Evolutionary Psychological Science
https://doi.org/10.1007/s40806-018-0143-y

THEORETICAL ARTICLE

Mate Copying and the Effects of Sexual History on Romantic Desirability

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Abstract
Mate copying typically refers to the idea that the likelihood of an individual being chosen as a romantic partner varies as a function of how they are assessed by (generally opposite sex) others. The phenomenon has been well documented among nonhumans, but mate copying among humans has only really begun to receive attention from an academic audience in the last decade. Although our understanding of mate copying can be broadly encapsulated by the statement "sexual experience is desirable," the long-standing and deeply ingrained social prescriptions against promiscuity present a challenge to this dictum. This paper attempts to address this inconsistency by reviewing literature supportive of and inconsistent with the above statement. It is concluded that the two ideas, although seemingly opposing, are not mutually exclusive.

Keywords Mate copying · Sexual history · Promiscuity · Desirability · Mate quality

When analyzing the decision making of animals, behavioral ecologists have traditionally assumed that individuals assess utility and take action independently of one another (Gibson and Hoglund 1992). Evidence gathered in the last 25 years has challenged this assumption. It is now widely accepted that nonindependent mate choice, often referred to as mate copying/mate-choice copying, is prevalent among a range of zoological taxa (for reviews, see Brown and Fawcett 2005; Galef and Laland 2005; Vakirtzis 2011). Building upon results indicating the existence of mate copying among nonhumans, there is a growing body of literature which suggests that the phenomenon also occurs readily among humans.

Typical mate copying paradigms involving nonhuman subjects generally show that when given a choice between a mated and a nonmated male, female mate choosers gravitate toward the mated male (Dugatkin 1992). Research examining the phenomenon among humans typically indicates that women have a similar preference for *romantically* experienced men. While both human and nonhuman mate copying ultimately involves copying the mate choice preferences of another individual, there is a considerable difference in how the relevant information is conveyed. Whereas among nonhumans, paradigms often involve preference information being presented *explicitly* by presenting conspecifics in a courting/amorous sequence for example, humans, in possession of hypothetico-deductive capacities, may *infer* preference information (Bowers et al. 2011; Chu 2012; Dunn and Doria 2010; Hill and Buss 2008; Jones et al. 2007; Place et al. 2010) rather than relying on explicit cues.

There is no universally accepted definition of mate copying, and academic disagreement and confusion exist regarding what kinds of behavior specifically constitute the phenomenon (see Vakirtzis and Roberts 2009; Witte and Godin 2009). However, mate copying, in a broad sense, in both humans and nonhumans is generally understood to involve nonindependent mate selection resulting from social learning. In essence, information that an individual has been previously selected as a mate is conveyed (visually or otherwise) and an opposite sex other attending to that information consequently modifies their preference for them as a mate. The essential element in both humans and nonhumans is that mate-relevant information is conveyed via social mechanisms.

Our appreciation of the existence of mate copying and the importance of social learning in general has not yet been fully realized. However, as far back as 1973, there were suggestions that impressions of a man could be favorably influenced by his romantic association with an attractive woman (Sigall and Landy 1973). While mate copying has been extensively

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Published online: 05 March 2018

documented among nonhumans, in the last 10 or so years, research has begun to mount, suggesting that the phenomenon also operates within human populations (Anderson and Surbey 2014; Bowers et al. 2011; Chu 2012; Deng and Zheng 2015; Dunn and Doria 2010; Eva and Wood 2006; Little et al. 2008; Place et al. 2010; Vakirtzis and Roberts 2010, 2012a; Waynforth 2007; Yorzinski and Platt 2010; Zhuang et al. 2016).

Although mate copying has been documented among both men and women, the phenomenon is considered to be more prevalent among the latter (Hill and Buss 2008; Jones et al. 2007; O'Hagen et al. 2003; Parker and Burkley 2009; Vakirtzis and Roberts 2010, 2012b; Waynforth 2007; Yorzinski and Platt 2010). It is understandable then that the majority of research exploring mate copying has focused either solely or primarily on women. It should be noted though that there have been a number of studies indicating that women but not men are influenced by peer choice (Graziano et al. 1993; Hill and Buss 2008; Jones et al. 2007; O'Hagen et al. 2003; Parker and Burkley 2009; Vakirtzis and Roberts 2010, 2012b), and others suggesting that both men and women make nonindependent mate choices (Bowers et al. 2011; Dunn and Doria 2010; Little et al. 2008; Little et al. 2011a; Place et al. 2010; Platek et al. 2001; Winegard et al. 2017; Yorzinski and Platt 2010; Zhuang et al. 2016). To date, there have been no studies focusing exclusively on men, or results supporting the existence of mate copying among men *unless* it is also present among women (but see Place et al. 2010).

In humans, there is evidence linking male physical attractiveness positively with control of resources (Hamermesh and Biddle 1994; Hawley et al. 2007) and negatively with parental ability (Waynforth 1999). A simple observation of a man, in the absence of other information, may not provide women with enough meaningful data concerning that man's ability to support and defend her and her offspring (Singh 1995). Additionally, there is considerable evidence that when selecting a mate, men place a greater emphasis on physical beauty than do women (Buss 1989; Feingold 1990; Jebraeili et al. 2013; Sprecher et al. 1994). Thus, unlike men, women are unable to obtain a significant amount of mate-relevant information simply by observing someone of the opposite sex. One possible additional (inexpensive) source of information for women is in knowing the preferences of same-sex individuals who are seeking similar mate-relevant information.

What Problems Does Mate Copying Address?

The adaptiveness of mate copying may not be immediately obvious. Gibson and Hoglund (1992) have suggested two (nonmutually exclusive) reasons why the phenomenon may have evolved. Firstly and perhaps most importantly, it may serve as a shortcut strategy where by virtue of an uncostly observation/cognitive inference, a discerning female selector may avoid the (nontrivial) costs of active mate choice. These may include the unnecessary expenditure of energy and time involved in gathering information and lost opportunities for pursuing other avenues. In nonhumans, this may even involve the risk of predation (Pomiankowski 1990). Mate copying allows for the gain of substantive mate-relevant information by simply observing/learning from and replicating the behavior of discriminating women, who are presumably seeking similar characteristics in a partner. Such women have already paid the costs of active mate choice and have presumably made (somewhat) successful mate decisions. In this sense, mate copying can be thought of as analogous to purchasing a product after having seen someone use it.

Secondly, given that the mate evaluation process is necessarily imperfect and subject to nontrivial judgment errors, copying preferences of practiced others may improve discrimination accuracy (Vakirtzis and Roberts 2009), particularly if the discrimination task is considerably difficult and/or stimuli are insufficiently differentiated. Research has reported mate copying propensity to be greater among younger and less sexually experienced females in both human (Anderson and Surbey 2014; Bowers et al. 2011; Vakirtzis and Roberts 2010) and nonhuman populations (Danchin et al. 2004; Gibson and Hoglund 1992; Nordell and Valone 1998).

In humans, a mate copying strategy may not eliminate the inherent costs of trial and error (dating) for women entirely, but it likely alleviates some of the necessary expenditure. Additionally, while male quality may sometimes be readily discernible among men, mate copying may provide women with considerable *supplementary* information. Under conditions of ambiguity, women's discrimination accuracy could be expected to improve. This increase may be marginal but certainly nonnegative.

It should be noted that research by Street et al. (2018) indicates that the phenomenon of mate copying is likely part of a larger domain-generalized social learning. The authors had women rate the attractiveness of images of (1) male faces, (2) hands, and (3) abstract artwork and found that while participants were influenced by how others had rated the images, there was no difference in the degree to which they were influenced for the various stimuli categories. They suggest that although social influence can readily produce behavior which is adaptive for mate choice, there is little evidence to support the idea that there is an evolved psychological adaptation that has been specifically selected to process information relevant to mate choice.

Evidence for and the Adaptiveness of a Bias Toward Attractive Partners

Among nonhumans, it has been suggested that female mate copiers may be sensitive to the mate value (phenotypic quality) of a male's female consort(s) (Hill and Ryan 2006). The authors demonstrated that female sailfin mollies spent

significantly more time with males previously seen consorting with females of high phenotypic quality. Additionally, females significantly decreased the time they spent with males seen consorting with low-quality females. The authors suggest that these results are consistent with the idea that females may be sensitive to differences in the phenotypic quality of a male's female partner(s).

Vakirtzis and Roberts (2009) suggest that results such as those obtained by Hill and Ryan (2006) bring to light a form of nonindependent mate choice not necessarily encapsulated by the phenomenon of mate copying. They propose the term "mate quality bias" to describe findings that males consorting with females of high phenotypic quality are preferred (romantically) over men consorting with low-quality females. Whereas mate copying among humans typically contrasts men with previous or current relationship experience against those without any, in the phenomenon of mate quality bias, the relevant comparison is between the female consorts of prospective mates. It should be noted however that Witte and Godin (2009) have dismissed the term "mate quality bias" as being an unnecessary distinction from traditional "mate copying" suggesting the terms are entirely consistent. Nevertheless, both forms of selection exploit valuable mate-relevant sources of information, namely, the romantic preferences of opposite-sex others.

Vakirtzis and Roberts (2009) suggest that by virtue of the male lacking of significant variation in mating success in monogamous mating systems (humans), mate copying may provide marginal (but nontrivial) benefits as a sexual selection strategy. Conversely, observations of mate quality bias (thus defined) could be expected to be particularly prevalent among serially monogamous species (humans) performing iterative sexual selections. One reason for this is that under a serially monogamous mating system, a positive correlation between male and female quality is likely to exist (Vakirtzis and Roberts 2009).

While it can be seen that mate copying essentially takes advantage of a "quality" heuristic (men with women are assumed to be of greater mate quality), a number of previous studies investigating the phenomenon among women evaluating men have failed to take into account the important variable of female quality, namely, the attractiveness of a man's female consort/associate (but see Little et al. 2008; Little et al. 2011a; Little et al. 2011b; Vakirtzis and Roberts 2010, 2012a; Waynforth 2007; Yorzinski and Platt 2010). In fact, when this variable has been manipulated, it has consistently made a measurable difference. It is suggested that studies which have returned null results for the existence of mate copying among women may have been employing insufficiently attractive stimuli (female consorts/associates).

Converging lines of evidence suggest that positive assortative mating (selection of a romantic partner based on them being similar to yourself on a given dimension) is particularly prevalent among humans (Buss 1985; Thiessen and Gregg 1980; Todd et al. 2007). Positive assortment has been indicated for dimensions such as age (Buss 1985); wealth (Lam 1988) and household income (Greenwood et al. 2014); attractiveness (Little et al. 2006) and sex typicality (Little et al. 2001); antisocial behavior (Krueger et al. 1998); education (Chiswick and Houseworth 2011) and personality characteristics such as openness, conscientiousness, extroversion, agreeableness, and neuroticism (Figueredo et al. 2006); warmth and ingenuity (Buss 1984); and self-liking (Klohnen and Mendelsohn 1998).

There is considerable evidence suggesting that the physical characteristics of a man's female partner are important in how observing women evaluate his mate value (implicitly or otherwise). In a seminal study by Waynforth (2007), 112 female college students (aged 19–23) rated the attractiveness of facial photographs of both men and women alone (T_1). Two weeks later, the same women re-rated the attractiveness of men they had already seen (T_2), but this time the men were pictured alongside an initially rated woman with whom he was now described as being in a steady "dating" relationship with. The ratings of male attractiveness did show a moderate (nonsignificant) overall increase from T_1 to T_2, but perhaps more interestingly, a clear attractiveness bias emerged. When men and women were each categorized as being either "low," "medium," or "high" in attractiveness (based on how they were initially rated at T_1), mate copying (defined as an increase in ratings from T_1 to T_2) was largely dependent on a man's female partner being highly attractive. The strength of the effect was further moderated by a man's initial attractiveness (at T_1) and only occurred if he was low or medium in attractiveness. It is worth noting that men's attractiveness actually *decreased* if he was presented as the partner of an unattractive woman. This mate avoidance effect is consistent with the idea that mate copying is complex, and that variables other than simple relationship/sexual experience need to be taken into account. Winegard et al. (2017) suggest that social observers use information about the quality (typically physical) of a person's romantic partner to make inferences about them. They discuss a theory of social signaling in which individuals are inclined to "conceal" their partner (by avoiding social functions, etc.) if they are of low physical quality and "flaunt" them (accompanying a partner to social functions, etc.) if they are of high physical quality.

Little et al. (2008) had both men and women rate the attractiveness of opposite-sex others after the physical characteristics of individuals to be rated had been manipulated. Consistent with the idea that male faces are often considered more attractive when they are masculine (Cunningham et al. 1990; DeBruine et al. 2006; Grammer and Thornhill 1994) than when they are feminine, and vice versa for female faces (Rhodes et al. 2003), Little et al. (2008) found that men's were considered significantly more attractive when they were

paired with feminine (rather than masculine) faces of women, but only for long-term mating decisions. The results suggest that women are not only influenced in their judgments of a man's attractiveness by the attractiveness of his partner, but also that their preferences for specific individuals are moderated by information about their partner's attractiveness.

In a study using dynamic stimuli, Place et al. (2010) found a similar attractiveness bias nested inside the phenomenon of mate copying. Both men and women exhibited mate copying-like effects after initially rating static photographs of opposite-sex others, and then re-rating the same individuals after seeing them in real speed-dating footage. Men's (but not women's) rating increases depended on the difference between the attractiveness of a same-sex other's attractiveness and his own. Copying only occurred for men when they considered that the men they were observing (the partners of the women they were rating) were more attractive than they were. Women copied irrespective of relative attractiveness.

The attractiveness bias observed in the mate copying process can even occur when there is a temporal removal of the association between a man being evaluated and his female partner. Following on from their proposal that the term "mate quality bias" be used to differentiate the above phenomenon from "mate choice copying," Vakirtzis and Roberts (2010) conducted a study where they presented both women and men with pictures of opposite-sex others who had either attractive or relatively unattractive former partners. Participants rated stimulus individuals on dimensions of overall attractiveness and willingness to date. Men were not influenced in any way by the attractiveness of the former partners of the women they evaluated, but women gave men marginally (but nonsignificantly) higher ratings of overall attractiveness if they had attractive former partners, than if their former partners were relatively unattractive. Additionally, women evaluated men as significantly more desirable to date if they had attractive former partners. The authors interpreted the results as evidence that men increase their desirability as a partner or mate value by dating physically attractive women.

In a follow-up study, Vakirtzis and Roberts (2012a) re-demonstrated this attractiveness bias using a realistic methodology similar to that employed by Place et al. (2010). Real women of varying attractiveness were video-taped describing their ideal male partner. These recordings were then shown to another set of women who were told they were observing muted footage of women describing a former partner of theirs. Results indicated that the physical attractiveness of the supposed former partners of described men was the most important factor in determining whether or not subsequent women would be willing to go on a date with him.

Chu (2012) extended this bias toward selectively copying the preferences of attractive women by examining the variable of *character* (rather than physical) attractiveness. A total of 40 women rated the attractiveness of men pictured with women that had either a pleasant or unpleasant character, and were either smiling at them or maintaining a neutral expression. Results indicated that men were considered more attractive when they were involved in conditions with women that had a pleasant character (happy, funny, etc.), regardless of whether or not they were smiling.

In a broad sense, converging lines of evidence suggest that "prestigious" individuals are more likely to be copied than others, and this can even occur when the specific behavior being copied is unrelated to why the prestigious individual is highly regarded (Atkisson et al. 2012; Henrich and Gil-White 2001; Mesoudi 2008; Street et al. 2018). There are numerous studies which have found that the preferences of physically attractive individuals are more likely to be copied than the preferences of physically unattractive individuals (reviewed in Little et al. 2011b). The phenomenon of preferentially taking cues from attractive women has a fairly straightforward evolutionary explanation. It is widely agreed upon that female mate value is appreciably determined by physical characteristics (Buss 1989; Fisher et al. 2008; Singh 2002; Vakirtzis and Roberts 2012a; Waynforth 2001; Wiederman and Allgeier 1992) typically via visual observation. An attractive woman can afford to be quite selective about who she romantically associates with, by virtue of her considerable mate value. Owing to the phenomenon of positive assortative mating, a man that has won her romantic favor presumably has desirable mate-relevant characteristics (otherwise he would likely be dismissed). In a sense, by simply romantically associating with a man, an attractive woman is implicitly endorsing him and thus increasing his mate value in the eyes of other women.

Taken together, these studies (summarized in Table 1) clearly indicate that there is a nontrivial difference between romantically associating with an attractive versus unattractive woman. It should be noted, however, that with the exception of Place et al. (2010) and Vakirtzis and Roberts (2012a), each of these studies asked women to evaluate the *physical attractiveness* of pictured/described men, rather than gauging her actual intention to date or engage in a romantic relationship with him. Only Vakirtzis and Roberts (2010) measured both. There is evidence that expressed attitudes and low-cost decisions such as these, while informative about actual behavior, may not be entirely predictive of it (Andrews and Kandel 1979). How women's behavior in real-life settings differs as a function of the attractiveness of a man's partner awaits further investigation.

Quality Is Better than Quantity: Evidence of Promiscuity Being Problematic

As the effect of mate copying is known to be stronger among women than men, I will restrict the following discussion to women copying the mate preferences of other women. There

Table 1 Summary of mate copying studies looking at attractiveness bias

Study	Findings	Dependent measure(s)
Waynforth (2007)	Male attractiveness increased when he was romantically associated with an attractive woman, but decreased if she was unattractive	Changes in physical attractiveness
Little et al. (2008)	Both women and men found opposite-sex others more attractive (for long-term mating decisions) if their partner's face was sex-typical	Physical attractiveness
Place et al. (2010)	Men (but not women) increased their ratings of women when her partner was more attractive than him	Interest in short-term/long-term relationship
Vakirtzis and Roberts (2010)	Women (but not men) were more willing to go on a date with men shown to have had attractive former partners	Overall attractiveness, willingness to go on a date with
Yorzinski and Platt (2010)	Men and women were both more willing to have long-term relationship with target IF target's partner was attractive (effect stronger for women)	Willingness to engage in a long-term relationship with the pictured individual
Little et al. (2011a)	Both women and men found opposite-sex others more attractive (for long-term mating decisions) if their partner's face was sex-typical	Physical attractiveness
Little et al. (2011b)	People like given facial traits if attractive people were paired with people with the trait	Decision of which face is most attractive for a long-term relationship
Chu (2012)	Women found a man more attractive if he was being looked at by another woman with a pleasant character than if the other woman's character was unpleasant	Physical attractiveness
Vakirtzis and Roberts (2012a)	Women were more willing to go on a blind date with a described man if his former partner was attractive	Willingness to go on a blind date with the man described

is evidence that quantitative aspects of mate copying are somewhat nuanced. Given what we already know about mate copying, it might seem reasonable to imagine that, since previous experience with an opposite sex partner increases male mate value (above not having had any experience), this increase is linear and possibly even indeterminate. However, most people likely have some awareness of the considerable social proscriptions against promiscuity and there are a number of proximate explanations for these.

There have been a number of studies suggesting that both sexes find promiscuity in the opposite sex (particularly in a prospective mate) to be undesirable (Ajidahun 2017; Bleske and Shackelford 2001; Kheswa and Mahlalela 2014; Levesque et al. 2007; Sprecher and Hatfield 1996). Female promiscuity has implications for paternity uncertainty and nonadaptive investment by a male partner (for a discussion, see Buss 1989), and virtues such as chastity/virginity are highly desirable. Baumeister and Vohs (2004) suggest that evolutionary conditions have, over time, set up a condition of sexual economic exchange between men and women and that men may be reluctant to invest in sexually experienced women due to the unnecessary expenditure involved in obtaining something which others have received for free or at a considerably lower cost.

When in Shakespeare's *Much Ado About Nothing* Claudio refuses to wed Hero until she convinces him of her virginity, he is simply offering an (outdated) adaptive solution to a recurring evolutionary problem. The pursuit by men of a sexual strategy of promiscuity is a risky one. On the one hand, the fitness increase due to copulations with multiple partners is self-evident, but the reasons for avoiding sexually promiscuous men are nontrivial. As they have sexually liaised with multiple partners previously, romantic interactions with sexually promiscuous men decrease one's fitness through exposure to potentially harmful pathogens (Aarøe et al. 2016; Epstein et al. 2007; Inbar and Pizarro 2016). Additionally, men exhibiting promiscuous proclivities risk acquiring a socially undesirable reputation as a womanizer (Buss and Schmitt 1993). This alone may impair their long-term mate value by having them blacklisted as undesirable partners (Murty and Roebuck 2016).

Male promiscuity has also been linked with aggression/sexual coercion (DeGue and DiLillo 2004), and low levels of agreeableness/conscientiousness (Schmitt 2004). As such, the adaptive significance of romantically avoiding promiscuous men, or *promiscuity aversion*, can be readily accounted for. By virtue of their promiscuity, such men are indicating that they are unwilling or otherwise unlikely to romantically commit (Thompson 1983; Weis and Slosnerick 1981). As sex (and the rearing of offspring) and romantic desertion can be considerably costly for women (Bateman 1948; Kaplan and Gangestad 2005), it is not surprising that women are highly sensitive and averse to indications of promiscuity in prospective mates. Herold and Milhausen (1999) found that while more than 95% of the women in their sample were willing to a accept a man who had had at least one previous sexual experience, only 10% were willing to accept a man who had had sex with 11 or more different partners previously.

It is reasonable to assume that in all but the most conservative and prudish of societies, any two given adults of the opposite sex will each have some kind of romantic resume. Previous research has indicated that loss of virginity typically occurs between the ages of 16 and 17 in both the USA and Europe (Carpenter 2001), and by their early to mid-20s, most individuals have had at least 2–3 romantic partners (Stewart-Williams et al. 2017).

Converging lines of evidence suggest that, among men, while a small or moderate amount of relationship experience is desirable, the "desirability * experience" graph is strikingly nonmonotonic. In a study examining the phenomenon of mate copying, Anderson and Surbey (2014) had women rate the desirability of men who had been with either 0, 1, 2, or 5 partners previously but were currently single. In order to determine the *relative* desirability of partnered men, an additional scenario was included whereby the evaluated man was currently in a relationship. The authors found an interesting pattern of results, and one that would not necessarily be predicted by extant mate copying theory. Men with a *current* partner were considered comparably desirable to men that had not been in a relationship in the past. This is inconsistent with research suggesting a romantic advantage for partnered over single men (Eva and Wood 2006; Little et al. 2011a; Parker and Burkley 2009; Rodeheffer et al. 2016; Winegard et al. 2017). Perhaps even more interesting were the author's findings that both of these categories of men were considered more desirable than men who had had five partners previously, but neither was as desirable as men with one or two previous partners.

The authors discussed the findings in the context of the well-known social proscriptions against promiscuity. While a small to moderate amount of relationship experience confers some kind of desirability advantage upon men, too much makes him considerably less desirable. While it is quantitatively unclear exactly when a man's previous relationship experience goes from being desirable to undesirable, the results of Anderson and Surbey (2014) suggest that an optimum lies somewhere between two and five previous partners. This is consistent with research by Stewart-Williams et al. (2017) who found that male desirability peaks at around two or three previous partners.

However, there have been demonstrations of *any* sexual experience being undesirable. Sprecher et al. (1997) found that both men and women found hypothetical opposite-sex others described as "chaste" to be more desirable as both a marriage partner and a dating partner, than if they were described as having had either "moderate" or "extensive" sexual experience. Furthermore, Farrer (2002) found that in many parts of East Asia, virginity is an extremely highly valued virtue (especially in women) and was preferable in a prospective mate to any degree of sexual experience. It should be noted, however, that relationship history is not typically the primary factor in determining whether or not two individuals become romantically involved. Both Herold and Milhausen (1999) and Urbaniak and Kilmann (2003) found that women prefer to partner a man with some degree of sexual experience to one that is chaste but has otherwise low mate value.

Despite research on mate preferences being one of the most actively researched and informative areas of psychology in the last 40 years, few studies have directly examined the phenomenon of how varying previous relationship experience affects an individual's current attractiveness or romantic desirability. In addition to some of the indirect investigations within the mate copying literature, a lot of what we know about how relationship experience affects an individual's romantic desirability comes from research ostensibly examining or primarily concerned with the phenomenon of sexual double standards (see Crawford and Popp 2003 for a review).

O'Sullivan (1995) had heterosexual college students (both men and women) make various judgments (morality, desirability as a dating partner, desirability as a spouse, etc.) about same and opposite-sex others. Male and female targets described as *sexually experienced* (versus relatively *inexperienced*) were judged significantly lower on each of the aforementioned dimensions. While generally supporting the idea that too much romantic experience is harmful, these results should be interpreted with caution. The average participant age was only 19 years and *sexually experienced* targets were described as having had either 13 (men) or 7 previous partners.

Stewart-Williams et al. (2017) found evidence consistent with the idea that fewer previous romantic partners are more desirable than too many. The authors asked a sample of heterosexual men and women from the UK how willing they would be to get involved with hypothetical opposite-sex others that had varying degrees of relationship experience. Unsurprisingly, willingness initially rose, peaking when the hypothetical other was described as having had two previous partners, and steeply declined after indications of seven or

more previous partners. It is worth noting that the average age of participant was just over 21 years. Although the *optimal* number of previous relationships for a prospective partner to have been in was consistently 2–3, responses of participants varied slightly according to their gender, how permissive their attitude toward sex was, and whether they were evaluating someone for a long-term or short-term relationship.

Finally, Jones (2016) had an ethnically diverse sample give romantic judgments of opposite-sex others described as having either an "extensive" or "nonextensive" sexual history. Both men and women judged individuals of the opposite sex more harshly when they had had an extensive sexual history. Although this result was not particularly surprising, a strong gender bias emerged when the targets indicated a recent shift toward monogamy. Despite an undesirable extensive sexual history, men were considered (by women) to be "reformed" and now far more desirable than they were previously. Women (as rated by men), however, were not afforded such a capacity for change and were rewarded with only a modest increase in desirability.

Evidence is strongly suggestive of the fact that sexual history is a salient factor of a prospective partner for both men and women (Sprecher and Hatfield 1996). Research overwhelmingly supports the idea that while a moderate amount of experience can be desirable, too much is clearly a big turn-off. The entrenched proscriptions against promiscuity for both men and women are entirely understandable and adaptive for separate reasons. Pursuing, selecting, or accepting a prospective romantic partner with a history of promiscuity (or no romantic experience) has important fitness consequences for each sex. The proximate consequence is the heightened sexual desirability of individuals with moderate sexual experience.

While it seems clear that an individual's romantic history is often considered an important factor by a prospective partner assessing their mate value, it is important to realize that *quality* is far more desirable than *quantity* here. There exists some kind of "optimal" number of previous romantic relationships (where perceptions of desirability peak). Moreover, the decline in perceived mate value is reasonably steep. Unsurprisingly, the proscriptions against male promiscuity (perceived or otherwise) are considerable. Although how many previous partners one has had can critically affect one's perceived romantic desirability, the physical *quality* (attractiveness) of one's mate also affects their perceived desirability, and there is research indicating that this variable is of critical importance (Chu 2012; Little et al. 2008; Little et al. 2011a; Little et al. 2011b; Vakirtzis and Roberts 2010, 2012a; Waynforth 2007; Yorzinski and Platt 2010). Future research may wish to additionally consider qualitative aspects of the relationship itself (duration of the relationship, etc.) in order to further determine which specific aspects of the relationship contribute to an individual's elevated desirability. For example, how is a man that has maintained one long-term relationship for the past 3 years perceived differently to one that has been in a number of short-term relationships in that time, versus a third with no relationship experience. Questions such as these await further enquiry but could greatly augment our understanding of the mate selection process.

Acknowledgments I appreciate the helpful feedback of two anonymous reviewers.

Compliance with Ethical Standards

Ethical Approval N/A

Informed Consent N/A

Conflict of Interest The author declares that he has no conflicts of interest.

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