, depending on how many sexual partners that individual had previously had. Data for these items were analyzed using a multivariate analysis of covariance with two within-group factors (number of past sexual partners and relationship type [long-term versus short-term]) and one between-group factor (sex of participant). This revealed a significant and sizeable interaction between the three variables (Wilks' Lambda = .85,  $F_{15, 171} = 1.99$ ,  $p = .019$ ,  $\eta^2_p = .15$ ). In the following, we focus on the parts of this interaction bearing on our three hypotheses.

### Hypothesis 1

The first hypothesis was that, in evaluating a hypothetical individual as a prospective mate, participants' willingness ratings would initially increase as the target individual's number of past sexual partners increased but that after a certain point, participants would be progressively less willing to get involved. The relevant data are presented in Figure 1. To test for curvilinearity, we tried fitting a number of growth curves to the data. The linear, quadratic, and cubic polynomials were all statistically



**Figure 1.** Willingness to engage in a relationship as a function of a prospective mate's number of past sexual partners.

significant ( $ps < .001$ ), but the best fit was the cubic ( $F_{1, 2877.36} = 296.88, p < .001$ ). This tells us that there were two main changes in the trajectory of the data. First, following an initial upswing, the scores reversed direction and began trending downward, as predicted. Second, toward the end of the series, the scores began to level out. The latter trend was not specifically predicted but presumably reflects a floor effect. The size of the effect of past partner number was large ( $\eta^2_p = .27$ , where .01 is conventionally classed as small, .09 as medium, and .25 as large). Post hoc tests (with Bonferroni adjustment for multiple comparisons) revealed that the difference between each past partner number category and its immediate neighbor was significant (all  $ps < .05$ ), except in the case of 2 versus 3 past partners ( $p > .05$ ). The overall pattern was consistent with hypothesis 1.

It might be argued that participants' optimal number of past sexual partners (i.e., two or three) was rather low. This may have been due to the fact that the average age of the sample was only 21. Most people of this age have been sexually active for only a few years, and thus a same-age potential mate who had, say, 8 or 16 previous partners might be viewed as promiscuous, even though an older individual with the same number of previous partners might not be. To test this speculation, we performed a median split on the age data. Participants aged 21 or younger were allocated to the younger group ( $M = 19.85, SD = 1.07$ ), those aged 22 or above to the older ( $M = 23.52, SD = 2.56$ ). We then ran a repeated-measures analysis of variance with age as a new independent variable. The analysis revealed a significant interaction between age and number of past partners ( $F_{15, 2760} = 4.64, p < .001, \eta^2_p = .03$ ). In essence, the curvilinear pattern was shifted to the right for the older participants. This is consistent with the idea that older participants tolerated higher numbers of past partners and that the optimal number of past partners for the sample as a whole was rather low because the average age of the sample was rather low. Note, though, that although the optimal number of

past partners for the sample was two or three, the mean number of *actual* past partners for both sexes was higher than this. For women, it was 5.81 ( $SD = 6.66$ ) and for men, it was 8.4 ( $SD = 9.56$ ). Thus, the average person in our sample had already had more past sexual partners than members of the other sex considered ideal.

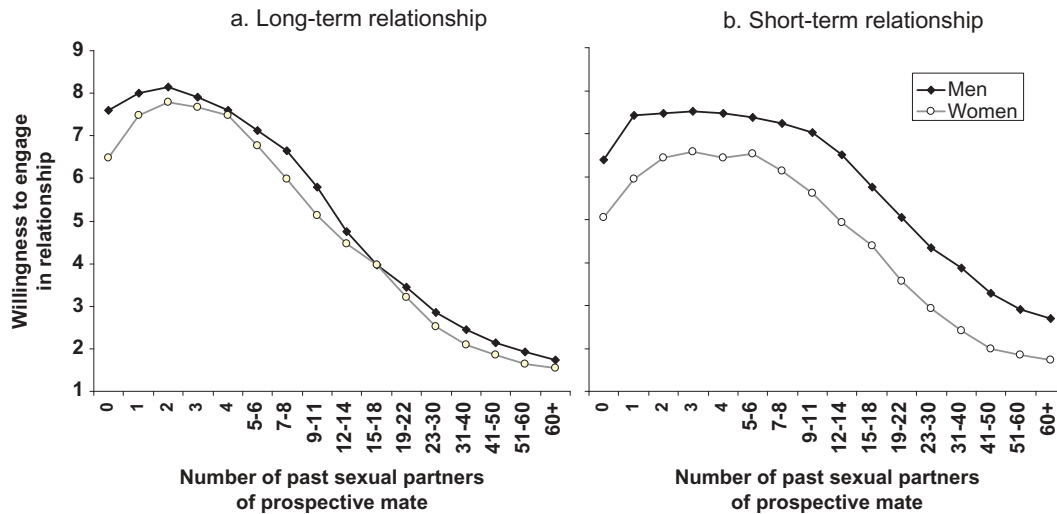
## Hypothesis 2

The second hypothesis concerned similarities and differences between the sexes in a long-term versus short-term mating context. The hypothesis was that, in a long-term context, men and women's patterns of responses would be comparable but that in a short-term context, men would be more willing than women to get involved. This hypothesis was, for the most part, confirmed. For long-term relationships, the pattern for men and women was very similar (see Figure 2a). Both sexes were most willing to get involved with someone who had two past sexual partners and were less willing to get involved with someone who had either fewer or more past partners. Controlling for age, post hoc tests (with Bonferroni adjustment for multiple comparisons) showed that the only significant sex differences in participants' willingness ratings were for the first three categories: zero, one, or two past partners (all  $ps < .05$ ). In each case, the average willingness score was slightly higher for men than for women—that is, men were more willing to get involved with a virgin or with someone with a low number of past sexual partners. For all other categories, the sexes were statistically indistinguishable (all  $ps > .05$ ). Thus, as the number of past sexual partners increased beyond two, men and women became progressively less willing to get involved in a long-term relationship and were equally unwilling at each step.

Whereas for long-term relationships the sexes responded almost identically, for short-term relationships, there was a clear pattern of differences (see Figure 2b). As predicted, men were more willing than women to engage in short-term relationships. Post hoc tests (again with Bonferroni adjustment) revealed that the sex difference was significant for every category (all  $ps < .05$ ), except 5-6 past partners ( $p = .055$ ). The short-term responses differed from the long-term ones in two other ways as well. First, whereas in the long-term context, the highest willingness ratings for both men and women were for two past partners, in the short-term context, it was three. Second, whereas in the long-term context, willingness ratings peaked early and then fell consistently, in the short-term context, willingness ratings hit a plateau for a while before a relatively steep decline. For women, the decline started after 5-6 past partners; for men, it started after 9-11 past partners. Thus, men tolerated a higher number of past sexual partners in a short-term mate than did women.

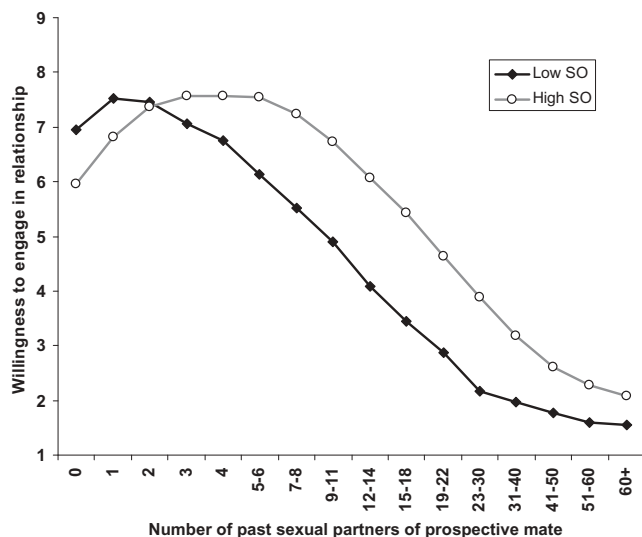
## Hypothesis 3

The third and final hypothesis was that people with an unrestricted SO would be more willing to get involved with a given individual than would those with a restricted SO,



**Figure 2.** Male versus female participants' willingness to engage in (a) a long-term relationship or (b) a short-term relationship as a function of a prospective mate's number of past sexual partners.

regardless of how many sexual partners that individual had had. To test this hypothesis, we performed a median split on participants' SOI-R scores. Participants who scored 35 or less were allocated to the low-SO group ( $M = 24.46$ ,  $SD = 6.82$ ), whereas those who scored 36 or higher were allocated to the high-SO group ( $M = 46.86$ ,  $SD = 8.86$ ). Controlling for age, there was a significant interaction between sociosexuality and number of past sexual partners (Wilks' Lambda = .75,  $F_{15, 163} = 3.59$ ,  $p < .001$ ,  $\eta^2_p = .25$ ). The results are shown in Figure 3. Post hoc tests (with Bonferroni adjustment for multiple comparisons) revealed that the high-SO participants were significantly more willing to get involved than the low SO participants (as predicted),



**Figure 3.** High-SO versus low-SO participants' willingness to engage in a relationship as a function of a prospective mate's number of past sexual partners.

but only for three or more past partners (all  $ps < .05$ ). Unexpectedly, for two past partners, there was no difference between the high-SO and low-SO participants ( $p > .05$ ), and for one or zero past partners, people high in SO were significantly *less* willing to get involved ( $ps < .05$ ).

## Discussion

The focus of the present study was how a prospective mate's sexual history affects people's willingness to get involved with that individual. The study yielded three main findings: (1) A prospective mate's number of past sexual partners had a large effect on participants' willingness to engage in a relationship with them. After an initial upswing in willingness ratings, participants grew progressively less willing to get involved as the number of past partners increased. (2) Men and women did not differ in their willingness to get involved in a long-term relationship with a target individual with more than two past sexual partners. In contrast, men were more willing (or less unwilling) than women to get involved in a short-term relationship, regardless of how many sexual partners the target had had. These differences between the long- and short-term contexts have not previously been documented with respect to people's responses to a prospective mate's sexual history. (3) Participants with high SO were more tolerant of prospective mates with a high number of past sexual partners. Interestingly, participants with high SO were *less* tolerant of prospective mates with a very *low* number of past partners.

## Two Amendments to Folk Psychology

These results suggest two amendments to folk psychology. The first relates to the nugget of folk psychology embodied in humorist Evan Esar's observation that "The girl with a future



avoids a man with a past.” Our research suggests that, at least in a modern western society, it depends how much of a past the man has. A little is better than none, but a lot is much worse. Furthermore, this is true of both sexes. For the average woman and the average man in our sample, the ideal mate was *not* someone without any sexual history. Our participants were reasonably willing to get involved with such a person; however, they were *more* willing to get involved with someone who had some history. This was especially so for women in the long-term context: When evaluating prospective mates with zero, one, or two past partners, women were less willing to get involved than men. There are several possible explanations for this result. One is that it stems from sex differences in the importance of mate-choice copying: Women may be more averse than men to a prospective long-term mate who garners little sexual interest from the other sex. A second possibility is that it stems from sex differences in parental certainty: Men may be more attracted than women to a prospective long-term mate with only limited sexual experience, because historically this was correlated with lower cuckoldry risk. Note, though, that the difference was not especially large and that it remains to be seen whether the pattern will replicate.

The second amendment to folk psychology concerns the sexual double standard. Contrary to the common notion that male promiscuity is tolerated whereas female promiscuity is not, both sexes expressed an unwillingness to get involved with someone with a high number of past sexual partners. For long-term relationships, there was virtually no difference between the sexes in this respect. For short-term relationships, in contrast, men were more tolerant of female promiscuity than women were of male promiscuity (thus, in a certain sense, the traditional double standard was reversed in the short-term context). This is not the first study to question the existence of the double standard (see Allison & Risman, 2013; Kreager & Staff, 2009; Mark & Miller, 1986; O’Sullivan, 1995). It seems that, although the *belief* that there is a sexual double standard is widespread, the sexual double standard itself is not nearly as widespread as it might once have been—at least not in the kind of liberal western culture in which the present study was conducted (cf. Stewart-Williams, 2002).

### Sex in Perspective

Although we found a number of sex differences, and although they were in the direction predicted by sociobiological theory, it is important to emphasize that this is not the main story of the research. The main story is the very large effect that people’s sexual history had on their mate value. The effect size for number of past sexual partners ( $\eta^2_p = .27$ ) was notably larger than that of participant sex ( $\eta^2_p = .09$  in the short-term context; no overall effect in the long-term context). The average willingness ratings for the different past partner number categories ranged from the top of the scale to the bottom, suggesting that an individual’s number of past partners has an extremely important effect on people’s willingness to get involved with them. This

effect dwarfed any differences due to sex. A large number of past partners was highly undesirable for *both* sexes: It was highly undesirable in a long-term relationship not only for men but for women; it was highly undesirable in a short-term relationship not only for women but for men.

That said, the patterning of sex similarities and sex differences was consistent with evolutionary principles suggesting that human beings exhibit greater psychological dimorphism in a short-term than a long-term mating context. Again, though, perhaps the most noteworthy aspect of this finding is not the sex difference itself but the fact that the difference was so small. Buss and Schmitt (1993) found evidence that men value signs of sexual accessibility in a short-term mate, including indicators of promiscuity. The present study did not uphold this finding. Although men in our study were *more* willing to engage in a short-term relationship with someone with a high number of past sexual partners, they were not especially willing to do so and they became progressively less willing as the target’s number of past partners increased. One possibility is that the discrepancy between the two studies reflects a cohort effect; perhaps social mores have shifted since the Buss and Schmitt paper was published in the early 1990s. On the other hand, western societies have generally become more tolerant of nonmarital sex, not less (Twenge, Sherman, & Wells, 2015). Our suspicion, therefore, is that the discrepancy stems from the fact that Buss and Schmitt did not look at differing *degrees* of promiscuity. Although they may well have been right that many men value *some* degree of promiscuity in a short-term mate, our study suggests that few men value *very high* levels of promiscuity and in fact that they find it rather aversive (as do women). This is an issue that might profitably be explored in future research.

### Cultural Universals and Differences

Like most studies in psychological science, the sample used in the present study was WEIRD—that is, it was drawn from a Western, Educated, Individualistic, Rich, and Democratic nation (Henrich, Heine, & Norenzayan, 2010). It was also predominately White. Nonetheless, it seems probable to us that at least two of the study’s main findings will be robust across cultures: (1) the largely negative association between willingness to get involved and number of past sexual partners and (2) the fact that men were more willing than women to engage in a short-term relationship, regardless of number of past partners. Both of these findings were predicted from evolutionary principles and, thus, if the reasoning behind them is correct, we would expect the findings to transcend cultural boundaries.

Our expectation regarding the initial upswing in willingness ratings is more circumspect: We anticipate that it will only be found consistently in cultures in which people are relatively free to act on their inclinations and desires. In cultures that have strong sanctions against sex before marriage (e.g., in religiously strict cultures or cultures with arranged marriages), the tendency may be nullified. Men

in particular may express a strong willingness to engage in a long-term relationship with a virgin coupled with a strong *unwillingness* to get involved with a woman with any past sexual history whatsoever. It would be interesting to know how men in such cultures would respond in a short-term context and how women would respond in both a long- and a short-term context. These are further issues for future research.

### Limitations

The present study had a number of limitations. The main one, arguably, was that the sample was relatively small and somewhat heterogeneous, consisting as it did of a mixture of university students and participants recruited via Facebook. As mentioned, it was also largely WEIRD and White (see Henrich, Heine, & Norenzayan, 2010). For these reasons, the replicability and generalizability of the results is currently uncertain and the study's findings must be considered preliminary at this stage.

There were also several limitations associated with the willingness-to-get-involved questionnaire. The first is that participants were asked to evaluate prospective mates based solely on one piece of information: their number of past sexual partners. In real life, people evaluate potential mates on many dimensions at once and often know a fair amount about them before they discover how many past sexual partners they have. It would be good to corroborate the study's finding using a more ecologically valid methodology.

A second potential limitation associated with the willingness-to-get-involved questionnaire is that it required participants to answer essentially the same question ("How willing would you be to get involved ...") for each of 32 cases: 16 for a long-term relationship and 16 for a short-term relationship. It is possible that the repetitiveness of this task led some participants to lose interest and focus. We suspect, however, that this was not the case. First, in piloting the questionnaire, no one mentioned that it was especially tedious or time-consuming. Second, visual inspection of the data suggests that few if any participants began giving the same response repeatedly or responding randomly. Finally, the fact that the data yielded such a coherent set of findings suggests that the vast majority of participants responded in a meaningful way.

### Conclusion

Our results extend previous research on the effects of a prospective mate's sexual history on their attractiveness. The findings that stand out most include (1) the curvilinear relationship between a prospective mate's number of past sexual partners and people's willingness to get involved in a relationship with that individual; (2) the large magnitude of the effect of past partner number; (3) the relatively *small* magnitude of the sex differences in the effect of past partner number, even in the context of short-term liaisons;

and (4) the difference in the response patterns of high-SO versus low-SO individuals.

### Acknowledgments

Special thanks go to Dr. Rob Lowe, Victoria Boudier, and Jackie Scholz for miscellaneous help. Thanks also to Kali Barawi, Sian Gibbon, Alex Pirie, Pamela Smith, Jane Stewart-Williams, Jodie Thomas, and Charlotte Whittle.

### References

- Allison, R., & Risman, B. J. (2013). A double standard for "hooking up": How far have we come toward gender equality? *Social Science Research, 42*, 1191–1206. doi:10.1016/j.ssresearch.2013.04.006
- Buss, D. M. (1989). Sex differences in human mate preferences: Evolutionary hypotheses tested in 37 cultures. *Behavioral and Brain Sciences, 12*, 1–49. doi:10.1017/s0140525x00023992
- Buss, D. M., & Schmitt, D. P. (1993). Sexual strategies theory: An evolutionary perspective on human mating. *Psychological Review, 100*, 204–232. doi:10.1037/0033-295x.100.2.204
- Clark, R. D., & Hatfield, E. (1989). Gender differences in receptivity to sexual offers. *Journal of Psychology and Human Sexuality, 2*, 39–55. doi:10.1300/J056v02n01\_04
- Dugatkin, L. A., & Godin, J.-G. J. (1992). Reversal of female mate choice by copying in the guppy (*Poecilia reticulata*). *Proceedings of the Royal Society of London B, 249*, 179–184. doi:10.1098/rspb.1992.0101
- Epstein, J., Klinckenberg, W. D., Scandell, D. J., Faulkner, K., & Claus, R. E. (2007). Perceived physical attractiveness, sexual history, and sexual intentions: An Internet study. *Sex Roles, 56*, 23–31. doi:10.1007/s11199-006-9169-x
- Gangestad, S. W., & Simpson, J. A. (1990). Toward an evolutionary history of female sociosexual variation. *Journal of Personality, 58*, 69–95. doi:10.1111/j.1467-6494.1990.tb00908.x
- Gangestad, S. W., & Simpson, J. A. (2000). The evolution of human mating: Trade-offs and strategic pluralism. *Behavioral and Brain Sciences, 23*, 573–587. doi:10.1017/S0140525X0000337X
- Geary, D. C., & Flinn, M. V. (2001). Evolution of human parental behavior and the human family. *Parenting: Science and Practice, 1*, 5–61. doi:10.1080/15295192.2001.9681209
- Gesselman, A. N., Webster, G. D., & Garcia, J. R. (2016). Has virginity lost its virtue? Relationship stigma associated with being a sexually inexperienced adult. *Journal of Sex Research, 53*, 1–12. doi:10.1080/00224499.2016.1144042
- Gottler, L. T., McDade, T. W., Feranil, A. B., & Kuzawa, C. W. (2011). Longitudinal evidence that fatherhood decreases testosterone in human males. *Proceedings of the National Academy of Sciences, 108*, 16194–16199. doi:10.1073/pnas.1105403108
- Gray, P. B., & Anderson, K. G. (2010). *Fatherhood: Evolution and human paternal behavior*. Cambridge, MA: Harvard University Press.
- Hames, R. B. (1988). The allocation of parental care among the Ye-Kwana. In L. Betzig, M. Borgerhoff Mulder, & P. Turke (Eds.), *Human reproductive behavior* (pp. 237–252). Cambridge, UK: Cambridge University Press.
- Henrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world? *Behavioral and Brain Sciences, 33*, 61–83. doi:10.1017/S0140525X0999152X
- Jones, B. C., DeBruine, L. M., Little, A. C., Burriss, R. P., & Feinberg, D. R. (2007). Social transmission of face preferences among humans. *Proceedings of the Royal Society of London B, 274*, 899–903. doi:10.1098/rspb.2006.0205
- Jones, D. N. (2015). The 'chasing Amy' bias in past sexual experiences: Men can change, women cannot. *Sexuality and Culture, 20*, 24–37. doi:10.1007/s12119-015-9307-0

- Kenrick, D. T., Sadalla, E. K., Groth, G., & Trost, M. R. (1990). Evolution, traits, and the stages of human courtship: Qualifying the parental investment model. *Journal of Personality*, *58*, 97–116. doi:10.1111/j.1467-6494.1990.tb00909.x
- Kreager, D. A., & Staff, J. (2009). The sexual double standard and adolescent peer acceptance. *Social Psychology Quarterly*, *72*, 143–164. doi:10.1177/019027250907200205
- Little, A. C., Burriss, R. P., Jones, B. C., DeBruine, L. M., & Caldwell, C. A. (2008). Social influence in human face preference: Men and women are influenced more for long-term than short-term attractiveness decisions. *Evolution and Human Behavior*, *29*, 140–146. doi:10.1016/j.evolhumbehav.2007.11.007
- Little, R. J. A., & Rubin, D. A. (1987). *Statistical analysis with missing data*. New York, NY: John Wiley & Sons.
- Mark, M. M., & Miller, M. L. (1986). The effects of sexual permissiveness, target gender, subject gender, and attitude toward women on social perspective: In search of the double standard. *Sex Roles*, *15*, 311–322. doi:10.1007/bf00288320
- Marks, M. J., & Fraley, R. C. (2005). The sexual double standard: Fact or fiction? *Sex Roles*, *52*, 175–186. doi:10.1007/s11199-005-1293-5
- Marlowe, F. W. (2003). A critical period for provisioning by Hadza men: Implications for pair bonding. *Evolution and Human Behavior*, *24*, 217–229. doi:10.1016/S1090-5138(03)00014-X
- O'Sullivan, L. F. (1995). Less is more: The effects of sexual experience on judgments of men's and women's personality characteristics and relationship desirability. *Sex Roles*, *33*, 159–181. doi:10.1007/bf01544609
- Penke, L., & Asendorpf, J. B. (2008). Beyond global sociosexual orientations: A more differentiated look at sociosexuality and its effects on courtship and romantic relationships. *Journal of Personality and Social Psychology*, *95*, 1113–1135. doi:10.1037/0022-3514.95.5.1113
- Place, S. S., Todd, P. M., Penke, L., & Asendorpf, J. B. (2010). Humans show mate copying after observing real mate choices. *Evolution and Human Behavior*, *31*, 320–325. doi:10.1016/j.evolhumbehav.2010.02.001
- Schmitt, D. P. (2005). Sociosexuality from Argentina to Zimbabwe: A 48-nation study of sex, culture, and strategies of human mating. *Behavioral and Brain Sciences*, *28*, 247–275. doi:10.1017/S0140525X05000051
- Simpson, J. A., & Gangestad, S. W. (1991). Individual differences in sociosexuality: Evidence for convergent and discriminant validity. *Journal of Personality and Social Psychology*, *60*, 870–883. doi:10.1037/0022-3514.60.6.870
- Stewart-Williams, S. (2002). Gender, the perception of aggression, and the overestimation of gender bias. *Sex Roles*, *46*, 177–189. doi:10.1023/a:1019665803317
- Stewart-Williams, S., & Thomas, A. G. (2013). The ape that thought it was a peacock: Does evolutionary psychology exaggerate human sex differences? *Psychological Inquiry*, *24*, 137–168. doi:10.1080/1047840X.2013.804899
- Thompson, A. P. (1983). Extramarital sex: A review of the research literature. *Journal of Sex Research*, *19*, 1–22. doi:10.1080/00224498309551166
- Trivers, R. L. (1972). Parental investment and sexual selection. In B. Campbell (Ed.), *Sexual selection and the descent of man: 1871-1971* (pp. 136–179). Chicago, IL: Aldine Press.
- Twenge, J. M., Sherman, R. A., & Wells, B. E. (2015). Changes in American adults' sexual behavior and attitudes, 1972–2012. *Archives of Sexual Behavior*, *44*, 2273–2285. doi:10.1007/s10508-015-0540-2
- Weiss, D. L., & Slosnerick, M. (1981). Attitudes toward sexual and non-sexual extramarital involvements among a sample of college students. *Journal of Marriage and the Family*, *43*, 349–358. doi:10.2307/351386