THE EFFECT OF RECENT SEXUAL ACTIVITY ON PARTNER DESIRABILITY: AN EVOLUTIONARY PERSPECTIVE

Lisa Busche
Michael Marks
Kristen Oates
Department of Psychology, New Mexico State University

Abstract
According to the mate selection literature, an individual’s desirability as a potential mate is influenced by his or her sexual history. The goal of the present study is to extend evolutionary explanations, derived from Trivers’ (1972) parental investment theory, regarding the mechanisms which influence mate preferences. We suggest that recent sexual activity should lower an individual’s desirability as a mate. Participants read one of several dating scenarios in which the elapsed time since the ending of a previous relationship of a potential mate was varied, and then reported their willingness to engage in a casual, sexual, or committed relationship with the potential mate. Both men and women reported increases in willingness to enter a new relationship when a potential partner had been single for a longer period of time. This relationship was curvilinear for men, and linear for women, supporting the claim that a partner’s recent sexual activity presents unique threats to the reproductive fitness of each sex.

Keywords: Sex, mating, evolution, paternity certainty, sexual strategies

Introduction
The manner in which men and women evaluate potential romantic partners has been a prominent topic of evolutionary psychology for the past several decades (e.g., Buss, 1994, 1996; Buss & Barnes, 1986; Buss & Schmitt, 1993; Buss et al., 1990; Feingold, 1992; Kenrick, Keefe, Gabrielidis, & Cornelius, 1996; Singh, 1993). The impact of an individual’s sexual history on his or her desirability to potential mates has traditionally been an area of particular interest. Numerous studies have shown that having many past sexual partners adversely impacts one’s desirability as a potential mate (Buss & Schmitt, 1993; Jacoby & Williams, 1985; Oliver & Sedikides, 1992; Sprecher, 1989). This finding has been described as a manifestation of psychological mechanisms designed to avoid cuckoldry and ensure selection of more committed partners. If this explanation is correct, then the amount of time elapsed since the end of one’s previous relationship...
relationship should also influence his or her desirability as a mate; specifically, a man’s or woman’s recently-ended intimate relationship could pose a risk to their potential partner’s reproductive fitness through resource diversion or cuckoldry, respectively. The recency hypothesis has not been empirically examined and is the focus of the present investigation. A confirmation of this explanation would support evolutionary explanations of mate selection and partner preferences, while helping to bridge the gap between proximate and ultimate explanations of contemporary courtship behavior.

Charles Darwin (1871) suggested that the sexual form of selection serves to optimize the conception and survival of future offspring. Traits that allow individuals to produce quality offspring should be highly desired by members of the opposite sex. Consequently, it is assumed that organisms that managed to pass on their genes to the present generation must have adapted to and successfully overcome evolutionary pressures, allowing them to survive and reproduce. Individuals in the present day should therefore display behaviors rooted in what was advantageous in our evolutionary past (Darwin, 1859, 1871). Consistent with these predictions, researchers have shown that traits or physical characteristics indicative of fertility, good genes, and access to resources are highly valued by both sexes (Buss & Barnes, 1986; Buss et al., 1990). According to parental investment theory (Trivers, 1972), the priority placed on each of these characteristics varies between the sexes based on the unique evolutionary challenges men and women separately faced.

Men have a high reproductive capacity; a man’s involvement in reproduction can be as minimal as a single contribution of sperm. Reproductively speaking, men should benefit from engaging in a “quantity strategy” whereby they out-compete other men by producing more offspring. As a result, men should desire more partners and be attracted to physical features revealing good genes and high reproductive potential (Buss & Barnes, 1986; Buss et al., 1990; Trivers, 1972). That explains why studies show most men prefer women who are younger than themselves while teenage boys tend to prefer slightly older women (Kenrick et al., 1996). This suggests that the quality men desire is not youth per se, but women who are at the height of their reproductive potential. Similarly, the waist-to-hip ratio men rate as most attractive coincides with the waist-to-hip ratio which is ideal for successful childbirth (Singh, 1993).

Women, on the other hand, have a limited supply of eggs and a limited number of pregnancies they can sustain over the course of their lives. Accordingly, women are more likely to pass on their genes if the offspring they produce are of higher quality than others, and benefit more from a “quality” versus “quantity” strategy. A clear display of these sex differences in mating strategies was identified in by Clark & Hatfield (1989) when they found 75% of men would agree to have sex with a stranger, while not a single woman was willing to do the same. Women also place greater emphasis on status and signs of commitment, because these qualities point to future allocation of resources (Buss & Barnes, 1986; Feingold, 1992). Research shows that women prefer men with higher socioeconomic status, ambitiousness, and intelligence, all traits which imply possession of or ability to acquire resources (Feingold, 1992). Not surprisingly, reviews of personal ads revealed men seeking attractive women, and women seeking well-educated or wealthy men (Davis, 1990; Harrison & Saeed, 1977; Koestner & Wheeler, 1988; Smith, Waldorf, & Trembath, 1990).

Trivers’ (1972) account of differential investment has also generated research into sex differences in concerns over commitment and fidelity. Because ovulation, fertilization, and gestation are not outwardly observable, a man can never be certain that
Recent sexual activity

any given child is his biological offspring. Men face a risk of cuckoldry, which is unknowingly investing their time and resources in offspring who do not carry their genes. If a man mates with a woman who has recently engaged (or will soon engage) in a sexual relationship with one or more other men, he could potentially raise a child that does not carry his DNA. Therefore, sexual infidelity should be of particular concern to men.

Women are not at risk of cuckoldry. However, relative to men, a larger investment is required for women to bear children. Evolutionarily speaking, a woman should strive to ensure that her offspring have adequate resources throughout their lifespan. As such, indications of long-term commitment are of great importance to women because a lack of commitment could result in dispersion of resources to others. Thus, the type of infidelity most worrisome to each sex corresponds with the type of betrayal that poses the largest threat to an individual’s reproductive fitness. Interestingly, when parents are asked about the fidelity of their daughter’s partner, both mothers and fathers are most concerned about emotional infidelity. When asked the same question regarding their son’s partner, both parents’ foremost concern is the sexual infidelity of a male child’s partner (Buss, Larsen, Westen, & Semmelroth, 1992; Harris, 2000; Pietrzak, Laird, Stevens, & Thompson, 2002). This suggests that concerns about certain types of infidelity are not restricted to a particular sex, but instead are based on what presents the largest threat to the success of an individual’s descendants (Fenigstein & Peltz, 2002; Shackelford, Michalski, & Schmitt, 2004).

Trivers’ (1972) theory has also been instrumental in the generation of hypotheses about the desirability of people with many past sexual partners. Empirical investigations have revealed that as the number of prior sexual partners increases, an individual’s desirability as a mate correspondingly decreases (Hendrick & Hendrick, 1987; Jacoby & Williams, 1985; Oliver & Sedikides, 1992; Sprecher, 1989; Sprecher, McKinney, & Orbuch, 1991; Williams, Fisher, & Cox, 2008). Thus, both men and women prefer low levels of sexual experience in potential dating and marriage partners (Jacoby & Williams, 1985; Oliver & Sedikides, 1992; Sprecher et al., 1997). Moreover, individuals with a large number of previous sex partners are evaluated negatively by both sexes (Hendrick & Hendrick, 1987; Sprecher, 1989), and those with more unrestrained sexual histories are judged by both sexes as having negative personality characteristics (O’Sullivan, 1995).

In summary, evolutionary psychologists suggest that men and women have developed evolved psychological mechanisms that facilitate avoidance of serious threats to their respective reproductive fitness. For men, paternity uncertainty should lead to avoidance of partners that could result in cuckoldry, whereas for women, the threat of resource diversion should lead to avoidance of partners who might not be fully committed to them and their offspring. Although a great deal of research evidence exists to support these claims, evolutionary theories are often criticized as being unfalsifiable or “just so stories” (Gould & Lewontin, 1979; Holcomb, 2000). Consequently, it is of utmost importance to provide as many critical tests of any proposed theory as possible.

A Critical Test

The present research aims to test for the previously described “cuckoldry avoidance mechanism” in a novel way: If men and women have evolved psychological mechanisms designed to avoid cuckoldry or loss of a mate’s resources (respectively), then they should find a potential mate’s recent sexual activity more aversive than sexual activity that occurred in the more distant past. This question of how the recency of
Recent sexual activity influences an individual’s mate desirability has not yet been empirically examined. Importantly, not only should both men and women prefer potential partners that have not recently been in relationships, but the manner in which they do so should vary according to the respective type of evolutionary pressures they face in reproduction.

As noted above, paternity uncertainty is compounded by the fact that ovulation and fertilization occur internally, and pregnancy is not outwardly observable until approximately week 12 (Mayo Clinic, 2011; WebMD, 2010). In addition, most people believe that by the end of the 4th month after conception, they would be able to tell if a clothed woman is pregnant (Marks, 2012). Thus, engaging in coitus with a woman shortly after she has concluded a prior sexual relationship presents a particularly high risk of cuckoldry. If avoidance of highly sexually active mates is truly due to a cuckoldry avoidance mechanism, men should have the strongest aversion to engaging in a relationship with women that are currently (or have very recently been) sexually involved with other men. For example, if a woman’s last sexual relationship ended one month prior to her meeting a new potential mate, there is a much higher probability that sexual relations with her could result in paternity uncertainty than if her last relationship ended seven months prior. Accordingly, we hypothesize that men should demonstrate an aversion toward entering a relationship with women who have recently been sexually active with another man. If this is the case, then the relationship between desirability and time since last relationship should be curvilinear, as cuckoldry avoidance should be strongest when paternity is likely to be ambiguous. To clarify, aversion should be especially strong immediately after a woman’s previous relationship ends, begin to stabilize as risk of cuckoldry abates, and then plateau or inflect at the point in which uncertainty over paternity is no longer a factor.

Although women do not face a risk of cuckoldry, men who have recently been sexually active with other women also threaten their reproductive fitness. Women should tend to avoid potential mates who are currently (or have very recently been) involved with other women. A man’s recently ended relationship presents a greater risk of resource diversion to a woman than does a more latent relationship. Because recent sexual relationships with other women may indicate a lack of commitment and the risk of diverted resources, we hypothesized that women should also demonstrate an aversion towards potential partners who have recently had another sexual partner. However, the specific point in time when a past relationship is no longer a serious risk to women is not as clearly defined as it is for men. Therefore, we predict a positive, linear relationship between the number of months since a man’s last intimate relationship and a woman’s willingness to enter a relationship with him.

In order to test these predictions, participants read a vignette about a potential mate in which the time since that person’s last intimate relationship ended was varied from 0-12 months. After reading the vignettes, participants reported how likely they were to enter a casual, sexual, or committed relationship with the person described in the vignette. Several additional factors that have shown to affect willingness to enter a relationship or engage in sexual activity were measured as controls. First, individual differences in sociosexuality, or the degree to which an individual prefers either unrestricted (casual, without love) or restricted (in the context of a relationship) sex could influence willingness to enter a sexual relationship (Simpson & Gangestad, 1990). In order to control for this individual difference, we assessed the sociosexuality orientation of participants. Second, one’s attachment style could influence willingness to enter a
relationship (Hazan & Shaver, 1987). Thus, we assessed dimensions of attachment anxiety and avoidance. Finally, we recorded several demographic variables relevant to the current hypotheses, including age, sexual orientation, and relationship status of participants, all factors that could potentially moderate the relationship between time since a potential partner’s last relationship and the participants’ willingness to commence a relationship with him or her.

Method

Participants

We recruited participants via the Internet. The survey was linked on a Close Relationships and Personality Research website (which is generally found via links or by searching for terms such as “free personality test” on Internet search websites). The site attracts participants by providing personalized feedback on relevant variables after participation. Participants were required to be at least 18 years old in order to be included in the sample. The final sample consisted of 2,178 women with a mean age of 28 (SD=9.49), and 763 men with a mean age of 30 (SD=11.01). The male sample was 59% Caucasian, 13% African American, 10% Hispanic or Latino, and 18% of other or undeclared ethnicity. The female sample was 56% Caucasian, 13% African American, 10% Hispanic or Latino, and 21% of other or undeclared ethnicity. Approximately 67% of female participants and 70% of male participants lived in the United States.

Procedure

Each participant completed the survey in a single session lasting approximately 15 minutes. Upon clicking the survey link, participants read a brief description of the study and granted electronic consent if they wished to participate. Participants then provided basic demographic information and completed the survey. Upon completion, participants were thanked, given personalized feedback on their responses, and debriefed.

Measures

The first section of the survey consisted of the time manipulation. At the start of the study, the computer program randomly assigned participants (via an internal random number algorithm) to one of 13 “months since last relationship” conditions. Participants read a passage describing a first meeting with a potential dating partner. The scenario was presented (with the appropriate information based upon the sex of the participant) as follows:

Imagine that later this evening you are out for dinner. You meet an attractive [man/woman] who is about your age. You strike up a conversation and find that [he/she] shares many of your interests and is very pleasant to talk with. As the conversation continues, the topic turns toward dating and [he/she] shares with you that [his/her] most recent intimate relationship ended [yesterday, one month ago, two months ago…. one year ago].

The time elapsed since the end of the potential partner’s previous relationship was varied, ranging from “yesterday” to “one year ago” in monthly increments (because monthly time increments should be easily conceptualized by participants). Participants then indicated their willingness to engage in three types of relationships—casual, committed,
Recent sexual activity

and sexual—with the potential mate. These questions consisted of a Likert-type, 7 point scale, with 1 being “not at all likely” and 7 being “extremely likely.”

The next component of the survey was the Sociosexuality Orientation Inventory (SOI: Simpson & Gangestad, 1990), which assesses individual differences in preferences for restricted versus unrestricted sex. The SOI consists of 2 items measuring overt sexual behavior (e.g., “With how many partners have you had sex (sexual intercourse) within the last year?”), 2 items measuring covert sexual behavior, (e.g., “How often do you fantasize about having sex with someone other than your current dating partner?”), and 3 attitudinal items, (e.g., “Sex without love is ok”). Reliability was adequate at .73.

A third measure included was the Experiences in Close Relationships-Revised Questionnaire (ECR-R; Fraley, Waller, & Brennan 2000). The ECR-R is a revised version of Brennan, Clark, and Shaver's (1998) Experiences in Close Relationships (ECR) questionnaire, which assesses individuals’ comfort with depending on a romantic partner and their confidence in their partners’ availability and receptiveness. The questionnaire contains 36 items. Half of the items assess attachment-related anxiety (e.g., “I’m afraid that I will lose my partner’s love”) and the other half of the items assess attachment-related avoidance (e.g., “I prefer not to show a partner how I feel deep down”). Each item is rated on a seven point scale from 1, strongly disagree, to 7, strongly agree. In the present research, reliability of the two scales was .90 or better across both samples.

The final component of the survey was an open-ended measure that read, “When starting a new relationship, what is the ideal amount of time (in months) you would prefer to have passed since your new partner’s last intimate relationship ended?” This question was included as a measure of whether individuals’ desires for real-life potential partners would correspond with the time periods when threats to reproductive fitness are lessened.

Results

A series of hierarchical polynomial regression analyses were run to examine the linear and curvilinear effects of time since last relationship on willingness to enter each type of new relationship. Multiple control variables, including attachment style, SOI, age and relationship status were included as predictors. (There was not a sufficient quantity of non-heterosexual participants to allow an adequately-powered analysis using this construct, thus results are based solely on heterosexual participants.) Step 1 of the analyses included the untransformed month condition, attachment style, SOI, age, and relationship status (either single or in a relationship, dummy coded with “single” serving as the reference group). Step 2 included the quadratic term for months, in order to test for a curvilinear relationship between time and willingness to enter a relationship. Step 3 included all possible two-way interactions between the linear and quadratic month terms and all control variables (see Table 1 for correlations). All continuous variables were entered as uncentered data, as the zero points for time and age have meaningful values. The attachment style indices of anxiety and avoidance did not account for a significant amount of variance in willingness to enter any type of relationship for either men or women, and were therefore removed from the final analyses.
Each relationship type (casual, sexual, and committed) was regressed on the predictors, resulting in a total of six unique hierarchical polynomial regressions (three for men, three for women). For men, willingness to enter a purely sexual relationship was not affected by any of the predictors. However, the set of predictors explained a significant amount of the variance in men’s willingness to enter both a casual relationship ($R^2 = .03$, $F (5,757) = 4.58$, $p < .001$) and a committed relationship ($R^2 = .10$, $F (5,757) = 16.46$, $p < .001$; see Table 2 for regression statistics). The addition of the quadratic term in the second step of the regression analyses resulted in a significant increase in the amount of additional variance accounted for in willingness to enter both a casual relationship ($\Delta R^2 = .01$, $\Delta F (1, 757) = 5.10$, $p = .024$) and committed relationship ($\Delta R^2 = .01$, $\Delta F (1, 757) = 5.82$, $p = .016$; See Figure 1). Additionally, there was a significant interaction between relationship status and month condition ($\beta = .39$, $p = .019$), such that single men were most influenced by the amount of time since the individual’s last relationship.

Table 1. Correlations Between Predictors and the Three Dependent Variables for Men and Women

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Sexual</th>
<th>Casual</th>
<th>Committed</th>
<th>Months</th>
<th>Age</th>
<th>Status</th>
<th>SOI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sexual</td>
<td>.54*</td>
<td>.48*</td>
<td>.07</td>
<td>-.05</td>
<td>-.06</td>
<td>.02</td>
<td></td>
</tr>
<tr>
<td>Casual</td>
<td>.46*</td>
<td></td>
<td>.46*</td>
<td>.04</td>
<td>-.04</td>
<td>-.14*</td>
<td>.05</td>
</tr>
<tr>
<td>Committed</td>
<td>.54*</td>
<td>.48*</td>
<td>.14*</td>
<td>-.18*</td>
<td>-.18</td>
<td>-.16*</td>
<td></td>
</tr>
<tr>
<td>Months</td>
<td>.11*</td>
<td>.07*</td>
<td>.16*</td>
<td>.03</td>
<td></td>
<td>-.01</td>
<td>.00</td>
</tr>
<tr>
<td>Age</td>
<td>-.06*</td>
<td>-.11*</td>
<td>-.10*</td>
<td>.01</td>
<td></td>
<td>.23*</td>
<td>.12*</td>
</tr>
<tr>
<td>Status</td>
<td>-.04</td>
<td>-.14*</td>
<td>-.08*</td>
<td>.02</td>
<td></td>
<td>.06*</td>
<td>.08*</td>
</tr>
<tr>
<td>SOI</td>
<td>.34*</td>
<td>.08*</td>
<td>.02</td>
<td>-.01</td>
<td></td>
<td>.08*</td>
<td>-.06*</td>
</tr>
</tbody>
</table>

Note: *$p < .05$.

Table 2. Men’s Willingness to Enter a Relationship as predicted by Months since Last Relationship of the Potential Partner, and participant’s SOI, Relationship Status, and Age

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Sexual Relationship</th>
<th>Casual Relationship</th>
<th>Committed Relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE</td>
<td>B</td>
</tr>
<tr>
<td>Constant</td>
<td>4.71</td>
<td>0.27</td>
<td>4.65</td>
</tr>
<tr>
<td>Months</td>
<td>0.09</td>
<td>0.07</td>
<td>0.17</td>
</tr>
<tr>
<td>Months$^2$</td>
<td>-0.01</td>
<td>0.01</td>
<td>-0.10</td>
</tr>
<tr>
<td>SOI</td>
<td>0.00</td>
<td>0.00</td>
<td>0.03</td>
</tr>
<tr>
<td>Status</td>
<td>-0.23</td>
<td>0.15</td>
<td>-0.06</td>
</tr>
<tr>
<td>Age</td>
<td>-0.01</td>
<td>0.01</td>
<td>-0.05</td>
</tr>
</tbody>
</table>

Note: *$p < .05$. Months$^2$ is the quadratic term (the months condition squared), $B =$ regression coefficient, an estimate of the effect of each variable (in the units of the raw score) for predicting willingness to enter a relationship, $SE B =$ standard error of B, an estimate of the variance from the average B for each variable, $\beta =$ standardized regression coefficients, an estimate of the relative importance of each independent variable in predicting the willingness to enter a relationship.
Recent sexual activity

Figure 1. Regression lines depicting Men’s willingness to begin a casual, committed, or sexual relationship with a woman across 0-12 months since the woman’s most recent sexual relationship. Note: *p < .05.

For women, significant trends were found for sexual ($R^2 = .13$, $F (4, 2173) = 82.86$, $p < .001$), casual ($R^2 = .04$, $F (4, 2173) = 23.15$, $p < .001$), and committed relationships ($R^2 = .04$, $F (4, 2173) = 22.71$, $p < .001$). In each case, the addition of a quadratic term did not result in a significant increase in variance explained, and thus linear trends were deemed the best fit for the data (See Table 3 for regression statistics).

Table 3. Women’s Willingness to Enter a Relationship as predicted by Months since Last Relationship of the Potential Partner, and participant’s SOI, Relationship Status, and Age

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Sexual Relationship</th>
<th></th>
<th></th>
<th>Casual Relationship</th>
<th></th>
<th></th>
<th>Committed Relationship</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE B</td>
<td>β</td>
<td>B</td>
<td>SE B</td>
<td>β</td>
<td>B</td>
<td>SE B</td>
</tr>
<tr>
<td>Constant</td>
<td>2.97</td>
<td>0.15</td>
<td></td>
<td>4.85</td>
<td>0.15</td>
<td></td>
<td>4.11</td>
<td>0.14</td>
</tr>
<tr>
<td>Months</td>
<td>0.06</td>
<td>0.01</td>
<td>0.11*</td>
<td>0.04</td>
<td>0.01</td>
<td>0.07*</td>
<td>0.08</td>
<td>0.01</td>
</tr>
<tr>
<td>SOI</td>
<td>0.02</td>
<td>0.00</td>
<td>0.34*</td>
<td>0.01</td>
<td>0.00</td>
<td>0.08*</td>
<td>-0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Status</td>
<td>-0.06</td>
<td>0.08</td>
<td>-0.01</td>
<td>-0.48</td>
<td>0.08</td>
<td>-0.13*</td>
<td>-0.28</td>
<td>0.08</td>
</tr>
<tr>
<td>Age</td>
<td>-0.02</td>
<td>0.01</td>
<td>-0.08*</td>
<td>-0.02</td>
<td>0.01</td>
<td>-0.11*</td>
<td>-0.02</td>
<td>0.01</td>
</tr>
</tbody>
</table>

Note: *p < .05. B = regression coefficient, an estimate of the effect of each variable (in the units of the raw score) for predicting willingness to enter a relationship, SE B = standard error of B, an estimate of the variance from the average B for each variable, β = standardized regression coefficients, an estimate of the relative importance of each independent variable in predicting the willingness to enter a relationship.
Recent sexual activity

Figure 2. Women’s willingness to begin a casual, committed, or sexual relationship with a man across 0-12 months since the woman’s most recent sexual relationship. Note: *p < .05.

The final question, regarding the length of time participants preferred to have passed since a new partner’s last intimate relationship ended, revealed that men (M = 5.61, SD = 6.26) preferred a significantly shorter timespan than women (M = 7.20 months, SD = 6.05; t = -6.17, p < .01; see Figure 2). Interestingly, these findings show that the preferred length of time for men is well past the period after which people perceive a pregnancy is noticeable.

Discussion

The evolutionary literature on mate preferences reveals that both men and women form less positive evaluations of members of the opposite sex with more promiscuous sexual histories (Hendrick & Hendrick, 1987; Jacoby & Williams, 1985; O’Sullivan, 1995; Oliver & Sedikides, 1992; Sprecher, 1989; Sprecher et al., 1997). Evolutionary theorists cite these findings as evidence of an evolved mechanism for cuckoldry avoidance by men and resource securing by women (Buss et al., 1990; Trivers, 1972). The objective of this research was to provide a test of the evolutionary explanation by examining the effect of time elapsed since the end of a potential partner’s previous sexual relationship. We hypothesized that if humans have evolved cuckoldry or resource dispersion avoidance mechanisms, they should be less willing to enter relationships with individuals who have recently had sexual relationships, and this effect should manifest differently in men and women.

For men, there was a significant curvilinear relationship between the number of months since a woman’s last sexual relationship and willingness to begin a committed or casual relationship with her. Willingness to enter a relationship was lowest directly after the end of a potential partners’ most recent relationship and increased over time before reaching a plateau or inflecting. This curvilinear trend is consistent with the hypothesized mechanism of cuckoldry avoidance, indicating that the amount of time that has elapsed since a past relationship is most influential immediately after a potential mate has ended a
Recent sexual activity

prior relationship, but gradually lessens after the threat of cuckoldry abates. Additionally, men reported preferring an average of 5.61 months to have elapsed since the end of a potential mate’s previous relationship, which is well past the point most women would first show outward signs of pregnancy.

Men’s willingness to commence a relationship with a woman who had just ended a separate relationship was dependent on the nature of the potential new relationship. For men who were contemplating a committed relationship, increases in willingness began to plateau approximately 10 months after the termination of potential partner’s previous relationship. Men’s willingness to enter a casual relationship peaked at approximately 8 months. The earlier peak for casual relationships compared to committed relationships is also supportive of a cuckoldry avoidance explanation, as a committed relationship involves the greatest responsibility to provide physical and financial resources. Interestingly, there was no relationship between when a woman’s last relationship ended and a man’s willingness to enter a purely sexual relationship with her. This is also consistent with an evolutionary perspective, as there is very little investment required when following a quantity-oriented reproductive strategy. In other words, there is no risk of cuckoldry in seeking a purely sexual relationship.

For female participants, significant linear relationships between the set of predictors and willingness to enter a relationship were identified across all three relationship types, indicating that recent sexual relationships are also a concern for women. The linear nature of the relationships suggests that there is not a particularly crucial period during which women are especially wary regarding the length of time following the end of potential mate’s previous relationship.

Finally, men and women were asked to state the ideal amount of time they would like to have passed since a last relationship ended, this time period was shorter for men than for women. This finding substantiates past research which has shown that women, relative to men, are more selective and desire greater commitment before entering a relationship (Buss, 1994). However, although men did not desire as much time as women, the preferred amount of time for men was approximately 5 and one-half months. This time frame is well beyond the previously discussed point when most men believe they would be able to visibly perceive if a woman was pregnant.

In summary, we found several sex differences in the relationship of willingness to date a person and the time that had passed since that person’s last relationship, supporting the claim that psychological mechanisms maximize reproductive potential of each sex differently. First, the difference between men and women in the shape of the relationship between time and willingness is crucial. For men, the effect of time on willingness to enter relationships was curvilinear, as men should have particular concerns about cuckoldry in the first several months of a possible pregnancy. For women, the effect of time on willingness to enter relationships was linear, because they do not have any reason to place particular emphasis on the first several months. Willingness to enter a sexual relationship was also significantly affected by the passing of time for women, which was not the case for men. This finding is also consistent with evolved mechanisms, because for women, the potential for pregnancy and a need to secure resources is present in all relationship types, whereas for men in a purely sexual relationship, investment into offspring is less likely.

The present results have important implications for bridging proximate and ultimate explanations of partner selection and mate preferences. Social learning theorists have explained negative attitudes toward those with previous sexual experience as the
Recent sexual activity

results of learning and socialization (Delamater, 1989; Gagnon & Simon, 1973; Howard, Blumstein, & Schwartz, 1987). For example, social factors theory suggests that religion, parents, and other authority figures teach children that having multiple sex partners is morally wrong (Howard et al., 1987). Similarly, proponents of sexual script theory suggest that individuals are socialized to follow sexual scripts designating appropriate sexual behaviors. Those who deviate from these scripts will be perceived negatively by their peers (Delamater, 1989; Gagnon & Simon, 1973). In addition to the evolved psychological mechanisms we have been emphasizing, it is likely these social factors also contribute to the relationship between sexual recency and mate desirability. The present findings may help us frame these two explanations as complementary proximate and ultimate mechanisms for attitudes and behaviors. It is entirely plausible that underlying psychological mechanisms for cuckoldry avoidance lead to negative attitudes about promiscuous behavior which in turn lead to social stigmas and learned responses to individuals with a more unrestrained sexual history. Further research in this area will be needed to begin to bridge these two fields. It is our hope, however, that the unique approach taken by the current investigation will help foster additional research from both perspectives.

Strengths and Limitations

The use of an online survey allowed us to gather a more diverse sample in terms of age, ethnicity, and socioeconomic status than a convenience sample of undergraduates. Online surveys also provide a greater sense of anonymity than person-proctored studies, which is especially important considering the personal nature of sexuality-based questions (Kiesler & Sproull, 1986; Richman, Kiesler, Weisband, & Drasgow, 1999). Additionally, participants were informed that they would receive personalized feedback about their responses at the end of the survey, which promotes more accurate responding in order to ensure correct feedback (Gosling, Vaziar, Srivastava, & John, 2004).

One limitation to this study is the artificial nature of the dating scenario. This was necessary in order to control for all the other variables that could affect willingness such as age, attractiveness, and shared interests, and to make certain the evaluation was based primarily on the manipulation of elapsed time since last sexual relationship. However, as with any study of this nature it is difficult to make generalizations about real-world responding. Moreover, exploring an unstudied phenomenon with a person-perception study can serve as a cost-efficient precursor to more ecologically valid future studies.

An additional limitation is that in a real-life scenario, many other variables such as who ended the prior relationship, how long the relationship lasted, post relationship grief (see Morris & Reiber, 2011), and the possibility that there are lingering feelings between the previous couple would most likely also influence a new partner’s willingness to enter a relationship. Moreover, even if the length of time since a relationship ended is known, this does not preclude the fact that casual or other sexual encounters may have occurred in the interim. Nonetheless, examination of participant responses based on the information known is still an important part of explaining human behavior, and an important early step in a generative research program.

It is also important to note that the majority of participants were American, Caucasian, and relatively young. As different cultures, ethnicities, and age groups have more or less strict standards regarding the acceptability of sexual relationships outside of marriage, the generalizability of the present results should be interpreted with caution.
Future studies on this topic should strive to include participants from a wider variety of demographic backgrounds, in order to better separate the influence of evolution as opposed to socialization. Finally, it is necessary to acknowledge that despite the statistically significant findings, the models had a fairly low degree of explanatory power. Nonetheless, the present study is an important first step in elucidating the relationship between the length of time since one’s last relationship or sexual activity and his or her desirability as a potential mate.

Future Directions and Conclusions

Although our findings add to evolutionary explanations of attitudes toward past partners, negative attitudes toward promiscuity can still be explained from many alternative perspectives. Concern over jealous ex-lovers, undiagnosed sexually transmitted diseases, or learned attitudes toward promiscuous behavior could be the primary factors motivating past findings about negative attitudes toward promiscuity, and many of these explanations could also account for concerns over more recent sexual relationships.

Future work in this area may serve to bridge the gap between ultimate and proximate mechanisms by simultaneously manipulating the number of previous sexual partners and the time since last relationship in order to tease apart the relative contribution of each to mate desirability. If social learning theory predictions hold, the number of partners should be the primary factor in mate desirability. If predictions made by evolutionary theory hold, the number of partners should matter less than time since last relationship. The interaction between the two variables may also serve to further illuminate the relationship between these two important variables.

In closing, it is evident that a person’s past sexual history is an important indication of their value as a potential mate (reproductively speaking). Past sexual histories were of great significance to our ancestors, and it is important to understand how they affect present day attitudes and behavior towards others. Our research presents a new variable that we hope inspires further evolutionary research and provides an incentive for collaboration between evolutionary and social psychologists.

Received September 27, 2011; Revision received March 31, 2012; Accepted July 26, 2012

References

Recent sexual activity


Recent sexual activity


