

ROMANTIC JEALOUSY IN EARLY ADULTHOOD AND IN LATER LIFE

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Young men are more distressed by a partner's sexual infidelity, whereas young women are more distressed by a partner's emotional infidelity. The present research investigated (a) whether the sex difference in jealousy replicates in an older sample, and (b) whether younger people differ from older people in their selection of the more distressing infidelity scenario. We presented forced-choice dilemmas to 202 older people (mean age = 67 years) and to 234 younger people (mean age = 20 years). The sex difference replicated in the older sample. In addition, older women were less likely than younger women to select a partner's emotional infidelity as more distressing than a partner's sexual infidelity. Discussion offers directions for future work on sex differences and age differences in jealousy.

KEY WORDS: **Age differences; Evolutionary psychology; Romantic jealousy; Sex differences**

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Romantic jealousy is a key emotion experienced by both men and women (e.g., Bringle and Buunk 1991; Salovey and Rothman 1989; Shackelford, LeBlanc, and Drass 2000; and see Buss 2000 for a review of research). Empirical work over the past decade documents that both men and women report that they would experience high levels of upset by a long-term partner's real or imagined infidelity. This research also documents a sex difference in the psychological weighting of the aspects or content of a partner's infidelity: Men report greater distress than do women in response to a partner's sexual infidelity (for example, having sexual intercourse with someone else), and women report greater distress than do men in response to a partner's emotional infidelity (for example, falling in love with someone else). In addition, when a partner is imagined or discovered to be involved in an affair that is both sexual and emotional in nature, men report greater distress in response to the sexual aspect of the infidelity, whereas women report greater distress in response to the emotional aspect of the infidelity. This sex difference in the nature of jealousy has been found repeatedly by different investigators—psychologically, physiologically, and cross-culturally (Buss et al. 1992; DeSteno et al. 2002; Geary et al. 1995; Harris 2000; Pietrzak et al. 2002; Shackelford, Buss, and Bennett 2002; Wiederman and Kendall 1999).

The sex difference in jealousy was first hypothesized by evolutionary psychologists. Evolutionary psychologists hypothesized two decades ago that men and women would differ psychologically in the weighting given to cues that trigger jealousy (Daly, Wilson, and Weghorst 1982; Symons 1979). Both sexes, of course, are distressed by both forms of infidelity, and the evolutionary hypothesis suggests that they should be, given their correlated nature in everyday life and the fact that both forms would have signaled the loss of important reproductive resources in ancestral environments (Buss et al. 1992). Nonetheless, the hypothesized sex difference is anchored in sexual asymmetries that men and women recurrently faced. Because fertilization occurs internally within women, a man's partner's sexual infidelity threatened his paternity certainty. On the other hand, from a woman's perspective, a partner's emotional involvement with other women was hypothesized to predict the long-term loss of her partner's time, resources, and investments, all of which could get diverted to the rival woman and her children. Thus, the *evolved psychological design* of male and female romantic jealousy was hypothesized to differ for the sexes, with women giving relatively greater weight to signals of emotional infidelity and men giving relatively greater weight to signals of sexual infidelity.

The empirical evidence documents a sex difference in the psychological weighting of the cues that trigger jealousy. As Voracek (2001) points

out, however, every study conducted to assess this sex difference has relied on samples of young men and young women. The implicit assumption of past research, according to Voracek, is that the sex difference in jealousy is generalizable to older adults, but this assumption has not been subjected to empirical scrutiny. Part of the impetus for Voracek's research was to identify whether the sex difference was moderated by participant age. Age is a proxy for other, developmentally relevant variables, such as experience in long-term romantic relationships and the experiences of one's own or a partner's infidelities (Voracek 2001).

Voracek's (2001) research included a community sample of Austrian participants 18 years or older. Participants completed an infidelity dilemma used in past research and pioneered by Buss and colleagues (1992). In this dilemma, the participant is asked to think of a serious romantic relationship in which he or she is currently involved, has been involved, or would like to be involved. The participant is asked to imagine that the person with whom he or she is involved became interested in someone else. The participant then must select which of two activities would be more distressing: a partner's sexual infidelity, or a partner's emotional infidelity. As a first attempt to identify whether participant age moderates the sex difference in jealousy, Voracek constructed a participant age variable with three levels: 18 to 25 years ($n = 129$), 26 to 40 years ($n = 126$), and older than 40 years ($n = 80$). The forced-choice infidelity selection was regressed on the trichotomous participant age variable, a sex of participant variable, and several other demographic variables. Participant age did not moderate the sex difference in jealousy.

An alternative strategy for investigating the effect of age on the sex difference in jealousy is to attempt to answer the following question: Does the sex difference identified in younger samples replicate in an older sample? An evolutionary perspective suggests that the sex difference in jealousy will be replicated in an older sample, but that the difference may be smaller in magnitude than it is in younger samples. This is expected because, relative to younger men, older men may be less distressed by a partner's sexual infidelity, assuming they are partnered to postreproductive women (a reasonable assumption: see Buss 2004 for a review of research on assortative mating; also see Flinn 1988 and Buss and Shackelford 1997). Sexual infidelity by a postreproductive woman does not place her partner at risk of cuckoldry. And relative to younger women, older women may be less distressed by partner's emotional infidelity. Older women are less likely than younger women to have dependent children, and therefore, any resource diversion that accompanies a partner's emotional infidelity may be less consequential for an older woman than it is for a younger

woman. Both factors lead to the expectation of an attenuation of the sex difference over the lifespan.

In addition, it would be instructive to know if older people differ from younger people in their selection of the more distressing infidelity scenario. Following the evolutionary reasoning presented above, we speculate that older men will be less distressed than will younger men by a partner's sexual infidelity, and that older women will be less distressed than will younger women by a partner's emotional infidelity. We are not proposing that the evolved jealousy mechanisms are "undone" with age but, instead, that these mechanisms may have age-sensitive design features.

Although the average lifespan of ancestral humans is likely to have been shorter than the average lifespan of modern humans, there is a consensus among evolutionary scientists that *some* ancestral humans surely lived into their seventies and eighties (see, for example, Euler and Weitzel 1996; Hill and Hurtado 1991). It therefore is reasonable to propose hypotheses about the evolved psychology of older humans, or about developmental changes in evolved psychological mechanisms over the lifespan (for examples of such work, see Euler and Weitzel 1996 and Hill and Hurtado 1991). We are not proposing conscious or unconscious calculation of fitness benefits; rather, we are proposing evolved jealousy mechanisms that are sensitive to certain contexts that change (and presumably have changed over human evolutionary history) reliably with age. Other context-sensitive design features of jealousy include, for example, sensitivity to a partner's physical attractiveness (Buss and Shackelford 1997) and to characteristics of mating rivals (Buss et al. 2000).

In summary, the purpose of the present research is twofold: (a) to investigate whether the sex difference in jealousy identified in younger samples persists over the lifespan and hence would be found in an older sample, and (b) to investigate, separately for men and for women, whether younger people differ from older people in their selection of the more distressing infidelity scenario. No previous research has explicitly investigated the existence of the sex difference in the weighting given to different forms of infidelity in an older sample. And no previous research has investigated the possibility of within-sex age differences. To address these issues, we collected responses to several infidelity dilemmas from more than 200 people with an average age of about 67 years. We compared the responses of this older sample with an archival database of responses provided by more than 200 people with an average age of about 20 years (Buss et al. 1999, Study 2).

METHOD

Participants

We present data collected from two independent samples of participants. The first sample, which we will call the younger sample, consisted of 117 male and 117 female undergraduates at a large university in the midwestern United States. Participation was voluntary and not rewarded. Analyses based on data collected from the younger sample were presented in Study 2 of Buss and colleagues' 1999 publication. These data and associated analyses are used in the present article as a means of comparison with the second, much older, sample (see below). Additional analyses using these data and not previously reported are presented in the current article. The average age of participants in the younger sample was 20.2 years (s.d. = 1.7 years; for males, mean = 20.2 years, s.d. = 1.6 years; for females, mean = 20.1 years, s.d. = 1.7 years).

The second sample, which we will call the older sample, consisted of 69 men and 133 women residing in one of several retirement communities in a metropolitan area in the southeastern United States. Participation was voluntary and not rewarded. The average age of participants in the older sample was 67.1 years (s.d. = 8.7 years; for males, mean = 66.7 years, s.d. = 9.1 years; for females, mean = 67.3 years, s.d. = 8.5 years).

Materials

Participants from both samples completed an identical set of questions. Six questions (from Buss et al. 1999) presented two infidelity scenarios and asked participants which scenario would upset or distress them more. The six questions were prefaced with the following instructional set:

Please think of a serious or committed romantic relationship that you have had in the past, that you are currently having, or that you would like to have. Imagine that you discover that the person with whom you've been seriously involved became interested in someone else. What would upset or distress you more? (Please circle only one answer, A or B, for each question.)

Two of these dilemmas were replications of previous studies (Buss et al. 1992). In the first replication, participants indicated which of the following two events would be more distressing: "(A) Imagining your partner enjoying passionate sexual intercourse with that other person" or "(B) Imagining your partner forming a deep emotional attachment to that other person." In the second replication, participants indicated which of the

following two events would be more distressing: "(A) Imagining your partner trying different sexual positions with that other person" or "(B) Imagining your partner falling in love with that other person." Four additional dilemmas were presented and are described next.

The first of the four additional dilemmas was as follows: "Imagine that your partner *both* formed an emotional attachment to another person *and* had sexual intercourse with that other person. *Which aspect* of your partner's involvement would upset you more? (A) the sexual intercourse with that other person, or (B) the emotional attachment to that other person." The next dilemma was constructed with strong wording requiring participants to evaluate each type of infidelity in the absence of the other: "Which would upset or distress you more? (A) Imagining your partner having sexual intercourse with that person, but you are certain that they will *not* form a deep emotional attachment. (B) Imagining your partner forming a deep emotional attachment to that person, but you are certain that they will *not* have sexual intercourse." In this dilemma, participants were instructed to consider only cases in which one type of infidelity occurs, with a certainty that the other type will not occur. The next dilemma differed from the previous dilemmas in that it invoked a former lover of one's partner: "Which would upset or distress you more? (A) Imagining that your partner is still sexually interested in the former lover, but is no longer in love with this person. (B) Imagining that your partner is still emotionally involved with the former lover, but is no longer sexually interested in this person." A fourth dilemma read as follows: "Which would upset or distress you more? (A) Imagining your partner having sexual intercourse for just one night with another person, with no chance of any further involvement. (B) Imagining your partner becoming emotionally involved with another person, with no chance of any sexual involvement." This dilemma offers a contrast between the purely sexual infidelity, which would have compromised an ancestral man's certainty in paternity, with the emotional involvement, which may have signaled to a woman the longer-term diversion of her partner's commitment and resources.

Analysis Plan

We first present the results of analyses of within-sample sex differences along the six infidelity dilemmas. We present these analyses first for the younger sample and then for the older sample. Next, we present the results of analyses of sample differences (younger sample vs. older sample) within sex along the six infidelity dilemmas. We present these

analyses first for the male participants and then for the female participants.

Each of the four sets of analyses present the results of six chi-square analyses (using two-tailed p -values with α set to .05)—one each for the six infidelity dilemmas. In addition (and following Voracek 2001; and see Fleiss 1994), for each dilemma we present the corresponding odds ratio (OR) describing the differential response of one sex relative to the other or of one sample relative to the other. Also following Voracek 2001 (and see Hasselblad and Hedges 1995), for each dilemma we present d_1 , an index appropriate for expressing an effect size for an OR computed from a fourfold table of dichotomous data. The magnitude of d_1 is interpreted according to the conventions provided by Cohen (1988) for the standardized mean difference effect size; thus, an absolute value of d_1 around 0.20 is “small,” around 0.50 is “medium,” and around 0.80 is “large.”

For each of the four sets of analyses, we report the results of an independent means t -test (in which the p -value is two-tailed and α is set to .05) on a composite Sexual Jealousy Score (SJS) that we computed from responses to the six infidelity dilemmas, following Dijkstra et al. (2001). For each set of six dilemmas, 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 computed as the sum of the six recoded responses to the six infidelity dilemmas. SJS could vary from 0 (if the participant selected emotional infidelity as more upsetting than sexual infidelity for all six infidelity dilemmas) to 6 (if the participant selected sexual infidelity as more upsetting than emotional infidelity for all six infidelity dilemmas). A key reason for presenting the results of analyses of SJS is that single-item measures such as the individual infidelity dilemmas are of unknown reliability. Use of the SJS allowed us to assess differential responses to the infidelity dilemmas by sex and by sample with a composite measure of known reliability. The reliability of the SJS in these data was $\alpha = .84$ across sample and sex. Within sample and within sex, α varied from .79 to .87. Thus, the composite SJS variable displayed exemplary reliability (Robinson, Shaver, and Wrightsman 1991).

RESULTS

Within-Sample Sex Differences

Sex Differences within the Younger Sample. The top panel of Table 1 presents descriptive and inferential statistics for within-sample sex differences in jealousy for the younger sample. Across all six infidelity

dilemmas, younger men more than younger women selected a partner's sexual infidelity as more distressing than a partner's emotional infidelity. For the first replication dilemma (passionate sexual intercourse vs. deep emotional attachment), for example, 75.7% of the young men selected a partner's sexual infidelity as more distressing, whereas only 32.5% of the young women selected a partner's sexual infidelity as more distressing. The corresponding *OR* (6.61), indicates that young men were nearly seven times more likely than were young women to select a partner's sexual infidelity as more distressing than a partner's emotional infidelity. The corresponding d_1 is 1.04. The mean SJS score for young men was significantly larger than for young women (for men: mean = 3.51, s.d. = 1.85; for women: mean = 1.27, s.d. = 1.61; $t_{232} = 9.89$, $p < .001$; Cohen's $d = 1.29$). Relative to young women, young men were more distressed by a partner's sexual infidelity than by a partner's emotional infidelity.

Sex Differences within the Older Sample. The bottom panel of Table 1 presents descriptive and inferential statistics for within-sample sex differences in jealousy for the older sample. Across five of the six infidelity dilemmas, older men more than older women selected a partner's sexual infidelity as more distressing than a partner's emotional infidelity. The mean SJS score for older men was significantly larger than for older women (for men: mean = 3.50, s.d. = 2.31; for women: mean = 2.31, s.d. = 2.23; $t_{187} = 3.42$, $p = .001$; Cohen's $d = 0.53$). Relative to older women, older men are more distressed by a partner's sexual infidelity than by a partner's emotional infidelity.

The pattern of sex differences identified in the younger sample was replicated for the older sample. For both the younger and older samples, men (relative to women) selected a partner's sexual infidelity as more distressing than a partner's emotional infidelity. The magnitudes of these sex differences were smaller, however, for the older sample than for the younger sample.

Within-Sex Sample Differences

Younger Men versus Older Men. The top panel of Table 2 presents descriptive and inferential statistics for within-sex sample differences in jealousy for men. The responses of younger men and older men did not differ significantly for any of the six dilemmas. The mean SJS scores for younger men and older men did not differ statistically (for younger men: mean = 3.51, s.d. = 1.85; for older men: mean = 3.50, s.d. = 2.31; $t_{179} = 0.04$, $p > .05$; Cohen's $d = 0.01$). In summary, across all six of the infidelity dilemmas, and for the composite SJS score, the responses of the younger men and the older men did not differ significantly.

Table 1. Within-Sample Sex Differences in Jealousy

| <i>Infidelity Dilemma</i> | <i>Percent selecting sex as more distressing</i> | | χ^2 (1 df) | <i>Odds ratio (d_1)</i> |
|--|--|--------------|-----------------|--------------------------------------|
| | <i>Men</i> | <i>Women</i> | | |
| <i>YOUNGER SAMPLE</i> | | | | |
| Passionate sex vs. Deep emotional attachment | 75.7 | 32.5 | 43.50*** | 6.61 (1.04) |
| Different sexual positions vs. Falling in love | 43.5 | 11.2 | 30.32*** | 6.18 (1.00) |
| Which aspect: Sexual vs. Emotional | 61.5 | 12.8 | 59.45*** | 10.88 (1.32) |
| Sex but no emotion vs. Emotion but no sex | 65.0 | 30.8 | 27.40*** | 4.17 (0.79) |
| Former lover: Sexual vs. Emotional | 54.3 | 27.4 | 17.53*** | 3.21 (0.64) |
| Sex for one night vs. Emotion, no chance for sex | 54.3 | 12.9 | 44.50*** | 4.21 (0.79) |
| <i>OLDER SAMPLE</i> | | | | |
| Passionate sex vs. Deep emotional attachment | 67.7 | 49.2 | 5.76* | 2.23 (0.44) |
| Different sexual positions vs. Falling in love | 52.5 | 21.8 | 17.72*** | 3.91 (0.75) |
| Which aspect: Sexual vs. Emotional | 61.3 | 39.2 | 8.13** | 2.42 (0.49) |
| Sex but no emotion vs. Emotion but no sex | 65.1 | 44.3 | 7.21** | 2.35 (0.47) |
| Former lover: Sexual vs. Emotional | 54.0 | 41.5 | 2.63 | 1.62 (0.27) |
| Sex for one night vs. Emotion, no chance for sex | 58.7 | 38.2 | 7.08** | 2.35 (0.47) |

Note: For the younger sample, $n = 234$ (117 men, 117 women); for the older sample, $n = 202$ (69 men, 133 women). The d_1 index (Hasselblad and Hedges 1995) is appropriate for expressing an effect size for an odds ratio computed from a fourfold table of dichotomous data. The magnitude of d_1 is interpreted according to the conventions provided by Cohen (1988) for the standardized mean difference effect size, Cohen's d . Thus, as an absolute value, d_1 around 0.20 is "small," d_1 around 0.50 is "medium," and d_1 around 0.80 is "large."

* $p < .05$, ** $p < .01$, *** $p < .001$ (two-tailed)

Younger Women versus Older Women. The bottom panel of Table 2 presents descriptive and inferential statistics for within-sex sample differences in jealousy for women. Across all six infidelity dilemmas, older women more than younger women selected a partner's sexual infidelity as more distressing than a partner's emotional infidelity. These results are in striking contrast to the results of the tests comparing the responses of older men and younger men. The mean SJS score for older women was significantly larger than for younger women (for older women: mean = 2.31, s.d. = 2.23; for younger women: mean = 1.27, s.d. = 1.61; $t_{240} = 4.13$, $p < .001$; Cohen's $d = 0.53$). Relative to older women, younger women were more distressed by a partner's emotional infidelity than by a partner's sexual infidelity.

DISCUSSION

Previous research using samples of young men and young women document a robust and replicable sex difference in jealousy: Men are more distressed by a partner's sexual infidelity (for example, having sexual intercourse with someone else), whereas women are more distressed by a partner's emotional infidelity (for example, falling in love with someone else). The present research indicates that this sex difference replicates in a much older sample, suggesting that the sex difference persists over the lifespan, although the magnitude of the difference is smaller in the older sample than in the younger sample. The present research also indicates an intriguing within-sex, age-dependent asymmetry in the selection of the more distressing infidelity type. Older men and younger men do not differ in the selection of the more distressing infidelity type. A clear age-dependent difference emerged for women, however. Across every infidelity dilemma, older women are less likely than younger women to select as more distressing a partner's emotional infidelity.

These findings are consistent with several of the evolutionarily inspired speculations. We suggested that older women would be less distressed than would younger women by a partner's emotional infidelity. This is because older women are less likely to have dependent children than are younger women, and therefore, the diversion of resources and investment that accompanies a partner's emotional infidelity might be less consequential for older women than for younger women. The results provide initial support for this speculation. What we do not know, and what future research can address, is whether this age-dependent within-sex difference is attributable to the fact that older women are less likely than younger women to have dependent children. It would be useful to

Table 2. Within-Sex Sample Differences in Jealousy

| <i>Infidelity Dilemma</i> | <i>Percent selecting sex as more distressing</i> | | χ^2 (1 df) | <i>Odds ratio (d_i)</i> |
|---|--|--------------|--------------------|-----------------------------------|
| | <i>Young</i> | <i>Older</i> | | |
| <i>MEN</i> | | | | |
| Passionate sex vs. Deep emotional attachment | 75.7 | 67.7 | 1.28 | 1.49 (0.22) |
| Different sexual positions vs. Falling in love | 43.5 | 52.5 | 1.29 | 0.71 (-0.19) |
| Which aspect: Sexual vs. Emotional | 61.5 | 61.3 | <1.00 | 1.03 (0.02) |
| Sex but no emotion vs. Emotion but no sex | 65.0 | 65.1 | <1.00 | 0.99 (-0.01) |
| Former lover: Sexual vs. Emotional | 54.3 | 54.0 | <1.00 | 1.04 (0.02) |
| Sex for one night vs. Emotion, no chance for sex | 54.3 | 58.7 | <1.00 | 0.82 (-0.11) |
| <i>WOMEN</i> | | | | |
| Passionate sex vs. Deep emotional attachment | 32.5 | 49.2 | 6.95** | 0.50 (-0.38) |
| Different sexual positions vs. Falling in love | 11.2 | 21.8 | 4.82* | 0.45 (-0.44) |
| Which aspect: Sexual vs. Emotional | 12.8 | 39.2 | 21.62*** | 0.23 (-0.81) |
| Sex but no emotion vs. Emotion but no sex | 30.8 | 44.3 | 4.63* | 0.56 (-0.32) |
| Former lover: Sexual vs. Emotional | 27.4 | 41.5 | 5.28* | 0.53 (-0.35) |
| Sex for one night vs. Emotion, no chance for sex | 12.9 | 38.2 | 19.86*** | 0.24 (-0.80) |

See note for Table 1.

* $p < .05$, ** $p < .01$, *** $p < .001$ (two-tailed)

secure responses to the infidelity dilemmas from older women and younger women, some of whom have dependent children and some of whom do not. If the speculation is correct, then women who have dependent children should be more likely to select as more distressing a partner's emotional infidelity, independent of participant age (see Geary 1998 and Lampert and Friedman 1992 for related discussions).

An alternative speculation for the difference in upset about a partner's infidelity between younger women and older women focuses not on the importance of emotional infidelity, but instead on the importance of a

partner's sexual infidelity earlier in life relative to later in life. Younger men are more likely to be sexually unfaithful than are older men (see, e.g., Buss 2004). Because of its relative frequency, perhaps the occurrence of a young man's infidelity is less likely to be interpreted by his partner as a harbinger of emotional infidelity and subsequent diversion of resources to another woman. An older man's sexual infidelity, in contrast, may provide an important cue to likely relationship disillusion because it is relatively infrequent. What we do not know—and what remains for future research to test—is whether there is a link between a man's age and the likelihood that his sexual infidelity will be followed by his termination of the relationship with his regular partner.

We speculated that older men would be less distressed than would younger men by a partner's sexual infidelity. This is because a partner's sexual infidelity is less likely to place older men at risk of cuckoldry than it is to place younger men at risk of cuckoldry (see Flinn 1988 and Buss and Shackelford 1997 for research indicating that men "guard" older women less than younger women, a finding that corroborates the current speculation). This speculation is not supported by the present research. Across all six infidelity dilemmas, older and younger men do not differ in the selection of the more distressing infidelity type. It is possible that we did not accurately test this speculation. The speculation assumes that older men are, in general, partnered to older women who can no longer conceive children and, therefore, are not capable of genetically cuckolding the men (for research indicating that male sexual jealousy and female-directed intimate partner abuse and homicide is greater for age-discrepant couples in which an older man is mated to a much younger, reproductive-age woman, see, for example, Daly and Wilson 1988 and Shackelford, Buss, and Peters 2000). We do not know because we did not collect information on the age of the participant's partner. Future work can secure this information to allow for a cleaner test of the speculation that older men (who are partnered to older women) will be less likely than younger men (who are partnered to younger women) to select as more distressing a partner's sexual infidelity.

Alternatively, older men and younger men may not, in fact, differ in their upset about a partner's sexual infidelity. Although men's fertility declines with age, it remains significant throughout the lifespan. Older men can still sire children, and in addition, high-status older men probably did sire children throughout human evolutionary history (see Forsberg and Tullberg 1995; Käär et al. 1998; and see Buss 2004 for a review). We might therefore expect a persistent vigilance and upset about a partner's sexual infidelity throughout a man's life, regardless of his partner's current age and, therefore, reproductive potential.

Hormonal changes across a lifetime are more extreme for women than for men (for a brief review, see Geary et al. 2001). This sex-differentiated hormonal change with age might provide a proximate explanation for the sex-differentiated changes in upset to a partner's infidelity. Estrogen titers positively predict interest in children and might also positively predict upset to a partner's emotional infidelity, especially if a partner's emotional infidelity signals decreased male investment in children (and see Geary et al. 2001; Gaulin et al. 1997).

One limitation of the current research is that we cannot rule out the possibility of cohort effects because the design of our study was cross-sectional. Our intention in this research was, in part, to investigate within-sex differences in jealousy as a function of age. We compared the responses of two groups of participants that differed in age. We identified differences for women but not for men. The older and younger women in our sample may have differed along several variables confounded with age, such as political orientation or sexual liberality. For example, perhaps older men and women are more similar in their upset to a partner's sexual infidelity because, in previous generations, sexual exclusivity was the *sine qua non* of commitment to a relationship. Perhaps younger women, therefore, draw a greater distinction than do older women between emotional and sexual fidelity. Future research might involve collecting data from participants of all ages, in which age could then be treated as a continuous variable to assess the impact of participant age on reported jealousy. A research design that could solve the problem of cohort effects is a longitudinal design in which the responses of men and women to the infidelity dilemmas are collected when the participants are young adults and again when they are older adults. With participants serving as their own controls, effects attributable to age could be isolated.

We did not collect data on either sample along variables such as race, ethnicity, religious affiliation, political orientation, or socioeconomic status. We therefore cannot address whether these variables, and not age, might account for the differences we observed between younger participants and older participants. In addition, we cannot address whether these variables predict upset to a partner's infidelity. Previous work on jealousy has focused on sex differences because they are clearly predicted from an evolutionary psychological perspective. There is no clear theoretical reason, in contrast, to expect variables such as ethnicity and political orientation to be linked predictably to jealousy. Shackelford and colleagues (2002) documented that ethnicity is not linked to responses to a partner's infidelities. Future work might investigate whether any number of demographic variables are linked to jealousy, but such work would profit by

first presenting a coherent theoretical framework from which to predict such links.

The use of forced-choice scenarios might represent a methodological limitation. There is a considerable body of research (reviewed in Buss 2000) documenting that, when given the option of rating upset along an interval scale, most people indicate substantial upset in response to a partner's sexual infidelity and in response to a partner's emotional infidelity. Clearly, mated men and women, both young and old, are terribly upset about a partner's infidelity, whether that infidelity is primarily sexual, primarily emotional, or equally sexual and emotional. The specific hypotheses tested in the current research focused on whether men and women (or older and younger people) might be *differently* upset about one or the other type of infidelity. Given the methodological problem of ceiling effects often encountered when using a Likert-type format in these contexts, forced-choice methods provide the opportunity to discover actual differences that might otherwise be obscured. Buss and colleagues (1992, 1999) provide additional discussion of the appropriateness of the forced-choice design for identifying group differences in responses to a partner's infidelity (and see Geary et al. 1995, 2001; Pietrzak et al. 2002; Wiederman and Kendall 1999).

A potential limitation of the current work is the reliance on imagined scenarios. An important, albeit more difficult extension of this work would involve collecting data from men and women who have experienced a partner's sexual infidelity, emotional infidelity, or both. Among those people who have experienced a partner's infidelity, do men report greater upset to a sexual infidelity, whereas women report greater upset to an emotional infidelity? Do younger women report greater upset than older women in response to a partner's emotional infidelity? Examining these issues directly poses formidable methodological and ethical challenges, but if they could be overcome, such work would constitute the most direct tests of the current hypotheses. No previous work has assessed the correspondence in upset between forced-choice responses to imagined scenarios and the responses of people who have experienced a partner's infidelity. Harris (2002, and see Harris 2003) assessed correspondence between forced-choice responses to imagined scenarios and continuous ratings of the degree to which people who have experienced a partner's infidelity focused on the sexual or emotional aspects of that infidelity. Harris reports little correspondence across the two events, hypothetical and actual partner infidelity, but the events are confounded with response format (forced choice, continuous rating scale) and with the target of assessment (upset to a partner's infidelity, degree of focus on the sexual or emotional aspects of a partner's infidelity).

SUMMARY

This research fills several gaps in our knowledge about romantic jealousy. No previous work has directly assessed whether the sex difference in jealousy extends to a much older sample. The present research indicates that it does, albeit with a smaller magnitude than has been found in younger samples. And no previous work has addressed within-sex differences as a function of age. The present research indicates a substantial difference between older and younger women, but no difference between older and younger men. Across several different infidelity dilemmas, older women are less likely than younger women to select a partner's emotional infidelity as more distressing than a partner's sexual infidelity. This new finding suggests that there may be important ontogenetic changes among women in the experience of jealousy—a finding that calls for more research devoted to the study of emotional experiences generally, and romantic jealousy specifically, over the lifespan.

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