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Relationship experience as a predictor of romantic jealousy

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Abstract

We examined between-sex differences and within-sex differences in jealousy in response to a romantic partner's sexual and emotional infidelity. In addition to replicating established sex differences in jealousy, we investigated a potential trigger for within-sex differences in jealousy. We hypothesized that men will be more distressed by sexual infidelity and women will be more distressed by emotional infidelity and that relationship experience will trigger men and women to respond in evolutionarily predictable ways. We replicated previous research on sex differences in jealousy and demonstrated that relationship experience predicts upset over infidelity, but primarily for men. Relative to men without relationship experience, men with such experience reported greater distress about a partner's sexual infidelity. Discussion focuses on the relevance of relationship experience to within-sex differences in distress over a partner's infidelities. © 2005 Elsevier Ltd. All rights reserved.

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1. Introduction

Because of the reproductive costs of a male unknowingly investing in offspring to whom he is not genetically related, men have been hypothesized to be more upset over a partner's sexual

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infidelity than her emotional infidelity. Women, on the other hand, suffer greater reproductive costs if they lose paternal investment and, therefore, have been hypothesized to be more upset over a partner's emotional infidelity than his sexual infidelity (Daly, Wilson, & Weghorst, 1982; Symons, 1979). Buss, Larsen, Westen, and Semmelroth (1992) tested this hypothesis in a study that examined sex differences in jealousy in three distinct ways. First, they used a forced-choice self-report survey that teased apart sexual infidelity from emotional infidelity. Second, they investigated physiological responses to imagined infidelity. Finally, they investigated what triggered the different responses between and within the sexes. They hypothesized and found that both types of infidelity distress both men and women, but that the weight that is given to each type is different for the sexes, with men more affected by sexual infidelity and women more affected by emotional infidelity. The present study was designed to replicate and extend these findings by investigating possible triggers for the sex-differentiated responses within men and women.

Both sexes have a jealousy psychology, but some of the triggers that activate men's jealousy are different from the triggers that activate women's jealousy. A man is more attuned to cues by his partner that she is sexually unfaithful, whereas a woman is more attuned to cues by her partner that he may no longer be willing to invest in her exclusively (Schützwohl & Koch, 2004; Shackelford & Buss, 1997; Shackelford, Buss, & Bennett, 2002). Thus, a man's jealousy appears to be more likely to be activated by his partner's sexual infidelity and a woman's jealousy appears to be more likely to be activated by her partner's emotional infidelity.

Much of the research conducted on romantic jealousy has focused on differences between the sexes, with little attention devoted to within-sex differences. Buss et al. (1992) proposed that being in a sexually committed relationship activates the jealousy mechanism, because the direct experience of being in such a relationship contributes to the activation of the different weights associated with the jealousy mechanism. Their results revealed a reliable difference between men who had been in a committed sexual relationship and men that had not (with relationship experience predicting greater upset to sexual infidelity than to emotional infidelity), but no such effect was found for women.

The present research was intended to provide a more detailed test of the general hypothesis that relationship experience augments the differences between men and women in their respective distress over sexual and emotional infidelity. Rather than simply inquiring whether participants have had a romantic relationship, we presented a series of questions concerning participants' relationship history and current involvement in a relationship. These questions enabled us to test a set of hypotheses regarding the consequences of relationship experience for the distress generated by sexual versus emotional infidelity.

The hypotheses are as follows (stated with reference to men, but equally applicable to women—see below): (1) men who have ever been in a serious, committed romantic relationship (SCRR) will be more distressed by sexual infidelity than men who have never been in a SCRR, (2) men who are *currently* in a serious, committed romantic relationship (CSCRR) will be more distressed by sexual infidelity than men who are currently in a non-serious dating relationship (CNSDR), (3) men who are CSCRR will be more distressed by sexual infidelity than men who are not currently in a relationship (NCR), (4) men who are CNSDR will be more distressed by sexual infidelity than men who are NCR, and (5) men who are CSSRR or CNSDR will be more distressed by sexual infidelity than men who are NCR. This increased sexual jealousy may be activated because, until he enters into a relationship, a man cannot be cuckolded, so there is little need for sexual jealousy.

Once in a relationship, sexual infidelity weighs more heavily, because he is now faced with huge consequences if he is cuckolded.

Relationship experience may affect women in a fundamentally different manner. Therefore, ever experiencing a SCRR, being CSCRR compared to CNSDR, being CSCRR compared to NCR, being CNSDR compared to those NCR, and being CSCRR or CNSDR compared to NCR is expected to activate women's jealousy mechanism, but with an increase in emotional jealousy relative to sexual jealousy. This is expected because, once she becomes involved in a relationship, a woman is at a greater risk for resource loss and abandonment. We collected self-report data from over 200 participants to test these five hypotheses regarding relationship experience as a predictor of within-sex differences in jealousy.

2. Methods

2.1. Participants

Participants were 263 undergraduates (188 women, 75 men) enrolled in introductory psychology classes who received course credit for their participation. Participants ranged in age from 18 to 74 years, with a mean of 23.9 (SD = 6.3) for women and a mean of 25.2 years (SD = 9.9) for men. The majority of the sample was unmarried (87%) at the time of testing, but 89% of participants reported having experienced a committed, romantic relationship, either currently or in the past.

2.2. Materials and procedures

Data were collected using self-report questionnaires. Participants first responded "Yes" or "No" to the following three questions regarding their relationship experience: Have you ever been in a serious, committed, romantic relationship? Are you currently in a serious, committed, romantic relationship? Are you currently in a non-serious dating relationship? Following Buss et al. (1992), participants next were asked to reflect upon either a past or present serious, committed, romantic relationship in answering several questions, including scenarios involving acts of a partner's infidelity.

The first question was: "Imagine that the person with whom you have been involved becomes involved with someone else. What would upset or distress you more?" Participants were instructed to select one of the following: (A) Imagining your partner forming a deep emotional attachment to that other person and (B) Imagining your partner enjoying passionate sexual intercourse with that other person. The next question asked: "Imagine that you discover that the person with whom you have been seriously involved becomes interested in someone else. What would upset or distress you more?" Participants were instructed to select one of the following: (A) Imaging your partner trying different sexual positions with that other person and (B) Imagining your partner falling in love with that other person. The third question asked: "Imagine that your partner becomes emotionally involved with and has had sexual intercourse with another person. Which aspect of your partner's infidelity would upset you more?" Participants were instructed to select one of the following: (A) The sexual involvement and (B) The emotional involvement.

The final question asked: "Imagine that you are at a point in your relationship where you are less than satisfied sexually and emotionally, although you are hoping to improve your relationship in these areas. You learn your partner has committed an infidelity with another person. Which of these scenarios upsets you more?" Participants were instructed to select one of the following: (A) Your partner confiding to the other person things which he/she has not confided to you and (B) Your partner trying a new sexual position with the other person that he/she has not tried with you.

Following Buss et al. (1999), we computed a Sexual Jealousy Score (SJS) from the responses to the four forced-choice infidelity scenarios. For each scenario, a response of emotional infidelity was assigned a value of "0" and a response of sexual infidelity was assigned a value of "1." SJS was calculated as the sum of the responses to the four infidelity scenarios. SJS could vary from 0 (if the participants selected emotional infidelity as more upsetting than sexual infidelity for all four scenarios) to 4 (if the participants selected sexual infidelity as more upsetting than emotional infidelity for all four scenarios). SJS was calculated to allow us to assess responses to the infidelity scenarios with a multi-item measure of known reliability. The reliability of the SJS in these data was $\alpha = .70$.

3. Results

3.1. Replication of sex differences

To examine whether the sex difference in jealousy replicated, we conducted χ^2 tests on responses to each of the four scenarios. For the scenario of one's partner forming a deep emotional attachment to another person versus enjoying passionate sexual intercourse with that other person, 49.3% of men, but only 24.2% of women, reported more distress to the sexual infidelity than emotional infidelity, $\chi^2(1 \text{ df}) = 15.68$, p < .001. For the scenario involving a partner trying different sexual positions with another person versus falling in love with that other person, a similar sex difference was observed, with 33.3% of men, but only 9.7% of women reporting more distress to the sexual aspect of the infidelity, rather than the emotional aspect of infidelity, χ^2 (1 df) = 21.54, p < .001. For the scenario involving a partner confiding in another person versus trying new sexual positions with another person, 37.0% of men, but only 8.2% of women, reported more distress to the sexual infidelity than emotional infidelity, $\chi^2(1 \text{ df}) = 31.29$, p < .001. For the scenario involving both aspects of an infidelity occurring, a similar sex difference was observed, with 59.5% of men, but only 35.5% of women, reporting more distress to the sexual infidelity than emotional infidelity, $\chi^2(1 \text{ df}) = 12.47$, p < .001. Finally, a sex difference was found with the mean SJS score for men being significantly larger than for women (for men: M = 1.77, SD = 1.53; for women: M = 0.77, SD = 0.96; t(260) = -6.36, p < .001). Thus, we replicated findings of Buss et al. (1992, 1999).

3.2. Tests of the hypotheses

Table 1 presents descriptive and inferential statistics for within-sex differences in jealousy for men and for women who have ever been in a SCRR versus those who have never been in a SCRR.

Table 1 Within-sex differences for those who have ever been in a serious, committed romantic relationship vs. those who have never been in a serious, committed romantic relationship

| Infidelity scenarios | Percent selecting sexual infidelity as more distressing | | |
|--|---|--|------------------------|
| | Having ever been in a serious, committed relationship | Having never been in a serious, committed relationship | $\chi^2(1 \text{ df})$ |
| Males | n = 64 | n = 11 | |
| Passionate sex vs. Deep emotional attachment | 54.7 | 18.2 | 3.65* |
| Different sexual positions vs. Falling in love | 35.9 | 18.2 | 0.65 |
| Which aspect: Sexual vs. Emotional | 61.9 | 45.5 | 0.48 |
| Confiding in you vs. New sexual position | 39.7 | 20.0 | 0.83 |
| Females | n = 170 | n = 18 | |
| Passionate sex vs. Deep emotional attachment | 23.2 | 33.3 | 0.44 |
| Different sexual positions vs. Falling in love | 35.7 | 33.3 | 0.00 |
| Which aspect: Sexual vs. Emotional | 9.6 | 11.1 | 0.83 |
| Confiding in you vs. New sexual position | 8.5 | 5.9 | 0.95 |

^{*} p < .05.

For men, only one of the four infidelity scenarios generated a significant difference, but all four were in the predicted direction, consistent with hypothesis 1. The difference between women across all four scenarios was small and not significant. Whether they had ever been in a SCRR, women reported more distress about a partner's emotional infidelity than about his sexual infidelity.

Table 2 presents descriptive and inferential statistics for within-sex differences in jealousy for men and for women who are CSCRR compared to those who are CNSDR. These and all subsequent contrasts excluded responses from participants who have never been in an SCRR. This was done in order to narrow down relationship experience to only those who have ever been in a

Table 2 Within-sex differences for those who are currently in a serious, committed romantic relationship vs. those who are currently in a non-serious dating relationship

| fidelity scenarios Percent selecting sexual infidelity as more distressing | | | |
|--|--|--|------------------------|
| | Currently in a serious, committed relationship | Currently in a non-serious dating relationship | $\chi^2(1 \text{ df})$ |
| Males | n = 26 | n = 12 | |
| Passionate sex vs. Deep emotional attachment | 46.2 | 66.7 | 0.68 |
| Different sexual positions vs. Falling in love | 38.5 | 25.0 | 0.20 |
| Which aspect: Sexual vs. Emotional | 64.0 | 58.3 | 0.00 |
| Confiding in you vs. New sexual position | 44.0 | 33.3 | 0.72 |
| Females | n = 119 | n = 18 | |
| Passionate sex vs. Deep emotional attachment | 25.2 | 11.1 | 1.04 |
| Different sexual positions vs. Falling in love | 10.9 | 0.0 | 1.08 |
| Which aspect: Sexual vs. Emotional | 37.8 | 27.8 | 0.58 |
| Confiding in you vs. New sexual position | 9.5 | 5.6 | 0.01 |

SCRR. For both men and women, the difference between those who are CSCRR and those who are CNSDR was small and not significant, failing to support hypothesis 2.

Table 3 presents descriptive and inferential statistics for within-sex differences in jealousy for men and for women who are CSCRR and those who are NCR. The responses of both men and women who are CSCRR and those who are NCR did not differ significantly for any of the four infidelity scenarios, failing to support hypothesis 3.

Table 4 presents descriptive and inferential statistics for within-sex differences in jealousy for men and for women who are CNSDR compared with those NCR. The responses of both men and women who are CNSDR compared with those who are NCR did not differ significantly for any of the four infidelity scenarios, failing to support hypothesis 4.

Table 3
Within-sex differences for those who are currently in a serious, committed romantic relationship vs. those who are not currently in a relationship

| Infidelity scenarios | Percent selecting sexual infidelity as more distressing | | |
|--|---|---------------------------------|------------------------|
| | Currently in a serious, committed relationship | Currently not in a relationship | $\chi^2(1 \text{ df})$ |
| Males | n = 26 | n = 26 | |
| Passionate sex vs. Deep emotional attachment | 46.2 | 57.7 | 0.31 |
| Different sexual positions vs. Falling in love | 38.5 | 38.5 | 0.08 |
| Which aspect: Sexual vs. Emotional | 64.0 | 61.5 | 0.01 |
| Confiding in you vs. New sexual position | 44.0 | 61.5 | 0.97 |
| Females | n = 119 | n = 32 | |
| Passionate sex vs. Deep emotional attachment | 25.2 | 21.9 | 0.02 |
| Different sexual positions vs. Falling in love | 10.9 | 9.4 | 0.01 |
| Which aspect: Sexual vs. Emotional | 37.8 | 34.4 | 0.02 |
| Confiding in you vs. New sexual position | 9.5 | 6.3 | 0.05 |

Table 4
Within-sex differences for those who are currently in a non-serious dating relationship vs. those who are not currently in a relationship

| Infidelity scenarios | Percent selecting sexual infidelity as more distressing | | | |
|--|---|---------------------------------|------------------------|--|
| | Currently in a non-serious dating relationship | Currently not in a relationship | $\chi^2(1 \text{ df})$ | |
| Males | n = 12 | n = 26 | | |
| Passionate sex vs. Deep emotional attachment | 66.6 | 57.7 | 0.03 | |
| Different sexual positions vs. Falling in love | 25.0 | 38.5 | 0.02 | |
| Which aspect: Sexual vs. Emotional | 58.3 | 61.5 | 0.03 | |
| Confiding in you vs. New sexual position | 33.3 | 61.5 | 1.61 | |
| Females | n = 18 | n = 32 | | |
| Passionate sex vs. Deep emotional attachment | 11.1 | 21.9 | 0.33 | |
| Different sexual positions vs. Falling in love | 0.0 | 9.4 | 0.52 | |
| Which aspect: Sexual vs. Emotional | 27.8 | 34.4 | 0.03 | |
| Confiding in you vs. New sexual position | 5.6 | 6.3 | 0.27 | |

Table 5
Within-sex differences for those who are currently in a serious, committed romantic relationship or currently in a non-serious dating relationship vs. those who are not currently in a relationship

| Infidelity scenarios | Percent selecting sexual infidelity as more distressing | | |
|--|---|---------------------------------|------------------------|
| | Currently in a serious, committed relationship or a non-serious dating relationship | Currently not in a relationship | $\chi^2(1 \text{ df})$ |
| Males | n = 38 | n = 26 | |
| Passionate sex vs. Deep emotional attachment | 52.6 | 57.7 | 0.02 |
| Different sexual positions vs. Falling in love | 34.2 | 38.5 | 0.01 |
| Which aspect: Sexual vs. Emotional | 62.2 | 61.5 | 0.03 |
| Confiding in you vs. New sexual position | 40.5 | 61.5 | 1.95 |
| Females | n = 137 | n = 32 | |
| Passionate sex vs. Deep emotional attachment | 23.5 | 21.9 | 0.00 |
| Different sexual positions vs. Falling in love | 9.6 | 9.4 | 0.09 |
| Which aspect: Sexual vs. Emotional | 36.0 | 34.4 | 0.00 |
| Confiding in you vs. New sexual position | 8.8 | 6.3 | 0.01 |

Table 5 presents descriptive and inferential statistics for within-sex differences in jealousy for men and for women who are CSSRR or CNSDR compared with those NCR. The responses of both men and women who are CSSRR or CNSDR compared with those who are NCR did not differ significantly for any of the four infidelity scenarios, failing to support hypothesis 5.

4. Discussion

The risk of being cuckolded (for men) and losing paternal investment (for women) is likely to have been a reoccurring problem that our ancestors had to solve. Previous research hypothesized and found that men and women have jealousy mechanisms that are activated by different types of infidelity, with men being more upset over sexual infidelity and women being more upset over emotional infidelity. We replicated this difference in the current research.

As suggested by Buss et al. (1992), a potential trigger for within-sex differences in jealousy may occur when involvement in a SCRR begins. As hypothesized, there was a within-sex difference for men who have ever been in a SCRR versus men who have not. This result suggests that men who have ever been at risk for cuckoldry respond with greater intensity to sexual infidelity than men who have not faced this adaptive problem. The hypothesis that there would be within-sex difference for women who have (versus women who have not) ever been in a SCRR was not supported. These findings replicate the Buss et al. (1992) findings. This null effect suggests that women's jealousy mechanisms may have already been triggered or do not need to be triggered (see below for explanation).

It was hypothesized that other types of relationship experience (such as CSCRR, CNSDR and NCR) also would produce within-sex differences in jealousy, with men responding more to sexual infidelity and women responding more to emotional infidelity. The results for men generated no statistical support for these hypotheses, although the majority of the differences for men in each

type of relationship situation were in the hypothesized direction. A possible explanation for this pattern of results is that the sample of men was small and with each narrowing down of the criteria to define relationship experience, power was lost. The results of the current research should be interpreted with caution because of the small samples sizes, particularly for men.

The hypothesis that relationship experience triggers the jealousy mechanism in women may be wrong. Instead, perhaps the activation of the jealousy mechanism in women occurs long before a serious relationship occurs. Working from his strategic conflict model, Buss (1989) suggested that parents socialize children differently depending on whether they are male or female, because this strategy is in the reproductive interests of the parents. If this is true, then perhaps parents socialize daughters to treat all relationships the same, in the sense that they should always be attentive to resource acquisition and loss. This is advantageous for women more than men because women are always at risk for resource loss, whereas men are only at risk of cuckoldry when they are in a committed, long-term romantic relationship.

A limitation of the current research is the reliance on participant's responses to an *imagined* infidelity. Participants might respond differently to as partner's actual infidelities. Although difficult to conduct due to methodological and ethical challenges, a study that examined jealousy in people who recently experienced partner infidelity would be valuable. Additional limitations of this study include the small sample of men and the relative youthfulness of participants. Future work could include larger, more diverse samples of men and women and further investigate whether relationship experience plays a role in the distress caused by jealousy at later ages, and especially for men.

Relationship experience is a new and potentially promising avenue for exploring variations in jealousy within the sexes. Future research could continue the search for other triggers that may activate the jealousy mechanism in men and women. In addition, a longitudinal within-subjects design that records how relationship experience plays a role throughout the lifespan would be important and could help rule out cohort or period effects.

In summary, the current research offers a small but notable contribution to our understanding of how jealousy mechanisms might be triggered and the relevance of relationship experience in this context. No previous research has addressed how different types of relationship experience might play a role in the activation of jealousy mechanisms. The results of the current research provide qualitative (and limited quantitative) evidence that relationship experience may account for a small portion of within-sex differences in jealousy, especially for men.

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