

Sex Differences in Self-reported Infidelity and its Correlates

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Abstract We examined sex differences in the prevalence, incidence, reasons for, and consequences of infidelity. Participants (Study 1, 543 undergraduates in the North-western US; Study 2, 313 undergraduates and 233 community members in the Mid-Atlantic US), reported on infidelity by questionnaire. Using a broad definition of cheating, women reported being as unfaithful or more unfaithful than men. Men were more suspicious about cheating and more likely to discover the cheating than women. Women were more likely to break up with their partners, to begin new relationships after cheating, and to report reasons for cheating that may indicate a desire to switch long-term mates, such as being unhappy in the current relationship. Results are discussed in the context of evolutionary theory.

Keywords Sex differences in infidelity · Correlates of infidelity · Evolutionary psychology · Parental investment theory

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Infidelity or “cheating” in romantic relationships has devastating consequences. Having been cheated on can result in anguish, depression, fury, and humiliation (Buunk and van Driel 1989; Daly and Wilson 1988; Lawson and Samson 1988) and is associated with major depression and anxiety (Cano and Leary 2000). Infidelity (real or suspected) is the leading cause of divorce (Betzig 1989) and of wife-battering and wife-killing (Daly and Wilson 1988). Further, it is considered one of the most challenging issues to treat in couples’ therapy (Whisman et al. 1997). Yet, as noted in several recent papers (Blow and Hartnett 2005; Wiederman 1997; Wiederman and Hurd 1999), the research literature on infidelity does not provide adequate information about individuals’ reasons for infidelity and its impact on the primary relationship. Evolutionary theory, in particular, Parental Investment Theory (Trivers 1972), suggests reasons for sex differences in the occurrence of infidelity, as well as the motivations for and the consequences of cheating. In the current study, we explore these potential sex differences by asking participants who have cheated to report on the surrounding circumstances via anonymous questionnaire.

One robust finding in the literature is that of a sex difference in infidelity: men appear to engage in infidelity more often than women across cultures (e.g. Greeley 1994; Wiederman 1997). However, this sex difference seems to be attenuated when infidelity is defined as encompassing a variety of behaviors rather than just intercourse, particularly in younger cohorts (Drigotas et al. 1999; Oliver and Hyde 1993; Wiederman 1997). To better understand infidelity in the contemporary adult population, it is important to re-examine this sex difference. Further, despite findings for sex differences in incidence and/or prevalence, we know surprisingly little about sex differences in the sequelae of cheating and sex differences in individuals’ reasons for cheating.

Thus, in the current study, we have two main goals. The first goal is to re-explore sex differences in infidelity, using a broad definition of cheating and a contemporary sample of adults. The second goal is to learn more about sex differences in the correlates of cheating. In Study 1, we focus on the means of discovery of cheating and its impact on the primary relationship. In Study 2, we explore questions regarding individuals' reasons for having cheated. In both studies, we use anonymous self-report questionnaires to ask about participants' own instances of infidelity and their own and their partners' responses.

Infidelity and Evolution

Past research suggests that sex differences in sexual behavior can be better understood in the context of evolutionary theory (Bjorklund and Shackelford 1999; Buss 1995; Buss and Schmitt 1993; Kenrick et al. 1990). One particularly informative theory with regard to sex differences is Parental Investment Theory (PIT; Trivers 1972). This theory trades on the fact that women and men have different levels of obligatory investment in their offspring. Historically, women were obligated to invest a year or more of pregnancy and lactation for there to be any hope of the child surviving; while males can, but need not, invest more than the act of sex. Because of these different levels of minimal investment, men's and women's mating behaviors will differ in many ways. PIT argues that because a strategy of quantity over quality can be effective when obligatory investment is low, the lesser-investing sex (in humans, men) is more likely than the greater-investing sex (women) to engage in short-term mating with multiple partners. On the other hand, for the greater-investing sex, for which every healthy offspring requires a bare minimum of 9 months gestation, a quality over quantity strategy is more likely to emerge. A high-quality mate, in this context, is one likely to provide potential offspring both with healthy genes and with many years of protection and resources. Thus, it is unlikely that women use infidelity as a means of securing many short-term partners.

However, women do engage in infidelity (Blow and Hartnett 2005; Wiederman and Hurd 1999), likely deriving benefits that are different than those for men. One reason women may pursue infidelity is to mate-switch: to find a replacement partner without first giving up the security and protection derived from the current mate (Symons 1979). Greiling and Buss (2000) evaluated several possible hypotheses to explain female infidelity by asking individuals to rate the perceived benefits of a number of mating behaviors. Participants reported that benefits related to mate-switching, such as finding a more desirable partner, were both likely to be accrued by unfaithful women and

likely to be beneficial to unfaithful women. Also, the context seen as most likely to induce an affair in women was finding out that their current partner was having an affair. From these results, the authors concluded that the best-supported of all of the hypotheses was mate-switching. On the whole, PIT and related aspects of evolutionary theory may help to make sense of sex differences in the incidence, prevalence, and correlates (causes and consequences) of infidelity.

Sex Differences in Incidence and Prevalence of Infidelity

One of the most common findings in infidelity research is that males commit more acts of infidelity. These sex differences apply to the *prevalence* of infidelity (the number of individuals who report having cheated), and although studied less exhaustively, the *incidence* of infidelity (the number of cheating liaisons in which an individual engages). These sex differences appear regardless of the type of primary relationship (married or dating) and whether infidelity is measured in terms of what individuals "want to" do or "have" done (Blow and Hartnett 2005; Schmitt 2003).

Much of the previous research has focused exclusively on infidelity involving sexual intercourse (see Blow and Hartnett 2005), but interest in emotional or non-sexual infidelity is gaining momentum (Allen et al. 2005; Drigotas et al. 1999; Glass and Wright 1985; Wiederman and Hurd 1999), especially in the age of internet dating and the possibility of internet "infidelity" (Underwood and Findlay 2004; Whitty 2003). When definitions of cheating include non-intercourse behaviors such as kissing or dating, sex differences appear to be attenuated or disappear (Drigotas et al. 1999; Glass and Wright 1985; Wiederman and Hurd 1999). These behaviors, which are sexual or romantic in nature but fall short of intercourse, are still likely damaging to the relationship and certainly violate many people's expectations for their relationships. As evidence for this, Drigotas et al. (1999) asked college students if emotional and physical intimacy behaviors, including flirting, sharing feelings, and kissing, constituted infidelity. Most (76%) reported that they did. At the same time, non-intercourse infidelity does not carry any risk of producing offspring, and thus according to PIT might be less likely to show sex differences than infidelity involving intercourse. In order to better understand sex differences in infidelity and its correlates, it seems important to broaden the definition of infidelity.

In addition, sex differences in infidelity may be changing in recent years. Wiederman (1997) for instance, found that 23% of men and 12% of women had had an extramarital sexual affair. However, when they examined their data

separately for participants under the age of 40, the sex differences in infidelity disappear. Allen et al. (2005; see also Oliver and Hyde 1993) reviewed several studies showing a shrinking sex difference in successively younger cohorts. Therefore, any attempt to understand sex differences in the predictors and consequences of infidelity requires an up-to-date assessment of incidence and prevalence. Thus, one goal of this study was to examine sex differences in self-reported cheating, using a definition that encompasses any romantic and/or sexual involvement, including behaviors such as kissing, with a sample that included contemporary young adults.

Sex Differences in Correlates of Infidelity

Despite fairly numerous investigations of sex differences in infidelity, we know little about sex differences in the correlates of infidelity. Two aspects of infidelity that might differ for the two sexes include the manner and rate of detection. Sex differences in mating strategies (e.g., Trivers 1972) suggest possible differences in the degree to which the two sexes suspect their partners of cheating, the likelihood the cheating is discovered, and the manner in which it is revealed.

Men and women may be in an “arms race” of sorts when it comes to hiding and detecting infidelity, with each sex continually evolving better strategies for self-protection. The dangerous, often fatal consequences for women who are suspected of infidelity (Daly and Wilson 1988) may have led them to evolve effective strategies for disguising extra-pair involvement. Therefore, one might predict that females would be less likely than males to be discovered when they have cheated. On the other hand, males face a considerable risk of cuckolding (investing valuable resources in children who are not their own) if their partners are unfaithful. This may in fact help to explain males’ potent reactions to partners’ infidelity (Buss et al. 1992; Wilson and Daly 1992), and may further suggest that males are likely to detect cheating when it occurs (and also to suspect it even when it is not occurring). Further, if women are in fact likely to use infidelity to mate-switch, keeping the infidelity a secret may not be paramount. Considering both of these issues, we thought it important to measure differences in the rates at which men and women eventually learn about partners’ infidelity, and whether they do so on their own or by being told by their partners.

The ultimate impact of infidelity on the relationship, i.e., whether the couple remains together, may also differ depending on the cheater’s sex. Whereas men are more likely to respond to infidelity with violence (e.g., Daly and Wilson 1988; but see Haden and Hojjat 2006), women are more likely to respond by distancing themselves from the

relationship (Jankowiak et al. 2002). In addition, when Shackelford et al. (2002) asked participants to imagine scenarios in which they had been cheated on and to consider their potential responses, they found that men were more likely than women to endorse terminating a relationship following a partner’s sexual infidelity. We expect that individuals who have actually experienced infidelity will bear out this finding.

Women may also be more likely to terminate a relationship following their *own* infidelity, as a way to “trade up” for a better partner. Greiling and Buss (2000) addressed this question; however, their research, like many other valuable studies on infidelity such as those reviewed above, asked participants to *imagine* scenarios and make judgments about possible causes and outcomes. We wanted to investigate this question directly by asking about *actual* instances of infidelity. In Study 1, we asked participants who had engaged in infidelity how often the infidelity led to a new relationship with the extra-pair partner, hypothesizing that this would be more common for women. In Study 2, we asked individuals who had engaged in infidelity their reasons for doing so.

Predictions

By using a more encompassing definition of infidelity and by measuring a current young adult sample, we predicted that the previously reported sex difference would be attenuated for both prevalence (Hypothesis 1 [H1]) and incidence [H2] of infidelity. In terms of outcomes in the relationship after infidelity had occurred, we predicted that men would show more suspicion regarding infidelity in their partners [H3], and would be more likely to learn about infidelity [H4a], both by having it revealed by the cheating partner [H4b] and by discovering it themselves [H4c]. We also predicted that relationships were more likely to end after women’s infidelity than men’s [H5], and that women would be more likely to start a new relationship with the extra-pair partner [H6]. Finally, we predicted differences in the reasons men and women would give for their infidelity; specifically, we hypothesized that women would be more likely than men to endorse reasons related to mate-switching while men would be more likely to endorse reasons relating to variety-seeking [H7]. In Study 1, we focus on the outcomes in the relationship: suspicion; rate and methods of discovery of the cheating; rate of termination of the primary relationship; and rate of initiation of a new relationship with the extra-pair partner [H1-6]. In Study 2, we broaden our participant range, in terms of age and ethnic diversity, and we ask an additional question about the reasons for the infidelity [H7].

Study 1

Method

Participants

Five hundred sixty-one students (391 female; 170 male) at a large university in the Pacific Northwest comprised the sample. While ethnicity information was not collected, the student population at the time was approximately 87% Caucasian, 6% Asian or Pacific Islander, 3% Hispanic, 2% African American, 1% Native American, and 1% multi-ethnic or unknown (<http://diversity.uoregon.edu/stats.htm>). Participants received partial course credit for participating. In the second of two data collection sessions ($n=304$), we queried marital status, age, and sexual orientation. Two were married, two were divorced, and one was widowed; the rest (99.0%) reported being never-married. Eighteen reported being homosexual, bisexual, unsure, or other; the rest (94%) reported being heterosexual. A comparison of the Study 1 session 2 data with and without non-heterosexual participants revealed that inclusion of non-heterosexual participants did not change any of the findings. Therefore, we decided to retain responses from non-heterosexual participants. Ages ranged from 17 to 36; the average age was 19 ($SD=2.37$).

Measures

Participants received a packet of questionnaires, containing measures from a number of different research labs. The section of the packet relevant to this study contained demographics questions, followed by eight questions regarding infidelity, or “cheating” in romantic relationships.

For the purposes of this study, cheating was defined as “any form of romantic and/or sexual involvement, short or long-term, including kissing, while the individual is in a relationship with another person. A *cheating episode* is defined as each different time an individual becomes involved with someone else. An episode can be an ongoing affair or a one-night stand. Cheating on a partner with one person multiple times will count as a single episode. Cheating on two different partners with the same person will count as two episodes.”

Participants who said they had cheated were then asked a number of follow-up questions. First they answered how many cheating episodes they had had. Next, they were asked to report the number of episodes in which the partner was suspicious of the infidelity; the number of times the partner found out about the infidelity; the number of times the partner found out because the participant told the partner; the number of times the partner found out on his or her own; the number of times the infidelity led to the

original relationship ending; and the number of times the infidelity led to a new relationship with the individual with which the participant had cheated (the extra-pair partner, or EPP). The complete questionnaires used in Studies 1 and 2 are available on request from the first author. Responses regarding the discovery and outcomes were then divided by the number of episodes, to create a proportion of cheating episodes in which each relevant event occurred.

Procedure

Participants filled out questionnaires in large groups (approximately 300 students). Upon arrival, participants were handed a packet of questionnaires and were seated in an auditorium-style classroom. Participants were informed that all information collected was confidential and that completing the questionnaires constituted consent to participate. Unlike other portions of the packet, the portion corresponding to this study was marked with instructions *not* to include an assigned subject number, so that this study was completely anonymous. Participants were told that the different questionnaire segments would be retrieved by different research labs, so even if they provided identifying information somewhere in the packet, it could not be matched up to information they provided in the cheating questionnaire.

Results and Discussion

Of the 561 participants, 157 reported having cheated, 383 reported never having cheated, and 21 failed to answer any infidelity questions. Of those who said they had cheated, the number of episodes ranged from 1 to 40, $M=2.65$, $SD=3.85$, Median=2. As is often found in sex research, some participants reported extreme values for cheating behaviors. To ensure that our findings were not driven by the presence of outliers in the data, all analyses were repeated removing any outliers (± 3 SD). All findings were the same. (This is despite the fact that all the outliers were men, which is reflected in the dissimilar variances on most measures.) For the remaining comparisons, we excluded the 21 participants who did not answer any infidelity questions, leaving a sample of 540 (373 women; 167 men).

To address the first hypothesis [H1], we examined whether there was an overall sex difference in the percentage of men and women reporting having ever cheated (prevalence). Consistent with our hypothesis, we did not find men reporting infidelity more than women; in fact, we found a trend toward more women (31.4%) reporting infidelity than men (24.0%), Pearson’s chi square=3.08 $p=.08$. To address H2, we examined sex differences in the incidence of infidelity. Also consistent with our hypothesis, we found no significant difference in

incidence; those men who cheated reported an average of 3.79 episodes ($SD=6.59$), while those women who cheated reported an average of 2.26 ($SD=2.20$), independent-samples $t=-2.17$, *ns* (all t -tests reported here use Levene's correction for unequal variances).

Looking just at the respondents who reported cheating, we next examined sex differences in the reported consequences of infidelity using independent-samples t -tests. Recall that these data represent the cheating individuals' account of relationship events as a proportion of cheating episodes. We predicted that, relative to women, men would be more suspicious [H3] and that men would be more likely to find out about the infidelity [H4a], both by hearing about it from their partners [H4b] and by discovering it on their own [H4c]. We found support for all of these hypotheses. According to the cheating partners' report, women's partners (typically men) ($M=.28$, $SD=.41$) were more likely to be suspicious of the infidelity relative to men's partners (typically women) ($M=.11$, $SD=.25$), $t(153)=3.04$, $p=.003$ [H3]. Women's partners were also more likely to find out about the infidelity ($M=.44$; $SD=.43$) than men's partners ($M=.22$, $SD=.39$), $t(73.5)=3.00$, $p=.004$ [H4a]. Examining the two ways of learning about the infidelity, women's partners were marginally more likely to find out because the infidelity was revealed by the cheater ($M=.33$, $SD=.42$) than men's partners ($M=.19$, $SD=.38$), $t(61)=1.79$, $p=.08$ [H4b], and were also more likely to find out by discovering it on their own ($M=.17$, $SD=.34$) than were men's partners ($M=.05$, $SD=.18$), $t(102.5)=2.57$, $p=.012$ [H4c].

Consistent with our hypothesis, women's relationships were more likely than men's to break up after their own infidelity ($M=.35$, $SD=.42$ versus $M=.15$, $SD=.31$), $t(87.8)=3.16$, $p=.002$ [H5]. However, we found no support for our hypothesis that women were more likely to begin a new relationship with the extra-pair partner, (for women, $M=.21$, $SD=.35$, for men, $M=.25$, $SD=.36$), $t(111)=-.52$, *ns* [H6].

In sum, Study 1, using a sample of university undergraduates, revealed no sex differences in favor of men regarding the incidence or prevalence of infidelity. In fact, we saw a trend that women were more likely to have committed infidelity. In Study 2, we made four changes to further explore these non-significant findings. First, we recruited a more diverse sample in terms of age range and other demographics, by recruiting nearly half the overall sample from a non-student community. Second, in order to examine whether our findings may have been due to the broader definition of infidelity we used, in Study 2 we asked each question both about infidelity in any form *and* about infidelity that involved sexual intercourse. This allows us to better compare our findings with those reported in previous studies. Third, we clarified the definition of infidelity by adding the following text: "If you are in a relationship with Chris, but had a one-night stand with

Alex, then this counts as one cheating episode. If, later in your relationship with Chris, you have a 2-week affair with Pat, then this also counts as a single episode. So, in this scenario, you would have had two cheating episodes." We felt that being concrete in our definition would help ensure that men and women were defining infidelity in the same way. Finally, although Study 1 results were the same with and without non-heterosexual subjects included, in Study 2, to better focus our study on male–female relationships, we specified that questions were about cheating in *heterosexual* relationships, so participants would not include responses regarding non-heterosexual relationships.

In Study 1, despite roughly equal rates of infidelity between the sexes, we found striking evidence for sex differences in the consequences of the infidelity: Women's partners were more likely to find out about the infidelity, by any means, and women were more likely to break up with their partner after their own fidelity. In Study 2, we wanted to learn more about these differences, so we expanded our sample and also asked individuals to tell us their reasons for cheating when they did so.

Study 2

Method

Participants

Five hundred forty-six people participated in Study 2. Of these, 313 were students from two universities in the Mid-Atlantic region (178 female, 135 male); 233 were members of the surrounding urban and suburban communities (104 female, 129 male). Their age ranged from 17 to 78; the mean age was 24 ($SD=10.28$). Eighty-six percent were never-married; 10% were married; 3% were divorced or separated; less than 1% were widowed. Ethnicity was reported as 73% Caucasian, 7% Asian or Pacific Islander, 5% Hispanic, 10% African American, and 4% "other."

Student participants were recruited through the student subject pool at their respective universities and received partial course credit for participating. Community participants were recruited in public places, such as train stations and coffee shops, by trained research assistants. Community participants were not compensated for their participation.

Measures

Participants filled out a questionnaire including demographics and infidelity-related questions. We queried sex, age, marital status, and ethnicity. In the infidelity questionnaire, we asked the same questions as in Study 1 regarding incidence, prevalence, suspicion, discovery, and relationship status.

However, two answer spaces were provided for questions related to incidence and prevalence: one for all cheating, and one for cheating involving sexual intercourse. Finally, we asked participants why they had cheated on their partner, and allowed them to select as many options as applied. Possible answers were: I was unhappy in my relationship; I was bored in my relationship; an opportunity to cheat on my partner presented itself, so I went for it; my partner had already cheated on me; I was attracted to the person I had the cheating episode with; the person I had the cheating episode with made me feel attractive; my romantic partner no longer looked attractive to me; my romantic partner no longer excited me sexually; the relationship I was in was about to end anyway; I wanted to end the relationship I was in; there was no real reason why I cheated on my romantic partner. We also provided an “other” option (there were no reliable patterns in these “other” responses).

Procedure

Students were greeted as they arrived at the research appointment. Students filled out the questionnaires individually or in classrooms in groups of up to four individuals in which they were sufficiently spaced apart from one another to allow privacy. Community participants were approached by researchers and asked if they had a moment to fill out a short survey on relationships. All participants were informed that the questionnaire asked some private questions about cheating in relationships and were ensured that the questionnaire was anonymous. When participants were finished, they placed their questionnaires in a sealed box and the researcher answered any questions. In order to protect anonymity, the data was not extracted from the box until over 100 surveys had been completed.

Results and Discussion

Of 546 total subjects, 233 reported cheating, 285 reported never having cheated, and 28 did not answer any cheating questions. Of those who had cheated, the range of episodes was 1–100, with a mean of 4.35, $SD=9.92$, and a median of 2. As in Study 1, analyses in Study 2 were repeated removing any outliers (± 3 SD) and all findings remained the same.

In order to address H1, we compared the prevalence of infidelity in men and women. Contrary to previous studies, but consistent with our hypothesis, we found that more women than men endorsed cheating by our definition, with 50.6% of women endorsing having cheated and only 39.3% of men doing so, Pearson's chi square = 6.65, $p=.01$. When examining this question specifically with regard to cheating involving intercourse, we found no sex difference in

prevalence, with 19% of women and 21% of men reporting intercourse cheating, Pearson's chi square = .175, *ns*.

In order to address H2, we compared the incidence of infidelity for men and women. Contrary to our hypothesis but consistent with previous research, of those who cheated, men report more cheating episodes on average ($M=6.61$, $SD=14.53$) than women ($M=2.66$, $SD=2.58$), $t(101.7)=-2.66$, $p<.001$ [H2] although the median for both groups was 2. Men also report more episodes of infidelity involving intercourse ($M=3.16$, $SD=6.58$, median 2) than women ($M=1.31$, $SD=1.89$, median 1), $t(82.2)=-2.32$, $p=.023$ [H2b].

To address Hypotheses 3–6, we explored the consequences of infidelity for men versus women. We predicted that, relative to women, men would be more suspicious [H3] and that men would be more likely to find out about the infidelity [H4a], both by hearing about it from their partners [H4b] and by discovering it on their own [H4c]. Contrary to our hypothesis and to Study 1, we did not find that men were more suspicious [H3] or that they found out about the cheating more, in general [H4a] or on their own [H4c]. According to the cheating partner, women's partners ($M=.47$, $SD=.04$) were equally suspicious as men's partners ($M=.39$, $SD=.04$), $t(220)=1.10$, *ns* [H3], and were as likely as men's partners to find out about the cheating (for men, $M=.44$, $SD=.04$; for women, $M=.40$, $SD=.04$), $t(219)=1.59$, *ns* [H4a], and to find out by discovering it on their own (for women's partners, $M=.31$, $SD=.03$; for men's partners, $M=.28$, $SD=.03$), $t(203)=.35$, *ns* [H4c]. However, consistent with Study 1, we found that as a proportion of cheating episodes, women were more likely to tell on themselves than men (for women, $M=.49$, $SD=.05$; for men, $M=.38$, $SD=.04$), independent samples $t(204.5)=2.43$, $p=.016$ [H4b].

Consistent with our hypothesis, we found that women were marginally more likely to break up with the partner after they themselves had cheated (32% of episodes compared to only 22% for men), $t(199.8)=1.85$, $p=.066$ [H5]. As predicted, but unlike Study 1, we found that women were significantly more likely to begin a new relationship with the extra-pair partner than were men (22 versus 11%), $t(133.7)=2.24$, $p=.027$ [H6].

In order to address H7, we also queried those who had cheated to examine their reasons for infidelity. We predicted that, relative to men, women would more likely endorse reasons for cheating that indicated a desire to switch long-term mates. Our findings are consistent with this prediction. Specifically, two reasons showed significant sex differences: Women were more likely to report cheating because they were unhappy in current relationship (53.0%) than men (28.6%), Pearson's chi square=11.7, $p=.001$. In addition, women were more likely report cheating because they were made to feel attractive by the extra-pair partner (41.0%) than men (19.8%), Pearson's chi square=10.0, $p=.002$.

Interestingly, we found that the overall profiles of responses for men and women were fairly similar. Men's

Table 1 Reasons endorsed for cheating by sex (percent).

	Females	Males
Unhappy in current relationship ^a	54.6	27.4
Bored in current relationship	40.2	42.9
Opportunity presented itself	25.0	32.1
Partner cheated	14.4	16.7
Attracted to EPP	67.0	66.7
EPP made me feel attractive ^a	42.3	20.2
Not attracted to partner	14.4	8.3
Not excited by partner	17.5	13.1
Relationship ending	26.8	16.7
Wanted to end relationship	22.7	17.9
No real reason	15.5	16.7

Percents do not sum to 100 because participants could endorse multiple reasons.

^a Significant sex difference, $p < .01$

top five reasons, in rank order from most-endorsed to least-endorsed (each endorsed by more than 20% of men), were: felt attracted to the EPP, was bored in the current relationship, saw an opportunity and took it, was unhappy in current relationship, and was made to feel attractive by the EPP (see Table 1). Women's top five reasons, in rank order (each endorsed by more than 25% of women), were: felt attracted to the EPP, was unhappy in current relationship, was made to feel attractive by the EPP, was bored in the current relationship, and the relationship was ending anyway. This suggests that, at least in terms of the available options in this study, men and women tend to offer similar justifications for their cheating behavior.

General Discussion

The aims of this research were twofold: to re-explore sex differences in infidelity taking care to define infidelity to allow for different "kinds" of infidelity (e.g., kissing versus sexual intercourse) and to examine correlates of infidelity in terms of both potential causes and consequences. By examining two relatively large samples, including both student and community participants, we are able to reach some general conclusions which are consistent with the framework of evolutionary theory.

Our findings regarding the incidence and prevalence of infidelity among men and women were generally consistent with our first and second hypotheses [H1 and H2]. Our findings suggest that, overall, men were not more likely to cheat on their romantic partners than women. In fact, in both Study 1 and 2, women appeared to be the more likely sex to report a higher prevalence of infidelity. Our findings seem to indicate that past sex differences reported in this

literature may be misleading or outdated. The specific definitions of cheating used in this research and the inclusion of non-intercourse behaviors as cheating behaviors may at least partially account for the finding that women were likely to report infidelity. It is also possible that we are picking up on a cohort effect. The expression of female sexuality is increasingly depicted in popular culture (e.g., television) as appropriate; virginity is not prized as it once was (Buss et al. 2001; Hoyt and Hudson 1981). Thus, women may find themselves feeling free to partake in not only multiple sexual relationships throughout their lifetime, but perhaps multiple romantic and sexual relationships at the same time, regardless of their current relationship status. Although many factors may contribute to this shift in values, one possible explanation is the rise of divorce in America in the last 100 years (Pinsof 2002). Some evolutionary theories predict that unstable childhood circumstances, such as those brought on by divorce and poverty, influence girls to engage in more short-term and promiscuous mating strategies (Chisholm 1999; Draper and Harpending 1982).

Regarding sex differences in incidence, Study 2 (but not Study 1) revealed that men reported more episodes of infidelity than women. This finding is consistent with Parental Investment and related evolutionary theories (Buss and Schmitt 1993; Trivers 1972). As mentioned in the Introduction, males may be more likely than females to choose a quantity over quality strategy. Males also can (unconsciously, perhaps) choose from several mating strategies (Gangestad and Simpson 2000). One strategy is to offer the resource of exclusive investment in one female (that is, to be monogamous). A different strategy, perhaps available only to higher-resource or attractive men (Ridley 1993), is to mate widely with many different women, even when currently engaged in a long-term relationship. While approximately equal numbers of men and women in our study appear to be cheating, typically, men who were unfaithful cheated many times, consistent with a strategy to "spread their seed." Those women who were unfaithful, however, tended to cheat only a few times, which is more consistent with the possibility that they are cheating in order to try out or trade up to new partners. This relatively low number of cheating episodes in women emerged despite the fact that our measurement of cheating episodes may have inflated estimates of female cheating relative to previous studies (see Blow and Hartnett 2005). In particular, while prior research asked individuals for the number of extra-pair partners, we asked for episodes, defined by a change in either the primary *or* secondary partner. This resulted in a new cheating episode being counted when a participant returned to the same cheating partner across two or more long-term relationships. Women seem more likely to engage in long-term (although adulterous) relationships while men are more likely to engage in one-night stands

(Schmitt 2003). Despite this change in measurement tactic, we found that men reported more episodes on average, even though they did not have higher prevalence overall.

Our third and fourth hypotheses [H3 and H4] focused on potential sex differences in suspicion of infidelity and discovery of a partner's infidelity. Results from Study 1 and 2 were not completely consistent, but suggest that men may be more likely to be suspicious of infidelity (Study 1) and that women are more likely to tell their partners when they are unfaithful than are men (both Study 1 and 2). These findings are consistent with evolutionary explanations suggesting that it may be adaptive for men to determine if their partner has been unfaithful so that they do not invest resources in the relationship and in providing for offspring that may not be theirs. Further, the fact that women may reveal their infidelity may be due in part to their interest in terminating the relationship; it may be adaptive for them to trade-up from their current partner to a more resourceful partner.

Hypotheses 5, 6 and 7 focused on the consequences of infidelity and support the notion that men and women may cheat for different reasons. Consistent with our hypothesis [H5], women's relationships were more likely than men's to break up after their own infidelity. Further, consistent with H6 we have some evidence (Study 2) that women may be more likely to begin a new relationship with their extra-pair partner than are men. Both of these findings support the idea that women are cheating to mate-switch. Hypothesis 7 was concerned with examining sex differences in reasons provided for infidelity. Although men and women reported many of the same reasons for cheating (that they were attracted to the extra-pair partner, that they were bored or unhappy in the current relationship), there were also some telling differences. One of men's top-five responses that did not appear in women's top-five was that they cheated out of opportunity. This is consistent with the possibility that at least some men are pursuing a strategy of quantity, mating with multiple partners without a lot of regard for quality. On the other hand, women were significantly more likely than men to report cheating because they were unhappy in the current relationship and because they were made to feel attractive by the extra-pair partner. Both of these reasons are consistent with women cheating as a way to find a better, more attentive partner than their current mate.

Limitations

Although studies examining sex differences in correlates of infidelity are surprisingly scarce, the findings presented here should be tempered with an understanding of their limitations. First, this research necessarily relies on self-report measures. Given the sensitive nature of the topic under investigation, it is possible that participants were not completely truthful in their responses. However, given that

a more reliable method of querying participants about infidelity is not available, and that we carefully guarded participants' responses in a number of ways to ensure confidentiality (see *Method*), we are fairly confident that self-report biases would not alter these findings in any consequential way.

Another limitation of the self-report methodology used here is that participants are being asked to report about their partners' suspicion and discovery, about which they may not have full, unbiased knowledge. It may be, for instance, that women discover their partner's infidelity at rates that are equal to men, but for some reason, do not let on to their partners that they have discovered it. For this reason, methodologies in which both partners are asked about the same situation would be particularly valuable, because they allow each partner to corroborate (or call into question) the other's version of events.

The findings reported here are correlational in nature; thus, while they are consistent with causal theories, such as women cheating *because* they are unhappy and seeking better long-term mates, they do not allow us to draw causal conclusions. Further, while we have no reason to suspect our participants were actively deceiving us with regard to their responses, we were asking them to report justifications for behavior they may feel is wrong. Findings could potentially reflect differences in the degree to which each sex makes self-justifications of various sorts (i.e., "I cheated because I was unhappy in my relationship") rather than, or in addition to, true differences in the causes of the behavior. Prospective, longitudinal studies of dating and marriage may be the best way to understand the time course of causes and effects of infidelity.

The present research is also limited in its inability to fully explore age and cohort in relation to the causes and consequences of infidelity. Although our samples were relatively large, the percent of participants who were not young adults (>30 years old) was relatively small (approximately 7%), making a reasonable comparison of young adults' experiences of infidelity and older adults' experiences of infidelity impossible.

Conclusions

Popular culture conceptualizes women as loyal, faithful caretakers of the men in their lives, while men are conceptualized as creatures with uncontrollable urges that force them to "sow their seed." Past research has also suggested that men are more likely to be unfaithful than women. However, the present findings suggest that this notion may be old-fashioned and outdated. Our findings suggest that women do not appear to be altogether less likely to be unfaithful than men. Future studies are needed to clarify whether our inclusive definition of infidelity primarily

accounts for these findings, whether women are truly shifting in their sexual behavior over time, or perhaps both.

Despite equal prevalence of cheating, our findings support the idea that men and women may cheat for different reasons. Men who cheat seem likely to be pursuing a quantity-over-quality strategy; if they select cheating as a strategy, they may do so merely out of opportunity, with many different women. Women, on the other hand, may be using infidelity to mate-switch; rather than cheating indiscriminately with a large number of men, they may be selective in choosing a better potential long-term mate, specifically one who will make them happier than their current partner and will validate their attractiveness. Thus, while infidelity may have devastating consequences for both men and women in relationships, different measures may be effective in preventing men's and women's cheating behaviors and different ramifications may follow men's versus women's acts of infidelity.

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