
Sex, Lies, and Strategic Interference: The Psychology of Deception Between the Sexes

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The desires of one sex can lead to deceptive exploitation by the other sex. Strategic Interference Theory proposes that certain “negative” emotions evolved or have been co-opted by selection, in part, to defend against deception and reduce its negative consequences. In Study 1 (N = 217) Americans reported emotional distress in response to specific forms of deception. Study 2 (N = 200) replicated the results in a German sample. Study 3 (N = 479) assessed Americans’ past experiences with deception and conducted additional hypothesis tests using a procedure to control for overall sex differences in upset. Each study supported the hypothesis that emotions track sex-linked forms of strategic interference. Three clusters of sex differences proved robust across studies—emotional upset about resource deception, commitment deception, and sexual deception. We discuss implications for theories of mating and emotion and directions for research based on models of antagonistic coevolution between the sexes.

Keywords: *deception; sexual strategies; evolutionary psychology; strategic interference; antagonistic coevolution*

Cooperation between a man and a woman is virtually a requirement for successful reproduction. From courtship through child rearing, selection should favor the evolution of strategies for the successful coordination of a man’s and a woman’s efforts. A mate provides an indispensable genomic complement for producing offspring. Offspring become the shared vehicles for both man and woman, their genetic fate inextricably intertwined. Women benefited historically in the currency of fitness when a man invested parentally in their children, just as men benefited historically when a woman invested

parentally in their children (Symons, 1979; Trivers, 1972). Shared genetic fate through shared vehicles, in short, should create powerful selection pressure for cooperation between a man and a woman.

Few things are more obvious, however, than the fact that conflict between the sexes is pervasive. An evolutionary perspective provides compelling explanations about why. To start with, conflict between the sexes must be understood within the broader context of conspecific conflict. Aside from identical twins, the genetic interests of each individual are never identical to the genetic interests of any other individual. As Symons (1979) notes,

The interests of individual human beings conflict with one another, whether “interests” are understood in the ultimate genetic sense or in the proximate sense of motives and goals. . . . The most fundamental, most universal double standard is not male versus female but each individual human versus everyone else. . . . In an ultimate sense, this double standard results from the fact that, among sexually reproducing organisms, every

Authors’ Note: The authors thank Jennifer Semmelroth for help with Study 1; David Beaulieu, Emily Cowley, Melissa Iseri, Gary Shteynberg, Hsuchi Ting, and Holly Ann Wood for help with Study 3; April Bleske, Josh Duntley, Barry Friedman, Shelly Gable, Gian Gonzaga, and Anne Peplau for helpful comments on a previous draft of this article; and Michael Mitchell for statistical advice. Correspondence should be addressed to Martie G. Haselton, University of California, Communication Studies Program, 334 Kinsey Hall, 405 Hilgard Ave, Los Angeles, CA 90095; e-mail: haselton@ucla.edu.

PSPB, Vol. 31 No. 1, January 2005 3–23

DOI: 10.1177/0146167204271303

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conspecific is to a greater or lesser extent one's reproductive competitor. (pp. 228-229)

An important evolutionary premise is that complete alignment of interests among individuals is rarely possible; conspecific conflict is predicted to pervade group-living organisms.

This general evolutionary expectation for conspecific conflict, however, fails to provide a sufficiently precise explanation for unique aspects of conflict between the sexes that are not shared by other interacting members of a species. Although each individual can be considered a reproductive competitor with other conspecifics, *it is primarily between members of the same sex that reproductive competition is most intense*. Men compete primarily with other men for access to desirable women and for access to the resources and status that women find desirable in men (Buss, 1988, 2003). Similarly, women compete with other women for access to desirable men. Both sexes derogate their same-sex competitors with verbal slurs that are surprising only in their subtlety and viciousness (Buss & Dedden, 1990; Campbell, 2002). If reproductive competition is most intense within the sexes, why is conflict between the sexes so ubiquitous?

Strategic Interference Theory

One answer comes from Strategic Interference Theory (Buss, 1989a). According to this theory, men and women have recurrently confronted different adaptive problems. Some of these differences derive from the fact that fertilization occurs internally within women. Women bear the burdens and pleasures of a 9-month obligatory parental investment to produce a child that can be produced by a man from a single act of sex. These differences have resulted in the evolution of divergent sexual strategies between the sexes (Symons, 1979; Trivers, 1972). Evidence suggests that women, for example, have evolved to desire men with status and resources, whereas men across the globe place less emphasis on these qualities (Buss, 1989b; Sadalla, Kenrick, & Vershure, 1987). Because status and resources are especially important to women in securing long-term paternal investment for their children, women tend to impose longer courtship than men typically desire prior to consenting to sex. Women seek men who have access to status and resources, but they also seek men who are willing to commit those resources over the long run (Buss, 2003).

The large sexual asymmetry in obligatory parental investment also has produced one of the largest psychological sex differences ever documented—a sex difference in the desire for sexual variety (Oliver & Hyde, 1993; Schmitt, 2003; Symons, 1979). Although both sexes have evolved short-term and long-term mating

strategies, men's short-term mating "looms larger" in their strategic repertoire—it typically has greater motivational impetus and attendant design features, such as mechanisms to evaluate sexual availability, that facilitate its success (Buss, 2003; Schmitt, 2003). Dozens of studies have verified this sex difference. Men more than women desire a larger number of sex partners over various time intervals, are more likely to consent to sex with an attractive stranger, have twice as many sexual fantasies, are more likely to patronize prostitutes, and relax their standards for a partner more in the short-term context (Buss, 2003). These findings have now been replicated across 10 world regions in a study of 52 nations from around the world (Schmitt, 2003). In sum, men and women have confronted different adaptive problems over the long course of human evolutionary history and as a consequence have evolved different sexual strategies.

According to Strategic Interference Theory, conflict occurs when the strategies enacted by one person interfere with the desires, goals, or successful enactment of strategies by another (Buss, 1989a). To take a single example, if a man desires a particular woman as a short-term mate and deploys seduction strategies accordingly (e.g., feigning long-term interest), whereas that woman desires the man as a long-term mate, then his strategies will interfere with the successful attainment of her goal.

Strategic interference itself constitutes a profound adaptive problem, and so selection should favor the evolution of solutions that reduce its impact. According to Strategic Interference Theory (Buss, 1989a), the "negative" emotions of anger and upset have evolved or have been co-opted by selection, in part, as solutions to the problems of strategic interference (also see Mandler, 1975). When a person's goals, desires, or strategies are blocked, the arousal of anger and subjective distress are proposed to serve four functions: (a) drawing attention to interfering events, (b) marking those events for storage in memory, (c) motivating actions that reduce or eliminate the source of strategic interference, and (d) motivating memorial retrieval and hence subsequent avoidance of contexts producing future interference (Buss, 1989a). This theory suggests that events that interfere with an individual's favored sexual strategy activate negative emotions. To the degree that men and women pursue somewhat different sexual strategies, the sources of interference will differ for the sexes (see Buss, 1996, 2000, 2003, for more extensive elaborations of Strategic Interference Theory).

Sex Differences in Emotional Distress Due to Intersexual Deception

Previous research has discovered sex differences in which acts of deception men and women are likely to perform in mating contexts. Tooke and Camire (1991),

TABLE 1: Summary of Predictions and Empirical Support Across Studies

Prediction No. and Deception Form	Pattern Predicted	Confirmed		
		Study 1	Study 2	Study 3
1. Resource deception	women > men	+	+	+ (LT only)
2. Exaggerated status	women > men	+	+	+ (LT only)
3. Presex commitment deception	women > men	+	+	+
4. Sexual deception (being “led on”)	men > women	+	+	+
5. Postsex commitment deception	women > men	+	+	+
6. Already committed to other	women > men	+	+	+ (ST only)
7. Exaggerated ambition	women > men	NA	NA	+ (LT only)
8. Sexual infidelity	men > women	NA	NA	+ (LT only)
9. Emotional infidelity	women > men	NA	NA	–
10. Past promiscuity	men > women	NA	NA	–
11. Sexual fantasies	men > women	NA	NA	+ (LT only)
12. Youth	men > women	NA	NA	–
13. Pre/postsex commit deception	low SOI > high SOI	NA	NA	+
14. Sexual deception	high SOI > low SOI	NA	NA	+ (men only)

NOTE: + indicates support for prediction and – indicates failure to support, NA = not applicable (not tested), LT = long term, ST = short term. Low sociosexuality inventory (SOI) individuals are oriented more toward a long-term mating strategy and high SOI toward a short-term strategy.

for example, found that men, to attract women, act more polite and considerate than they really are, seem more vulnerable than they really are, and are more prone to exaggerate their prestige and importance in work settings. They found that women, more than men, used a variety of appearance-enhancement tactics that the authors considered to be deceptive, such as wearing clothing that concealed or amplified certain features. Rowatt, Cunningham, and Druen (1998) found similar sex differences in deceptive tactics used to get a date. In our research, we examined emotional reactions to having been subject to such deceptions.

We applied the logic of Strategic Interference Theory to the domain of mating deception. When an act of deception interferes with the favored sexual strategy of one sex more than the other, Strategic Interference Theory predicts sex differences in emotional arousal. Specifically, we developed the following predictions and tested them in Studies 1 and 2 (see Table 1):

Predictions 1 and 2: Resource and status deception. Because women value economic resources (Buss, 1989b) and status (Kenrick, Sadalla, Groth, & Trost, 1990) in a long-term mate more than do men, Strategic Interference Theory predicts that women will become more upset than men upon the discovery that they have been deceived about the potential partner’s economic resources and/or status.

Prediction 3: Precopulatory deception about depth of feelings. The expression of love and other deep feelings signals long-term romantic commitment (e.g., Gonzaga, Keltner, Londahl, & Smith, 2001; Hirshleifer, 1987). Deceptive displays of such feelings occur in the pursuit of a short-term mating strategy (Buss, 2003), thus,

Strategic Interference Theory predicts that women will be more upset by this form of deception than will men.

Prediction 4: Precopulatory deception about sexual access. Given the existence of a desire for short-term mating, members of one sex can deceive the other about the potential for sexual access for their own strategic purposes, such as gaining resources or enhancing perceived desirability in the eyes of others. Deception about short-term sexual access typically interferes with men’s sexual strategy more than women’s, and therefore, men are predicted to be more upset by it.

Prediction 5: Postcopulatory long-term intentions. Women often, although not always, delay sexual intercourse until there is evidence of long-term romantic intent (Buss, 2003). Strategic Interference Theory predicts that postcopulation signals that the partner is not interested in pursuing a relationship will upset women more than men, either because such signals imply precopulatory deception of intent or because they signal unwillingness to invest—both of which violate women’s desires more than men’s.

Prediction 6: Deception about existing commitments to others. External romantic involvements signal a lowered probability of potential for long-term commitment. Concealment of existing serious involvements is often part of a short-term strategy, which violates the desire for a committed relationship (Buss, 2003). Strategic Interference Theory predicts that women will become more upset than men upon the discovery that they have been deceived about a potential partner’s existing romantic involvements with others. Although men should become upset about this form of deception as well, especially if the man is pursuing a long-term mate, the costs of being

deceived in this manner would have been higher for women than for men because women risked sexual exploitation, with the attendant risks of reputational damage and untimely pregnancy without an investing partner.

Overview of Studies

Three studies tested predictions from Strategic Interference Theory. The first and second studies tested predictions about sex differences in emotional distress in the United States and in Germany. The final study used a method to control for overall sex differences in reports of distress, assessed a variety of similarities as well as differences between the sexes, and investigated participants' past experiences with deception.

STUDIES 1 AND 2: DO EMOTIONS TRACK SEX-LINKED FORMS OF DECEPTION?

We presented American and German participants with scenarios hypothesized to elicit strategic interference and they reported their likely emotional reactions to these events.

Method

PARTICIPANTS

Participants in Study 1 were 217 undergraduates, 113 men and 104 women, from a large, midwestern university. The average age was 18.56 for men and 18.64 for women. In Study 2, participants were 200 native Germans, 100 men and 100 women, who were older in age (men $M = 26.18$; women $M = 25.96$).

PROCEDURE

The instructions to American participants were as follows:

Completion of this questionnaire is entirely voluntary and completely anonymous. We are not asking for your name, so your honesty is greatly appreciated. The questions involve aspects of life, interactions with members of the opposite sex, and so on, that may be personally upsetting. Although we hope you find this questionnaire interesting and informative, you are free to skip answering any of the questions for any reason.

Subsequent to these instructions, participants were asked, "How much would the following events upset you?" Each event was rated on a 7-point scale, with 1 anchored by the phrase *not at all upsetting*, 4 by the phrase *moderately upsetting*, and 7 by the phrase *very upsetting*.

The events constructed to test the predictions are as follows: (a) "You found out that the man [woman] you were dating had exaggerated his [her] income" (resource deception); (b) "You found out that the man

[woman] you were involved with had seriously exaggerated his [her] status and prestige at work" (exaggerated status); (c) "The man [woman] you were going out with concealed the fact that he [she] was seriously involved with someone else" (deception about existing romantic commitments); (d) "The man [woman] you had dated a few times exaggerated his [her] feelings for you in order to have sex with you" (precopulatory deception about depth of feelings); (e) "The man [woman] you had dated a few times led you to believe that he [she] was willing to have sex with you but then he [she] decided not to at the last minute" (precopulatory deception about likelihood of sexual access); and (f) "The man [woman] you had sex with turned out not to be interested in pursuing a long-term relationship, even though you were interested in him [her]" and "The man [woman] you finally decided to have sex with did not return your calls afterward" (postcopulatory long-term intentions).

A German translation of this instrument was administered to participants in Study 2. The instrument was translated in three steps. First, it was translated into German. A second bilingual speaker then "back-translated" the instrument into English. A third bilingual speaker resolved discrepancies. (The translation is available from the authors.)

Results

The data were combined to allow for tests of the effect of sample origin (German vs. United States) and the interactive effects of sex and sample origin. For each item, we conducted a Univariate General Linear Model analysis (SPSS 12.0) with sex (male vs. female) and sample origin as between-groups factors. Age was included as a covariate in each analysis, and we tested for the interactive effect of age and sex in predicting upset. These tests were not significant for any of the items, and age was therefore dropped from the analyses. We conducted simple effects tests within each culture corresponding to the sex difference predictions (summarized in Table 1). In the analyses discussed below, we do not present tests of main effects of sex because they were all statistically significant in the predicted direction and redundant with the information presented in Table 2. When main effects of culture were qualified by interactions of culture and sex, we present only the tests of the interactions. Nonsignificant tests are not presented. Full results are available from the authors.

Deception about resources and status. In each study, women more than men reported that they would be upset about discovering that a romantic partner had exaggerated income or status. All differences were statistically significant ($p \leq .02$), with the exception of income deception ($p = .06$, two-tailed) in the German sample. The interaction of sex and culture was statistically

TABLE 2: Mean Upset Ratings in Response to Mating Deceptions (Studies 1 and 2)

	Men		Women		F	p ≤	d
	M	SD	M	SD			
American ratings							
Resource deception (1)	3.17	1.40	4.38	1.42	32.02	.001	.87
Status deception (2)	3.71	1.39	4.87	1.22	32.96	.001	.89
Presex depth of feelings deception (3)	4.35	1.82	6.74	0.75	144.83	.001	1.69
Deception about sexual access (4)	4.69	1.68	3.24	1.52	44.40	.001	.90
Postsex lack of long-term interest (5)	5.06	1.39	6.14	1.03	29.58	.001	.88
Postsex failure to call (5)	5.54	1.62	6.74	0.61	37.78	.001	.97
Already committed (6)	6.19	1.07	6.69	0.90	6.46	.01	.51
German ratings							
Resource deception (1)	3.42	1.83	3.84	1.67	3.47	.06	.24
Status deception (2)	3.84	1.81	4.32	1.48	5.30	.02	.30
Presex depth of feelings deception (3)	4.93	1.67	5.93	1.30	23.33	.001	.67
Deception about sexual access (4)	5.09	1.69	4.50	1.46	6.90	.01	.38
Postsex lack of long-term interest (5)	4.58	1.78	5.18	1.52	8.65	.01	.37
Postsex failure to call (5)	4.80	1.65	5.84	1.57	26.14	.001	.65
Already committed (6)	4.75	2.00	5.54	1.69	14.27	.001	.43

NOTE: Prediction numbers (in parentheses) correspond to the predictions described in the text. Two items tested Prediction 5. In all cases, women's ratings exceed men's, except for deception about sexual access (Prediction 4), in which men's ratings exceeded women's.

significant for status deception, $F(1, 410) = 5.27, p = .02$, and for resource deception, $F(1, 410) = 6.54, p = .01$, reflecting the fact that the size of the sex difference was larger in the United States.

Precooperative deception about depth of feelings and likelihood of sexual access. In each sample, women more than men reported that they would be upset about discovering that a partner had exaggerated his or her feelings to have sex ($ps < .01$). Conversely, and as predicted, men expressed more upset about being misled about willingness of a dating partner to have sex ($ps < .01$). The interaction of sex and culture was statistically significant in each case—depth of feelings, $F(1, 409) = 23.28, p < .001$; sexual access deception, $F(1, 409) = 7.32, p < .01$ —again reflecting larger sex differences in the United States.

Upset about postcopulatory long-term intentions. There were two tests of the hypothesis about postcopulatory intentions. As predicted, women expressed greater upset than did men in response to a partner's post-sex lack of interest in pursuing a long-term relationship ($ps < .01$). Similarly, in both samples, women more than men reported upset about the failure of a partner to call or return calls, after one had finally decided to consent to sex ($ps < .01$). There was a main effect of culture for each of these ratings—post-sex interest, $F(1, 410) = 25.47, p < .001$; post-sex calls, $F(1, 409) = 33.94, p < .001$ —reflecting lower ratings of upset by German participants. These events, while apparently potent forms of strategic interference, are not forms of deception per se, although they may contain a deceptive component if committed by a man or woman who professes deep feelings before having sex with a partner.

Deception about existing commitments. As predicted, the women in each sample reported that they would be distressed upon discovering that a person in whom they were interested had concealed a current involvement with someone else ($ps < .01$). There was a main effect of culture, $F(1, 411) = 80.94, p < .001$, again reflecting lower ratings of upset by German participants.

Discussion

The results of Studies 1 and 2 provide support for all six predictions. Women express greater upset than men about being deceived about a partner's status, resources, and serious romantic involvements. Furthermore, women express greater emotional distress than do men about being deceived about the depth of a partner's feelings prior to sex—the finding that showed the largest sex difference. Women also report greater upset about the failure of a partner to call or to return phone calls after sex. Women, however, do not report greater upset than men across all forms of intersexual deception. An important reversal of these sex differences concerns deception about precooperative likelihood of sex. Men report that they would be more upset than women report about being led to believe that sex was forthcoming and then experiencing a decision by the woman not to have sex. The findings, in short, support the hypothesis that emotional distress tracks sex-linked domains of intersexual deception, as predicted by Strategic Interference Theory.

Table 1 (third column) summarizes predictions and support from Studies 1 and 2. These sex differences were documented in both American and German samples. Although arguably more similar in their cultural norms

than other samples that might be recruited from around the world, these convergent findings show that the predicted sex differences are not limited to American undergraduate samples. The results certainly could have come out otherwise since German culture tends to differ from American culture on a number of mate preferences, such as the greater importance Germans place on dependability, good cooking skills, and good housekeeping skills and the less importance German's place on chastity or virginity (Buss & Angleitner, 1989). The fact that the samples differed in age also lends to the generalizability of the obtained sex differences.

Although the sex differences found in both samples support the predictions, it is worth noting that men were also upset by being deceived by a woman about existing commitments and about a woman failing to call after sex. Indeed, in the American sample, men express greater distress about these forms of deception than they did about sexual deception. Our theory and specific predictions focused on sex differences and not on the relative ordering of upset across deceptions within sex. Another evolutionary theory, Sexual Strategies Theory (Buss & Schmitt, 1993), may offer better insight into the relative importance of short-term and long-term deceptions to the sexes. According to the theory, both sexes are hypothesized to pursue context-contingent long-term and short-term mating strategies (also see Gangestad & Simpson, 2000). The fact that men in this study also were upset by a woman concealing existing commitments can be interpreted straightforwardly, for example, as men being upset by a woman interfering with a long-term mating strategy.

An important limitation of Studies 1 and 2 is that most of the tested hypotheses predicted greater upset in women as compared with men. Evidence from a variety of sources suggests that women may be more emotionally expressive than men, including in their self-reports of emotional experiences (e.g., Diener, Sandvik, & Larsen, 1985; Fujita, Diener, & Sandvik, 1991; Gross & John, 1995; also see Kring & Gordon, 1998, for a review). If women are more emotionally reactive than men or have a bias toward higher reports of emotional reactivity, as prior research suggests, this could create a bias toward confirming sex difference hypotheses in which women are predicted to be more upset than men. Study 3 was designed in part to address this potential weakness.

Studies 1 and 2 also were limited by a primary focus on deceptions occurring in longer-term dating interactions. Women's and men's relationship desires often differ depending on whether they are seeking short-term or long-term mates (Buss, 2003; Gangestad & Simpson, 2000). For example, attracting a mate who is high in social status or ambition may be most relevant to a woman seeking a long-term mate because of the long-

term investment benefits she may reap for herself and her offspring. Study 3 separately investigated deceptions committed by short-term and long-term partners to investigate whether sex differences in responses to strategic interference differ by relationship context.

STUDY 3

Emotional Reactions to an Extended Set of Deceptions and Reports of Experienced Deception

Study 3 was designed to extend the first two studies by (a) assessing reactions to a wider array of deceptive events, (b) assessing whether the patterning of men's and women's reactions differs by mating context, and (c) obtaining reports about the actual mating deceptions men and women have experienced. We made five additional predictions:

Prediction 7: Deception about ambition. Given the importance that women attach to a man's ambition in a long-term mate (Buss, 1989b), we predicted that women would be more likely than men to become upset about deception about a prospective partner's level of ambition.

Prediction 8: External sexual involvement with others (sexual infidelity). Studies 1 and 2 supported the prediction that women would be more upset than men upon learning that a partner concealed an existing serious romantic involvement with someone else (Prediction 6). A reversal of this difference should occur, however, when the external involvement is explicitly sexual in nature, particularly in the long-term mating context. Although an infidelity can be harmful to either sex, male paternity certainty is compromised as a result of a partner's sexual infidelity; women have always been 100% certain of their maternity. Therefore, we predicted that men would be more upset than women about deception involving sexual involvement with others.

Prediction 9: External emotional involvement with others (emotional infidelity). Although both sexes historically suffered fitness losses by a partner's emotional involvement with others, women risked the diversion of a partner's resources and commitments to other women—a sex-linked source of strategic interference. Therefore, we predicted that women would become more upset than men about a partner's deception about external involvements with a potential rival that are explicitly emotional in nature.

Prediction 10: Past sexual promiscuity. A truism in psychology is that the best predictor of future behavior is past behavior. This is no less true in the realm of sexual behavior. Indeed, one of the strongest predictors of marital infidelity is one's number of prior sex partners (Buss, 2000). Deception about past sexual promiscuity would

have inflicted greater costs, on average, on men than on women, if proved to be a good predictor of future infidelity. Therefore, we predicted a sex-linked cause of upset—men were predicted to become more distressed about deception surrounding past sexual promiscuity. The caveat to this prediction is that women could suffer a different form of cost from a man's deception about his prior promiscuity. A man's promiscuity might signal that he is a short-term sexual strategist, and hence he is unlikely to commit. Thus, women too may have strong reactions to this form of deception.

Prediction 11: Sexual fantasies. Sexual fantasies may be another predictor of sexual infidelity. Indeed, there is evidence that women who are unhappy with their primary relationship, or who have partners low in mate value, have a larger number of sexual fantasies about other men (Buss, 2003). Combined with the rationale provided for Predictions 8 and 10, we predicted that men would be more likely to become upset about deceptions surrounding sexual fantasies about others.

Prediction 12: Age (younger). Youth is a known component of female mate value, and much cross-cultural evidence exists that men's mate preferences reflect this (Buss, 1989b; Kenrick & Keefe, 1992). Therefore, deception about a potential partner's youth should be more upsetting to men than to women.

Within-Sex Individual Differences in Emotional Distress Due to Intersexual Deception

Because sexual strategies vary within the sexes as well as between them (e.g., Gangestad & Simpson, 2000; Simpson & Gangestad, 1991), we hypothesize variation within sex in the triggers of upset. In Study 3, we tested two within-sex predictions.

Prediction 13: Upset due to commitment deception as a function of sexual strategy. Because deception about commitment interferes with the pursuit of a long-term strategy more than a short-term strategy, Strategic Interference Theory predicts that men and women who pursue long-term strategies will be more upset by precopulatory and postcopulatory deception about commitment than will men and women who pursue short-term strategies.

Prediction 14: Upset due to sexual deception as a function of sexual strategy. In contrast to deception about commitment, deception about the likelihood of sexual access interferes with the pursuit of a short-term strategy more than the pursuit of a long-term strategy. Men and women pursuing short-term strategies are therefore predicted to be more upset about sexual deception than are men and women pursuing long-term strategies.

For a summary of all predictions, see Table 1.

Method

PARTICIPANTS

Participants were 239 men (M age = 18.78) and 240 women (M age = 18.40) from a large university in the Southwest United States. Participation in this study partially fulfilled a course requirement.

PROCEDURE

Men and women participated in small same-sex groups (15 or fewer individuals per group). A same-sex researcher conducted research sessions. Several measures were taken to increase participants' comfort in responding to questions of a personal nature: (a) at least one desk separated each participant from others; (b) participants were given a questionnaire packet and an unmarked envelope; upon completion, each participant dropped his or her envelope into a box where other completed questionnaires had been deposited; and (c) participants were assured verbally that their data would be kept strictly confidential and any information that might link their identity with their responses on the questionnaire (such as their signature on the consent form) would be stored separately. Participants first completed a biographical information questionnaire followed by event ratings and the relationship experiences instruments.

Sociosexuality inventory. The biographical information form included questions about participants' background demographics (e.g., year in school) and the sociosexuality inventory (SOI; Simpson & Gangestad, 1991), a seven-item instrument measuring willingness to engage in uncommitted sex.

Event ratings deception instrument. The instructions for the event ratings instrument read as follows:

Below are things people sometimes do in relationships. Try to think of how upsetting each of the following acts would be if a member of the opposite sex behaved that way toward you. Please indicate how upsetting each act would be if it were committed by two types of partners: (a) *short-term partners*: These are people with whom you would desire a *one-night stand* or *brief affair*; (b) *long-term partners*: These are people with whom you would desire a *long-term committed romantic relationship*. Please use the following scale to provide two ratings indicating how upset you would be (a) if someone you desired as a *short-term partner* deceived you in this way and then (b) if someone you desired as a *long-term partner* deceived you in this way.

A 7-point rating scale appeared below these instructions, with 1 anchored *slightly upset*, 4 anchored *moderately upset*, and 7 anchored *extremely upset*. Following the instructions appeared a list of 87 forms of deception and two blanks on which participants rated how upsetting the action

would be if perpetrated by a short-term partner and a long-term partner. (The order of presentation of the short-term and long-term partner descriptions, instructions, and response blanks was counterbalanced across participants.) These items appear in the second column of the appendix.

In addition to items testing predictions, there were several clusters of items for which there were not firm a priori expectations about sex differences. These include deception about desirability, exaggerated kindness and compatibility, and concealed flirtation with others. Conceptually similar items were interspersed throughout the instrument such that items within each cluster were nonadjacent.

Relationship experiences instrument. The instructions at the top of this instrument were as follows:

Below is a list of things men and women sometimes do in relationships. We would like to know whether someone of the opposite sex has ever behaved in any of these ways toward you. In this questionnaire we will ask you about two different types of relationship partners. These types of partners are defined for you below.

These instructions were followed by the same definitions of short-term and long-term partners and then by a series of 32 items about each type of relationship partner. In a column titled "Experienced Act? (Check One Blank)," respondents checked one of three blanks next to each item—*never*, *once*, or *several times*—to indicate whether they had ever experienced that form of deception. The 32 items appear in the third column of the appendix. The items were designed to provide reasonable domain-sampling from each deception cluster while minimizing item redundancy.

Results and Discussion

UPSET RATINGS

Overall responses to deception scenarios. To assess the overall pattern of responses to deception, a 2 (men vs. women) \times 2 (short term vs. long term) ANOVA was conducted on the arithmetic average of upset reports (α short term = .98, α long term = .97). Main effects of participant sex, $F(1, 447) = 115.00, p < .001$, and relationship context, $F(1, 447) = 1169.29, p < .001$, were qualified by a significant interaction of these factors, $F(1, 447) = 4.61, p < .05$. Women's mean rated upset in the short term (ST) was 4.11 ($SD = 1.04$), and in the long term (LT) was 5.67 ($SD = .68$). Men's mean rated upset in the ST was 3.23 ($SD = 1.11$) and in the LT was 5.02 ($SD = .78$). Women responded with greater reports of upset in response to deception scenarios than did men, and deceptions committed by long-term partners were thought to be more upsetting than deceptions committed by short-term

partners. The interaction was produced by a smaller differentiation by women between deceptions committed by short-term and long-term partners (resulting in a larger sex difference in the short term than in the long term). Because of women's heavy parental investment, deceptions committed by men in the short-term context may often be as costly as deceptions committed in the long term, resulting in relatively high upset scores in both contexts. For men, however, women's deceptions in the long-term mating context should typically be more costly than those occurring in the short-term context in which men's obligations and future investments are minimized. For this reason, men's emotional reactions differentiate more between the two contexts.

Sex difference control procedures and calculation of composites. Within the short-term and long-term context, raw item means and composites were first examined. In only one case, being sexually led on, did men's upset rating significantly exceed women's: Men's ST item composite $M = 4.72$ ($SD = 1.61$), women's ST item composite $M = 3.71$ ($SD = 1.68$), $t(464) = p < .001$; men's LT item composite $M = 4.84$ ($SD = 1.39$), women's LT item composite $M = 4.60$ ($SD = 1.67$), $t(467) = 1.71, p < .05$ (see *sexual deception* in the appendix for items). In all other cases, women's upset rating exceeded men's or there was no significant difference between the sexes.

In their investigation of betrayal, Shackelford and Buss (1996) investigated whether differences in betrayal occurred as a function of the relationship context in which the act was embedded, above and beyond the general tendency for an act to elicit greater betrayal when committed by a mate, for example, as compared with a friend. To test their predictions, they rescaled their data by standardizing within each relationship context. Our goal was equivalent: We wished to examine what forms of deception are particularly upsetting to men and women above and beyond the general tendency for women to rate forms of strategic interference as more upsetting than do men. We therefore followed an equivalent ipsatization procedure in which we standardized the item ratings within sex. This produced an overall item mean of 0.00 for men and for women within the short-term and long-term contexts, thus eliminating the average sex difference in upset. With these new variables, it is possible to ask, *Relative to other forms of deception, what is particularly upsetting to women and what is particularly upsetting to men?* The rescaled items were arithmetically averaged within each cluster to increase the reliability of prediction tests (see the appendix for reliabilities).¹ Tables 3 and 4 present comparisons by sex.

Resources, status, and ambition (Predictions 1, 2, and 7). As predicted, relative to other forms of deception by long-term partners, women's upset reports were greater

TABLE 3: Long-Term Deception Scenarios: Composite Ratings of Upset by Sex of Respondent

Composite (Prediction No.)	Men			Women			t	p	d
	M	SD	(n)	M	SD	(n)			
Age-older	-0.98	2.29	(237)	-1.06	2.28	(240)	0.36	.72	.03
Age-younger (12)	-0.81	1.94	(238)	-0.50	2.00	(240)	-1.68	.09	.15
Already committed (6)	1.76	1.47	(238)	1.71	0.92	(240)	0.40	.69	.03
Attractive perception	-0.32	1.56	(238)	-0.18	1.52	(238)	-1.05	.29	.10
Desirability deception	-1.70	1.67	(238)	-2.45	1.89	(238)	4.58	.00	.42
Emotional infidelity (9)	0.98	1.18	(236)	0.89	1.14	(237)	0.88	.38	.08
Enjoy sex	0.57	1.60	(236)	0.69	1.50	(239)	-0.84	.40	.08
Exaggerated ambition (7)	-0.75	1.45	(236)	-0.50	1.38	(238)	-1.95	.05	.18
Exaggerated compatibility	0.18	1.57	(237)	0.06	1.77	(239)	0.80	.42	.07
Exaggerated intelligence	-1.35	1.72	(236)	-1.50	1.81	(238)	0.91	.36	.08
Exaggerated kindness	-0.43	1.52	(236)	-0.20	1.46	(240)	-1.69	.09	.16
Exaggerated status (2)	-1.74	1.74	(238)	-1.47	1.85	(240)	-1.67	.10	.15
Flirt with others	0.44	1.44	(236)	0.09	1.64	(239)	2.51	.01	.23
Hid emotions	-0.15	1.61	(236)	-0.08	1.97	(239)	-0.42	.68	.04
Intelligence impression	0.53	1.63	(236)	0.83	1.45	(239)	-2.11	.04	.19
Misled future	0.88	1.16	(237)	0.99	1.04	(240)	-1.07	.29	.10
Postsex deception (5)	0.95	1.34	(235)	1.48	0.83	(239)	-5.18	.00	.48
Presex deception (3)	0.57	1.60	(233)	1.65	0.67	(238)	-9.48	.00	.88
Previous involvement	0.82	1.65	(233)	0.81	1.48	(239)	0.04	.97	.00
Promiscuity (10)	1.07	1.35	(235)	1.11	1.01	(239)	-0.34	.74	.03
Resource deception (1)	-1.56	1.59	(234)	-1.11	1.70	(239)	-2.96	.00	.27
Sexual deception (4)	-0.21	1.79	(234)	-1.58	2.45	(235)	6.92	.00	.64
Sexual fantasy (11)	0.10	1.79	(238)	-0.40	1.96	(239)	2.93	.00	.27
Sexual infidelity (8)	2.07	0.86	(238)	1.75	0.61	(239)	4.76	.00	.44

NOTE: Means presented have been rescaled by standardizing within sex. Overall mean within short term (ST) and long term (LT) for women = 0.00, for men = 0.00. The data in this table are presented alphabetically by composite label (see the appendix for individual items). Prediction numbers (in parentheses) correspond to the predictions described in the text. Composites without prediction numbers are those for which sex differences were not predicted on an a priori basis.

for *exaggerated ambition* ($p < .05$), *exaggerated status* ($p = .10$, marginal), and *resource deception* ($p < .01$) than were men's. These differences emerged in the long-term relationship context, as expected (all nonsignificant in ST).

Precopulatory commitment deception, postcopulatory commitment deception, and existing commitments to others (Predictions 3, 5, and 6). The prediction that women would respond with greater upset in response to presex and postsex commitment deception was supported in both the short-term ($ps < .01$) and long-term context ($ps < .01$). These forms of deception were among the most upsetting in the study for women, with all ratings between 1 and 1 1/2 SDs above average (see Tables 3 and 4).

A related cluster of items (*misled future*) did not demonstrate the same pattern of sex differences ($ps > .05$). Whereas the pre- and postcopulatory items specified that the deception was committed to gain sexual access, these related items did not so specify. One item from this composite read, for example, "He implied that he might marry you, but then it became clear that he had no intention of doing so." The specificity of the sex differences across these tests suggests that it is the *sexually manipulative* aspect of commitment deception that is particularly distressing to women. These selective reactions are con-

sistent with the expectations of parental investment theory: Pre- and postcopulatory deceptions by men impede female sexual choice, and so we should expect women to strongly resist them, in part through selectively strong emotional responses.

A single item identical to that used in Studies 1 and 2 assessed upset in response to existing romantic involvement (Prediction 6: *already committed*). *Women's upset was greater in the short term* ($p < .01$) but not in the long term ($p > .05$), partially replicating findings from Studies 1 and 2. In summary, relative to other forms of deception, women appear to be especially upset by deception about a partner's commitment and his interest in forming a long-term relationship, particularly when these deceptions occur as part of a sexually manipulative short-term strategy.

Deception about sexual access (Prediction 4). We found a starkly contrasting pattern for deception about sexual access (*sexual deception*). In both contexts, men rated sexual deception as relatively more upsetting than did women, as predicted. Reactions to sexual deception were among the most broadly sex-differentiated in the study as a whole. In the short term, for example, men rated deception about sexual access 1 1/2 SDs above the mean, whereas the corresponding rating for women was

TABLE 4: Short-Term Deception Scenarios: Composite Ratings of Upset by Sex of Respondent

Composite (Prediction No.)	Men			Women			t	p	d
	M	SD	(n)	M	SD	(n)			
Age-older	-0.27	1.73	(234)	-0.45	1.56	(237)	1.19	.23	.11
Age-younger (12)	-0.20	1.49	(234)	-0.09	1.46	(237)	-0.87	.38	.08
Already committed (6)	1.23	2.01	(234)	1.74	1.56	(237)	-3.07	.00	.28
Attractive perception	-0.10	1.37	(233)	0.06	1.26	(236)	-1.38	.17	.13
Desirability deception	-0.65	1.12	(234)	-1.14	1.10	(236)	4.77	.00	.44
Emotional infidelity (9)	0.02	1.50	(231)	-0.01	1.42	(235)	0.22	.82	.02
Enjoy sex	0.68	1.90	(234)	0.87	1.59	(235)	-1.17	.24	.11
Exaggerated ambition (7)	-0.66	1.14	(232)	-0.74	1.20	(236)	0.76	.45	.07
Exaggerated compatibility	-0.33	1.52	(234)	-0.36	1.49	(236)	0.23	.82	.02
Exaggerated intelligence	-0.73	1.23	(232)	-0.81	1.27	(235)	0.70	.49	.06
Exaggerated kindness	-0.27	1.27	(232)	0.01	1.29	(236)	-2.37	.02	.22
Exaggerated status (2)	-0.94	1.10	(234)	-1.04	1.14	(237)	0.88	.38	.08
Flirt with others	-0.04	1.41	(232)	-0.25	1.49	(236)	1.58	.12	.15
Hid emotions	-0.13	1.50	(232)	-0.13	1.45	(235)	0.04	.97	.00
Intelligence impression	0.31	1.85	(232)	0.81	1.71	(237)	-3.04	.00	.28
Misled future	-0.01	1.38	(233)	0.02	1.28	(237)	-0.29	.77	.03
Postsex deception (5)	0.42	1.65	(233)	1.38	1.51	(236)	-6.57	.00	.61
Presex deception (3)	0.25	1.70	(232)	1.76	1.38	(235)	-10.54	.00	.98
Previous involvement	0.24	1.74	(231)	0.18	1.55	(237)	0.37	.71	.03
Promiscuity (10)	1.14	1.53	(232)	1.27	1.28	(236)	-1.02	.31	.09
Resource deception (1)	-0.83	1.10	(232)	-0.81	1.19	(236)	-0.23	.82	.02
Sexual deception (4)	1.54	1.61	(233)	-0.32	1.59	(233)	12.58	.00	1.17
Sexual fantasy (11)	-0.29	1.50	(234)	-0.41	1.55	(236)	0.87	.39	.08
Sexual infidelity (8)	1.34	1.64	(233)	1.33	1.38	(236)	0.09	.93	.01

NOTE: Means presented have been rescaled by standardizing within sex. Overall mean within short term (ST) and long term (LT) for women = 0.00, for men = 0.00. The data in this table are presented alphabetically by composite label (see the appendix for individual items). Prediction numbers (in parentheses) correspond to the predictions described in the text. Composites without prediction numbers are those for which sex differences were not predicted on an a priori basis.

about a quarter of a standard deviation *below* the mean. These results suggest that delayed, restricted, or refused sexual access is a form of strategic interference for men far more than it is for women.

External sexual and emotional involvement with others (Predictions 8 and 9). In the long-term context, men rated a partner's concealed sexual infidelity (*sexual infidelity*) roughly 2 SDs above their overall item mean—the most distressing form of deception for men in the study. Although significantly lower ($p < .01$), women also rated deception about sexual infidelity among the most upsetting forms of long-term deception. Sexual infidelity also emerged as one of the more upsetting forms of deception in the short-term context (more than 1 SD above the overall ST mean), with no significant difference between the sexes ($p > .05$). The fact that sexual infidelity was most upsetting to men in the long-term context provides support for the evolutionary hypothesis that sexual infidelity signals compromised paternity and the potential for adaptively misdirected long-term investment (Buss, Larsen, Westen, & Semmelroth, 1992; Daly, Wilson, & Weghorst, 1982; Symons, 1979). A related cluster of items demonstrated a similar pattern of results. Men's upset ratings in response to deception about a partner's flirtation with others (*flirt with others*) were higher in the

long term than were women's ($p = .01$). In the short term, men's and women's ratings did not differ significantly ($p > .05$).

There were no significant differences between men's and women's responses to concealed emotional infidelity (*emotional infidelity*) in either relationship context, failing to support that prediction.

Past sexual promiscuity and sexual fantasies (Predictions 10 and 11). In both contexts, a partner's concealed past sexual promiscuity (*promiscuity*) was rated as one of the more upsetting forms of deception (about 1 SD above the overall mean). Ratings did not differ by sex ($ps > .05$), failing to support Prediction 10. Prediction 11 was supported in the long term, with men's ratings of a partner's concealed sexual fantasies about others (*sexual fantasy*) relatively higher than women's. There was no significant sex difference in the short term ($p > .05$). These results mirror those observed for sexual infidelity and flirtation and further suggest that the risk of cuckoldry constitutes a potent form of strategic interference for men in the long-term mating context.

Youth (Prediction 12). Because youth is a cue to female fertility, it was predicted that men would be more upset about youth deception. However, men's and women's responses did not differ significantly (*age-younger*, $ps >$

TABLE 5: Correlation of SOI and Upset

Deception	Men		Women		Difference	
	r	(n)	r	(n)	t	p
Presex commitment deception						
LT	-.43***	(213)	-.25*	(219)	-1.99	.05
ST	-.35***	(213)	-.24***	(217)	-1.24	.22
Postsex commitment deception						
LT	-.15*	(214)	-.36***	(220)	2.16	.03
ST	-.20**	(213)	-.31***	(218)	1.23	.22
Sexual deception						
LT	.19**	(213)	-.06	(217)	2.61	.01
ST	.23***	(213)	.01	(216)	2.32	.02
All ratings composite						
LT	-.16*	(207)	-.35***	(212)	2.01	.05
ST	-.18**	(208)	-.31***	(211)	1.31	.19

NOTE: LT = long term, ST = short term. High scores on the sociosexuality inventory (SOI) indicate pursuit of a short-term mating strategy; low scores indicate pursuit of a long-term mating strategy. Ns vary due to missing or uncodable subject responses. The *t* tests (4th column) are tests of the interaction of sex and SOI in predicting upset.

p* < .05. *p* < .01. ****p* < .001.

.05). This was also true of deception about being older (*age-older*, *ps* > .05). We take up this predictive failure in the discussion.

Other findings. Several forms of deception for which we did not advance predictions were investigated. Four clusters of items assessed upset in response to deception about desirable qualities. Men and women did not differ in their upset as a result of a partner exaggerating his or her compatibility (*exaggerated compatibility*, *ps* > .05) or intelligence (*exaggerated intelligence*, *ps* > .05). This result is consistent with literature suggesting that compatibility and intelligence rank equally high on men’s and women’s list of desirable mate qualities (e.g., Buss, 1989b; Li, Bailey, Kenrick, & Linsenmeier, 2002). Men were relatively more upset by a partner exaggerating her desirability to members of the opposite sex (*desirability deception*, *p* < .01), although both men and women rated this as one of the least upsetting forms of deception, particularly in the long term (1.70 and 2.48 *SDs* below the mean). In contrast, women were relatively more upset by a partner’s exaggerated kindness (*exaggerated kindness*, *p* = .02 in ST; marginal, *p* = .09 in LT).

Two sets of items investigated how upsetting it would be if a partner exaggerated his or her impression of the participant’s positive qualities. Men and women did not differ in their ratings of upset in response to their partner exaggerating how attractive he or she found them (*ps* > .05). Women, however, reported greater upset in response to a partner exaggerating how intelligent he found her (*p* < .01 in ST, *p* < .05 in LT).

The final three forms of deception, a partner hiding his or her emotions (*hid emotions*, also see Note 1), exaggerating his or her enjoyment of sex (*enjoy sex*), or concealing previous serious involvements, such as those involving children (*previous involvement*), were all rated

about equally within men’s and women’s responses (all *ps* > .05).

WITHIN-SEX EFFECTS

Sociosexuality was computed according to the guidelines suggested by Simpson and Gangestad (1991). The sexual fantasies item on the SOI pertains only to participants currently involved in a committed relationship. To preserve generalizability and sample size, this item was dropped from the scale score (following Haselton, 2003). SOI scores were correlated with upset in response to presex and postsex deception about commitment (Prediction 13), sexual deception (Prediction 14), and with the overall composite of deception upset (see Table 5). As predicted, women and men oriented toward short-term relationships reported less upset to commitment deception than did long-term women and men (*rs* ranged from -.15 to -.43, *ps* < .05). This trend was reversed for men in their response to being sexually led on, with short-term men rating this form of deception as more upsetting than long-term men (*r* = +.19 to +.23, *ps* < .01), supporting Prediction 14. This prediction was not supported for women (*r* = -.06 to +.01, *ps* > .05). Because a man’s threshold for consenting to sex is often considerably lower than is a woman’s (e.g., Schmitt, 2003), all women (including those oriented toward short-term and long-term relationships) may find being sexually led on insulting, possibly explaining this sex difference.

The cumulative probability that a deception will be revealed increases with the passage of time. Therefore, most forms of deception may generally signal the pursuit of a short-term social strategy. Consistent with this premise, overall reactions to deception were associated with SOI scores, with those oriented toward a short-term sexual strategy reporting less upset overall (*r* = -.16 to -.35, *ps* < .05).

In summary, upset ratings were related to individual differences in sexual strategies. Men and women who pursue long-term relationships reported greater upset in response to being misled about a partner's commitment and greater on-average upset to all forms of deception investigated. An important exception to this trend occurred in men's responses to sexual deception.

EXPERIENCES OF DECEPTION

For each of 32 different forms of deception (see rightmost column of the appendix for items), participants indicated whether a past partner had ever deceived them by checking *never* to indicate that they had not experienced that form of deception or *once* or *several times* to indicate that they had. Participants provided separate responses for past long-term partners and past short-term partners. For reporting efficiency, the frequency of *once* and *several times* responses were collapsed. Tables 6 and 7 present the resulting percentages of male and female participants reporting experiences of each form of deception.

Deception is committed in an attempt to exploit the desires of its target. The pattern of sex differences observed is, indeed, largely consistent with known sex differences in desires. More women than men reported that a past partner had exaggerated his ambition ($p < .01$ in LT and ST) and income ($p = .01$ in LT, *ns* in ST). More women than men also reported that a partner exaggerated his feelings to gain sexual access ($p < .01$ in LT, $p = .01$ in ST). One of the largest sex differences was observed in reports of being sexually led on, with more men than women reporting this form of deception ($ps < .01$ in ST and LT).

The most common deceptions centered on mating desires shared by the sexes, such as deception about a partner's sincerity, trustworthiness, or kindness (30% to 42% reporting), exaggerated compatibility (27% to 36% reporting), and concealed flirtation with others (34% to 46%). Two other common deceptions were hiding strong feelings (40% to 44%), perhaps reflecting the common claim that singles "play games" on the mating market, and falsely implying that one had strong feelings (30% to 44%). In summary, the deceptive experiences data suggest that deceptions are committed in ways that exploit men's and women's mating desires.

GENERAL DISCUSSION

When individuals live in groups, some goals can be achieved only at the expense of other individuals. When two individuals compete for position in a status hierarchy, the success of one usually comes at the expense of the other. In the mating domain, conflict is common among same-sex competitors in their efforts to attract desirable mates. Theories of mating also must explain

the nature and specifics of conflict *between* the sexes—the ways in which individual men and women clash when pursuing strategies to achieve their mating goals.

The current article contributes to this goal at several levels. It offers a novel set of theoretically derived predictions about specific clash-points—the ways in which men and women interfere with each other's mating strategies through specific forms of deception. It provides a framework for linking negative emotions with the interference of the successful enactment of preferred mating strategies, it documents sex differences in emotional experience that must be explained by any comprehensive theory of emotions, and it provides new empirical discoveries about the specific ways in which individuals have experienced deception at the hands of the opposite sex. Thus, it has implications for theories of mating, theories of emotion, and theories of deception—domains that are often treated separately in the psychological literature.

Taken together, the three studies provide support for the general conclusion that men and women have confronted, and continue to confront, different adaptive problems of mating when interacting with members of the opposite sex. We discovered several clusters of replicable sex differences in reported emotional reactions to hypothetical deception scenarios across all three studies (see Table 1 for a summary of the predictions and empirical tests across all three studies).

Sex Differences in Emotional Upset Linked to Strategic Interference

Women and men, in delimited domains, possess different desires in a mate and pursue somewhat different mating strategies. These differences open the door to deceptive mating practices. Although both sexes can present themselves as more desirable than they really are, our theory predicts that the sexes will differ in the domains of deception they perpetrate and experience, corresponding to differences in desire.

Resource deception. Men can falsely present themselves as more closely embodying the desires a woman holds, such as possessing resources or occupying a position of high status (see also Tooke & Camire, 1991). Each study showed that women more than men report that they would experience greater emotional upset to deception precisely on these dimensions. These findings support the hypotheses that women have a special sensitivity to these forms of deception.

Commitment deception. Men are hypothesized to deceive women about the depth of their feelings or magnitude of commitment to exploit women's evolved desires (Buss, 2003; Haselton & Buss, 2000). We predicted that women, more than men, would be especially

TABLE 6: Percentages of Men and Women Reporting Forms of Deception Committed by Long-Term Partners

Category and Item	Men		Women		χ^2	(df)	p	Φ
	%	(n)	%	(n)				
Age-older								
<i>Led to believe older</i>	06	(236)	02	(233)	5.65	(1)	.02	.11
Age-younger								
<i>Led to believe younger</i>	04	(236)	03	(235)	0.54	(1)	.46	.03
Already committed								
<i>Conceal current LT involvement</i>	08	(237)	09	(232)	0.06	(1)	.81	.01
Attractiveness perception								
<i>Lied about attract of face</i>	04	(237)	03	(233)	0.57	(1)	.45	.03
<i>Lied about attract of body</i>	06	(237)	04	(233)	1.06	(1)	.30	.05
<i>Lied about attract of others</i>	25	(237)	26	(234)	0.04	(1)	.85	.01
<i>Lied about sexiness</i>	05	(237)	03	(232)	0.43	(1)	.51	.03
Desirability deception								
<i>Misled desirability</i>	12	(237)	15	(231)	0.84	(1)	.36	.04
<i>Conceal dumped or rejected</i>	16	(238)	13	(233)	0.48	(1)	.49	.03
Emotional infidelity								
<i>Conceal feelings for others</i>	20	(237)	25	(233)	1.45	(1)	.23	.06
Enjoy sex								
<i>Faked orgasm</i>	11	(236)	00	(232)	25.21	(1)	.00	.23
Exaggerated ambition								
<i>Misled ambition</i>	11	(237)	21	(234)	9.41	(1)	.00	.14
Exaggerated compatibility								
<i>Deceived compatibility</i>	27	(237)	31	(235)	0.59	(1)	.44	.04
<i>Misled politics or religion</i>	06	(236)	07	(235)	0.04	(1)	.84	.01
Exaggerated intelligence								
<i>Misled intelligence</i>	13	(237)	12	(236)	0.02	(1)	.90	.01
Exaggerated kindness								
<i>Exaggerated sincere, trust, kind</i>	30	(237)	33	(236)	0.39	(1)	.53	.03
Exaggerated status								
<i>Exaggerated social status</i>	11	(237)	09	(234)	0.55	(1)	.46	.03
<i>Exaggerated occupational prestige</i>	06	(237)	09	(234)	1.17	(1)	.28	.05
Flirt with others								
<i>Conceal flirting with others</i>	45	(238)	46	(234)	0.12	(1)	.72	.02
Hid emotions								
<i>Hid strong feelings</i>	40	(238)	40	(234)	0.00	(1)	.96	.00
<i>Misled strong feelings</i>	30	(237)	36	(236)	1.71	(1)	.19	.06
Intelligence impression								
<i>Found you unintelligent</i>	05	(237)	02	(233)	4.00	(1)	.05	.09
Misled future								
<i>Misled long-term commitment</i>	25	(238)	20	(235)	1.29	(1)	.26	.05
Postsex deception								
<i>Misled commit after sex</i>	06	(237)	06	(234)	0.18	(1)	.67	.02
Presex deception								
<i>Misled feelings to get sex</i>	05	(237)	16	(232)	13.95	(1)	.00	.17
Previous involvement								
<i>Conceal having children</i>	03	(237)	01	(234)	Fisher's exact		.29	.08
<i>Conceal paying alimony</i>	01	(237)	0	(234)	Fisher's exact		.25	.06
Promiscuity								
<i>Conceal large partner number</i>	13	(236)	17	(235)	1.11	(1)	.29	.05
Resource deception								
<i>Exaggerated money</i>	04	(237)	11	(234)	7.15	(1)	.01	.12
Sexual deception								
<i>Sexually led on/refused sex</i>	20	(237)	03	(232)	31.49	(1)	.00	.26
Sexual fantasies								
<i>Hid sexual fantasies</i>	20	(236)	21	(233)	0.09	(1)	.76	.01
Sexual infidelity								
<i>Conceal sex with someone else</i>	13	(237)	15	(235)	0.33	(1)	.57	.03

NOTE: LT = long term. Rows in table correspond to items in right column of the appendix. Fisher's exact test was conducted (as noted) for expected cell counts lower than 5.

TABLE 7: Percentages of Men and Women Reporting Forms of Deception Committed by Short-Term Partners

Category and Item	Men		Women		χ^2	(df)	p	Φ
	%	(n)	%	(n)				
Age-older								
<i>Led to believe older</i>	15	(235)	08	(235)	5.95	(1)	.02	.11
Age-younger								
<i>Led to believe younger</i>	10	(235)	05	(234)	4.28	(1)	.04	.10
Already committed								
<i>Conceal current LT involvement</i>	23	(235)	16	(233)	3.23	(1)	.07	.08
Attractiveness perception								
<i>Lied about attract of face</i>	04	(234)	01	(235)	4.59	(1)	.03	.10
<i>Lied about attract of body</i>	08	(235)	06	(233)	1.15	(1)	.28	.05
<i>Lied about attract of others</i>	26	(235)	20	(235)	2.72	(1)	.10	.08
<i>Lied about sexiness</i>	06	(235)	08	(235)	0.29	(1)	.59	.02
Desirability deception								
<i>Misled desirability</i>	18	(235)	15	(233)	0.69	(1)	.41	.04
<i>Conceal dumped or rejected</i>	20	(235)	18	(234)	0.33	(1)	.57	.03
Emotional infidelity								
<i>Conceal feelings for others</i>	23	(235)	24	(234)	0.02	(1)	.89	.01
Enjoy sex								
<i>Faked orgasm</i>	06	(236)	0	(234)	14.3	(1)	.00	.17
Exaggerated ambition								
<i>Misled ambition</i>	10	(235)	20	(234)	8.90	(1)	.00	.14
Exaggerated compatibility								
<i>Deceived compatibility</i>	31	(234)	36	(235)	1.30	(1)	.26	.05
<i>Misled politics or religion</i>	09	(234)	06	(234)	0.77	(1)	.38	.04
Exaggerated intelligence								
<i>Misled intelligence</i>	16	(234)	20	(234)	0.93	(1)	.34	.04
Exaggerated kindness								
<i>Exaggerated sincere, trust, kind</i>	30	(234)	42	(236)	7.35	(1)	.01	.13
Exaggerated status								
<i>Exaggerated social status</i>	14	(235)	13	(235)	0.02	(1)	.89	.01
<i>Exaggerated occupational prestige</i>	07	(235)	10	(234)	1.79	(1)	.18	.06
Flirt with others								
<i>Conceal flirting with others</i>	37	(234)	34	(236)	0.71	(1)	.40	.04
Hid emotions								
<i>Hid strong feelings</i>	44	(235)	42	(234)	0.27	(1)	.60	.02
<i>Misled strong feelings</i>	30	(234)	44	(234)	9.37	(1)	.00	.14
Intelligence impression								
<i>Found you unintelligent</i>	03	(235)	03	(234)	0.00	(1)	.99	.00
Misled future								
<i>Misled long-term commitment</i>	22	(236)	28	(235)	2.00	(1)	.16	.07
Postsex deception								
<i>Misled commit after sex</i>	13	(235)	14	(233)	0.10	(1)	.76	.01
Presex deception								
<i>Misled feelings to get sex</i>	15	(234)	25	(234)	7.67	(1)	.01	.13
Previous involvement								
<i>Conceal having children</i>	04	(235)	03	(234)	0.54	(1)	.46	.03
<i>Conceal paying alimony</i>	02	(235)	00	(235)	Fisher's exact		.22	.10
Promiscuity								
<i>Conceal large partner number</i>	26	(235)	27	(235)	0.10	(1)	.75	.01
Resource deception								
<i>Exaggerated money</i>	09	(235)	12	(234)	0.60	(1)	.44	.04
Sexual deception								
<i>Sexually led on/refused sex</i>	25	(235)	04	(233)	41.34	(1)	.00	.30
Sexual fantasies								
<i>Hid sexual fantasies</i>	17	(234)	15	(231)	0.49	(1)	.48	.03
Sexual infidelity								
<i>Conceal sex with someone else</i>	15	(235)	12	(236)	0.91	(1)	.34	.04

NOTE: LT = long term. Rows in table correspond to items in right column of the appendix. Fisher's exact test was conducted (as noted) for expected cell counts lower than 5.

upset about these forms of strategic interference. Each study strongly supported this set of predictions. Indeed, the sex difference in response to someone “exaggerating their feelings for you in order to have sex with you” proved to be among the largest magnitudes of effect in all three studies. Similar findings occurred in Study 3 for postcopulatory commitment deception—failing to follow up on postsex contacts and commitments was much more upsetting to women than to men. These replicable findings support the hypothesis that commitment deception historically has been an important adaptive problem imposed by men on women, which may have forged especially acute female emotional reactions in this domain.

Sexual deception. Just as women can suffer from commitment deception, men can suffer from sexual deception. Women can and do sometimes deceive men about their willingness to have sex, leading them to believe that sex is forthcoming when it is not. There are several motivations for this form of deception, ranging from resource acquisition to evoking men’s public displays of interest to enhance a women’s perceived desirability (Buss, 2003). Studies 1, 2, and 3 all showed that men express greater upset in response to scenarios of these deceptions. Indeed, even though women generally reported that they would experience greater emotional upset across a larger range of deceptive events, deception about sexual access proved to be the consistent and significant exception to this overall pattern. These replicable findings support the dual hypotheses that women historically have sometimes deceived men about their willingness to engage in sex and that men’s emotional upset may have evolved as one line of defense to guard against this form of strategic interference.

These three clusters of sex differences in emotional upset in response to resource deception, commitment deception, and sexual deception are robust across three studies and must become part of any comprehensive theory of human mating. Taken together, they support the hypotheses that (a) there have been coevolutionary arms races between the sexes, (b) these arms races have occurred in highly predictable domains, and (c) negative emotions may be part of coevolved defenses against predictable forms of strategic interference.

In addition to these three clusters of replicable sex differences, several important predictions uniquely tested in Study 3 also were confirmed. After applying statistical controls for overall sex differences, men more than women reported greater emotional upset in response to deception about a partner’s *sexual infidelity* as well as deception about a partner’s *sexual fantasies* about others. These findings support the hypothesis that the problem of paternity uncertainty fashioned defenses in men designed to guard against precisely those actions

that would be most likely to result in cuckoldry. In contrast, the predicted sex difference in deception about emotional involvement with others in the context of a long-term mateship was not supported. In light of the voluminous empirical evidence supporting the hypothesis of a sex linkage in jealousy in response to emotional infidelity (e.g., Pietrzak, Laird, Stevens, & Thompson, 2002), this predictive failure should be viewed with caution.

Another predictive failure centered on deception about age. We had predicted that men would express more emotional distress to discoveries of being deceived about a woman’s age, specifically in the younger direction. It is likely that the youth of our sample—with an average age just younger than 19 years—precluded an adequate test of this prediction. A recent study found that it is women who are substantially older than those in our sample who are most likely to mislead about their true age (Pawlowski & Dunbar, 1999). Age deception may not be as relevant, therefore, for the current young sample. In addition, as one reviewer noted, selection has designed male minds to respond to *cues* to youth rather than explicit information about age. This may explain why surgically altered physical features remain attractive even when observers know they have been artificially enhanced and, in essence, are “lies.”

In addition to sex differences, we predicted within-sex effects of sociosexual orientation. As predicted, men and women oriented more toward long-term relationships were more upset by deception about commitment than men and women oriented toward short-term relationships. Also as predicted, this pattern differed for responses to sexual deception, or being “led on,” especially for men. Short-term-oriented men found sexual deception more upsetting than long-term men.

At the highest level of generality in the data, we found that women’s upset responses were generally greater than those of men (but see Diener et al., 1985). Women also appeared to differentiate less than men between deceptions committed by short-term and long-term partners, rating deceptions occurring in both contexts as highly upsetting. These general trends may reflect the heavy obligatory investment women make in reproduction—investment that does not necessarily differ by mating context—and women’s associated adaptations for discriminating sexual choice.

Our method for assessing and controlling for sex differences in emotional responsivity was limited. It assumed that the men and women in our sample differed in their overall emotional responsiveness. Although there is substantial evidence to support this assumption (see Kring & Gordon, 1998), measures of generalized emotional reactivity (e.g., Kring, Smith, &

Neale, 1994) could have been used to confirm the sex difference and perhaps provide better control for it.

A quarter of a century ago, Dawkins and Krebs (1978) observed that every organism that perceives can be deceived. We suggest that men and women have deceived each other in predictable ways in pursuing their respective mating strategies and attempting to fulfill their evolved desires. Because those who are successfully deceived suffer fitness losses, selection will favor the evolution of defenses against deception. The current studies suggest that emotional upset in response to specific sex-linked forms of mating deception is part of the evolved defensive machinery. Comprehensive theories of mating, therefore, must be able to successfully explain the coevolution of deception and defenses against deception as they are carried out on the battleground of human mating.

The current three studies were limited in examining emotional reactions to intersexual deception and did not explore the broader array of predictions generated by Strategic Interference Theory. Specifically, future studies could profitably examine predictions about (a) sex-linked attentional effort devoted to detecting specific forms of intersexual deception, (b) the greater memorial encoding of sex-linked forms of strategic interference, (c) sex-linked action designed to eliminate or circumvent specific forms of intersexual deception, and (d) actions taken to prevent future instances of intersexual deception, following being deceived.

These sex differences in emotional upset provide findings that should be explainable by any comprehensive theory of emotion. To our knowledge, existing theories of emotions, even those that are evolutionary in nature, have not addressed the issue of sex-differentiated emotional reactions, much less about emotional reactions to specific forms of intersexual deception (e.g., Clore & Ortony, 1991; Davidson, 1994; Ekman, 1992; Fridja, 1988; Gray, 1987; Kagan, 1991; Lazarus, 1991; Nesse, 1990; Scherer, 1988; Tooby & Cosmides, 1990; Watson & Clark, 1984; Zajonc, 1985). A recent edited book on emotions, containing contributions from many of today's leading researchers and theorists on emotions, does not contain a single index entry to sex differences (Ekman & Davidson, 1994). Of course, this does not imply that these other theories of emotions are wrong. Rather, it implies that comprehensive theories of emotions must ultimately be able to explain the rich pattern of sex differences in emotional reactions to specific forms of strategic interference, including intersexual deception.

Experiences of Deception

To our knowledge, Study 3 is the first to explore in a systematic fashion retrospective reports of men's and

women's actual experiences of deception at the hands of the opposite sex. The conceptual links between experiences with deception and emotional reactions to being deceived are likely to be more complex than we initially anticipated. First, for certain forms of deception, if the deception is carried out successfully, the victim may never become aware of having been deceived; hence, these will not show up in the reports. Second, if we are correct that each sex has evolved defenses against being deceived, then actual experiences with being deceived should be substantially lower than they would have been without such evolved defenses. Third, some forms of deception will be age and life-stage specific—for example, the low reports of being deceived about having children or paying alimony may reflect the youth of our sample rather than the absence of these forms of deception in the broader mating market. For all these reasons, it is not clear that the logic of Strategic Interference Theory that predicted sex differences in emotional reactions to deception would apply in a directly analogous manner to sex differences in actual experiences of deception.

Given these conceptual complexities, the obtained sex differences in reported experiences of being deceived are especially noteworthy. Women more than men reported having been deceived about a partner's ambition, sincerity and kindness, and strength of feelings. These findings suggest that women currently confront the adaptive problems of commitment deception and dishonesty regarding the degree to which a man fulfills a woman's desires. Conversely, the largest sex difference in the reverse direction centered on sexual deception. Men more than women reported experiencing sexual deception in both short-term and long-term mating contexts—where men perceive sexual willingness in women's communications but then women refuse to follow through (also see Haselton & Buss, 2000). These findings suggest that men may confront the adaptive problem of sexual deception and that women may exploit men's desire for sexual access (also see Haselton, 2003).

Future research in the arena of actual experiences of mating deception could profitably turn in two directions. First, whereas we now know of some subtle but reliable cues to deception (DePaulo et al., 2003; Frank & Ekman, 1997) and some population groups with skill in detecting deception (Ekman, O'Sullivan, & Frank, 1999), virtually nothing is known about deception detection in mating contexts. For example, what are the predictors of those who are successfully deceived? Does prior experience with deception, and the attendant emotional upset about having been deceived, successfully guard against future deception? Likewise, little is known about the qualities of successful deceivers. Do those who pursue deceptive mating strategies target victims with certain qualities? Do people have adaptations

designed to increase the success of pursuing a deceptive mating strategy? In this sense, the current study of experiences with deception, although an important first step, poses a wider array of questions than it answers.

Antagonistic Coevolution Between the Sexes

Sexual strategies pursued by one sex impose adaptive problems on the other sex over evolutionary time, leading to the coevolution of strategies and counterstrategies. Women desire commitment, which leads to men who sometimes feign commitment, which leads to the evolution in women of mechanisms to circumvent deception and its costs, which leads to more subtle and

sophisticated forms of commitment deception by men, which leads in turn to more refined mechanisms in women to detect and reduce the costs of such deception. At the current slice in time, humans occupy a set of points in this coevolutionary spiral. The current studies provide a modest contribution to knowledge about one facet of this coevolutionary arms race—the emotional reactions of the sexes to intersexual deception and men’s and women’s inferences about each other’s minds in these respects. As such, the current studies take us one step closer to understanding the emotional and cognitive aspects of the interactions and conflicts between the sexes.

APPENDIX

Individual Items Used in Hypothetical Scenarios Instrument and Past Experiences Instrument

Cluster/Composite	Hypothetical Scenarios	Past Experiences
	<i>You found out that . . .</i>	<i>A LT (ST) partner (or potential LT [ST] partner) . . .</i>
Age-older (single item)	He lied to you about his age, pretending that he was <i>older</i> than he really was.	Led you to believe he was older than he actually was.
Age-younger (α ST = .60, α LT = .66)	He lied to you about his age, pretending that he was <i>younger</i> than he actually was. He led you to believe he was 5 years younger than his actual age.	Led you to believe he was <i>younger</i> than he actually was.
Already committed (single item)	He concealed the fact that he was already seriously involved with someone else.	Concealed that he was already in a serious long-term relationship when he became involved with you.
Attract perception (α ST = .86, α LT = .86)	He had concealed the fact that your body was not “his type.” He concealed the fact that he was really attracted to women with a different hair color than yours. He concealed the fact that he was really more attracted to the body types of other women. You discovered that he found you less attractive than he had originally led you to believe. He concealed the fact that he did not really find you very sexy. He concealed the fact that he did not find your body attractive.	Led you to believe he found your face attractive when he actually did not. Led you to believe he found your body attractive when he actually did not. Lied by indicating that he did not find other women more attractive than you, when he actually did find other women more attractive than you. Indicated that he found you very sexy, when in fact he did not.
Desirability deception (α ST = .76, α LT = .79)	He exaggerated how desirable he was to members of the opposite sex. He let you believe that he had many admirers of the opposite sex, when in fact he had very few. He claimed that he was always the one to terminate past relationships, when in fact he was always the one who got dumped. He pretended that he was more attractive on the “mating market” than he really was.	Led you to believe that he was more desirable to members of the opposite sex than he actually was. Concealed the fact that he had been dumped or rejected in past relationships.
Emotional infidelity (α ST = .86, α LT = .70)	He concealed the fact that he still had romantic feelings for a former girlfriend, although <i>he no longer was sexually attracted to her</i> . He concealed the depth of his true feelings for another woman. He hid the fact that he had fallen in love with another woman since he became involved with you, although he <i>had not</i> become sexually involved with her.	Concealed the fact that he had deep feelings for another woman while he was involved with you.

(continued)

APPENDIX (continued)

Cluster/Composite	Hypothetical Scenarios	Past Experiences
Enjoy sex (α ST = .78, α LT = .64)	He concealed letters he still had from a former lover. He concealed that he had spent a lot of time with another woman.	Faked orgasm when he had sex with you.
Exaggerated ambition (α ST = .75, α LT = .64)	He pretended to enjoy sex with you when he did not enjoy it. He faked orgasm when he had sex with you. He pretended to be more hard-working than he really was. He said he was working late, when he was really out with friends. He pretended to be working when he was really goofing off.	Led you to believe he was more ambitious than he actually was.
Exaggerated compatibility (α ST = .66, α LT = .50)	He concealed the fact that he did not really have high career ambitions. He led you to believe that you and he had many things in common when he knew you did not. He failed to reveal that you and he really differed fundamentally on core values, such as religious or political beliefs.	Led you to believe that the two of you were more compatible than you were. Misled you about his political or religious beliefs so that you would not know how different they were from your own.
Exaggerated intelligence (α ST = .85, α LT = .83)	He seriously exaggerated his IQ. He concealed his low GPA so that he could come across as a real "brain." He pretended to be smarter than he really was.	Misled you about his intelligence so that you would believe he was smarter than he actually was.
Exaggerated kindness (α ST = .83, α LT = .81)	He led you into believing that he was kinder than he really was. He exaggerated the amount of empathy he had for disadvantaged people. He exaggerated how kind he was to others. He concealed the fact that he had a real cruel streak. He led you to believe he was interested in volunteering to help the disadvantaged, when in fact he had no interest in doing so.	Exaggerated how sincere, trustworthy, or kind he was.
Exaggerated status (α ST = .78, α LT = .81)	He exaggerated his prestige at work. He misled you about how much professional status he really had. He lied by claiming that he was a member of a prestigious family. He concealed the fact that his work position was really quite low in the hierarchy.	Exaggerated his social status. Exaggerated his occupational status or prestige.
Flirt with others (α ST = .85, α LT = .81)	He concealed the fact that he flirted with members of the opposite sex when you were not around. He concealed the fact that he liked to lead others on, making them believe that he might be romantically available. He lied by saying that he had not flirted with others at a party, when in fact he did. He concealed the fact that he liked to flirt with others.	Concealed having flirted with others while involved with you.
Hid emotions (α ST = .75, α LT = .44)	He hid all his emotions in order to act tough or macho. He denied that he loved you even though he really did. He concealed the fact that he had strong feelings for you.	Concealed the fact that he actually <i>did have</i> strong feelings for you. Falsely implied that he had <i>stronger</i> feelings for you than he actually had.
Intelligence impression (α ST = .80, α LT = .71)	He concealed the fact that he did not find you very intelligent. He hid the fact that he thought you were stupid.	Concealed the fact that he actually found you <i>unintelligent</i> .
Misled future (α ST = .81, α LT = .73)	He was not interested in pursuing a long-term relationship, even though you were interested in him.	Misled you by indicating that he wanted a long-term commitment when he actually <i>did not</i> .

(continued)

APPENDIX (continued)

Cluster/Composite	Hypothetical Scenarios	Past Experiences
Postsex deception (α ST = .89, α LT = .78)	<p>He implied that he might marry you, but then it became clear that he had no intention of doing so.</p> <p>He said he would introduce you to his family or close friends but failed to do so.</p> <p>He said that the two of you would have a great future together, but he was lying.</p> <p>He led you to believe that he would always be there for you, but then he failed to help you when you really needed it.</p> <p>After you finally had sex with him, he started talking about your future together, but then did not contact you at all over the next month.</p> <p>He failed to call you after you had sex with him, even though he said he would.</p> <p>After you finally decided to have sex with him, he did not return your calls.</p>	<p>Led you to believe he had intentions of developing a long-term relationship with you <i>after you became sexually involved with him</i>, when he actually did not.</p>
Presex deception (α ST = .83, α LT = .70)	<p>After you had sex with him, he turned out not to be interested in pursuing a long-term relationship, even though you were interested in him.</p> <p>In order to get you into bed, he pretended that the two of you would have a future together.</p> <p>He exaggerated his feelings for you in order to have sex with you.</p> <p>He said "I love you" before you had sex when he did not really mean it.</p>	<p>Led you to believe that he had <i>stronger</i> feelings for you than he actually did <i>in order to have sex with you</i>.</p>
Previous involvement (α ST = .80, α LT = .72)	<p>He concealed the fact that he had to pay alimony to his ex-wife.</p> <p>He concealed the fact that he already had children with another woman.</p> <p>He concealed the fact that he had to pay child support to a previous wife.</p>	<p>Concealed the fact that he had to pay alimony or child support to his ex-wife.</p> <p>Concealed that he had children from a previous relationship.</p>
Promiscuity (α ST = .82, α LT = .76)	<p>He concealed his sexually promiscuous past.</p> <p>He concealed the fact that he had more than 50 previous sex partners.</p> <p>He had engaged in a wider range of sexual experimentation than he originally led you to believe.</p> <p>He concealed the fact that he had a reputation for being sexually promiscuous.</p> <p>He had six more previous sex partners than he originally led you to believe.</p>	<p>Concealed having a large number of sex partners in the past.</p>
Resource deception (α ST = .83, α LT = .83)	<p>He concealed the fact that he had suffered a large cut in pay.</p> <p>He concealed the fact that he was deeply in debt.</p> <p>He exaggerated his income.</p> <p>He concealed the fact that he continued to borrow money from his relatives.</p> <p>He concealed the fact that he had been fired from his job.</p> <p>He couldn't pay for the dinner he had arranged for the two of you because his credit card was declined.</p>	<p>Led you to believe he had more money than he actually had.</p>
Sexual deception (Sexually Led On) (α ST = .90, α LT = .89)	<p>He implied that he would do sexual favors for you and then refused to perform them.</p> <p>He led you to believe that sex was forthcoming but then declined at the last minute.</p> <p>He led you to believe that he was willing to have sex with you but then refused to do so.</p> <p>He led you to believe he would have sex with you but then decided not to at the last minute.</p>	<p>Led you to believe that he would have sex with you but then refused to do so.</p>

(continued)

APPENDIX (continued)

Cluster/Composite	Hypothetical Scenarios	Past Experiences
Sexual fantasy (α ST = .86, α LT = .84)	He hid the fact that he had sexual fantasies about others. He concealed the fact that he fantasized about sleeping with a variety of women. He concealed the fact that he often daydreamed about having sex with others.	Had sexual fantasies he had about other women from you.
Sexual infidelity (α ST = .87, α LT = .84)	He concealed the fact that he had a one-night stand while he was involved with you. He concealed the brief sexual fling he had while he was on vacation. He failed to reveal that he ended up having sex with someone because he got drunk one night when he was out of town. He concealed the fact that he was still sexually involved with a former girlfriend, although <i>he no longer had feelings for her</i> . He told you that he was working when he was really having sex with another woman.	Had sex with someone else while involved with you and attempted to conceal it.

NOTE

1. Most alpha reliability estimates were reasonably high (.80 or greater, see the appendix). In three cases, however, the estimate was .60 or less, suggesting heterogeneity of item content. In each of these cases, statistical tests were conducted on both the composites and the items within them. In one of these three cases (hid emotions, short-term context) the results differed substantially by item. Men reported greater upset in response to hiding emotions to act tough or macho ($M = -.42$, $SD = 1.65$) than did women ($M = -.78$, $SD = 1.72$), $t(238) = 2.33$, $p < .05$, whereas women reported greater upset to a partner denying feelings of love ($M = .42$, $SD = 1.86$) than did men ($M = .12$, $SD = 1.98$), $t(237) = -1.72$, $p = .09$, marginal. The remaining item in the composite showed no significant difference between the sexes ($p = .74$).

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Received October 9, 2003

Revision accepted April 7, 2004