

SEX DIFFERENCES IN JEALOUSY

TESTING THE EVOLUTIONARY HYPOTHESES WITH A BRAZILIAN VALIDATED SCALE

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About Jealousy

Jealousy is defined as a mechanism that deals with real or imagined threats to the stability of a romantic relationship. It is reasonable to hypothesize that selection has favored the evolution of jealousy to deal with adaptive problems faced by each sex (Buss, 1994; Daly, Wilson, & Weghorst, 1982; Symons, 1979).

However, the kinds of threat faced by men and women differed: men faced the risk of paternity uncertainty due to possible sexual infidelity, which women did not (Buss, Larsen, Westen & Semmelroth, 1992). Women, in turn, faced more intensely than men the risk of diversion of investment by her partner, seeing that the fitness cost of putting in danger the health of one or more offspring is higher for females (Wooders & van den Berg, 2001).

Different methods of study, in various cultures, showed that women are more distressed because of emotional infidelity than sexual infidelity and men vice versa (Sagarin, 2005). However, these sex differences have been contested, especially because of the use of forced-choice questions and because of inconclusive results in continuous measures (DeSteno, Bartlett, Braverman, & Salovey, 2002; DeSteno & Salovey, 1996; Harris, 2002, 2005), although some studies with continuous measures did corroborate the evolutionary hypothesis (Sagarin, 2005; Edlund & Sagarin, 2009).

Results and Discussion

For women the mean of emotional jealousy was 3.87, and of sexual jealousy 3.38. This difference was statistically significant [$t(260)=8.12, p<.001, d=.54$]. For men the mean of emotional jealousy was 3.25 and of sexual jealousy 3.29. This difference was not significant [$t(173)=-.61, p=.54, d=.04$]. Women's emotional jealousy was also significantly higher than men's.



Figure 1. Mean of men and women for sexual and emotional jealousy in interval measures.

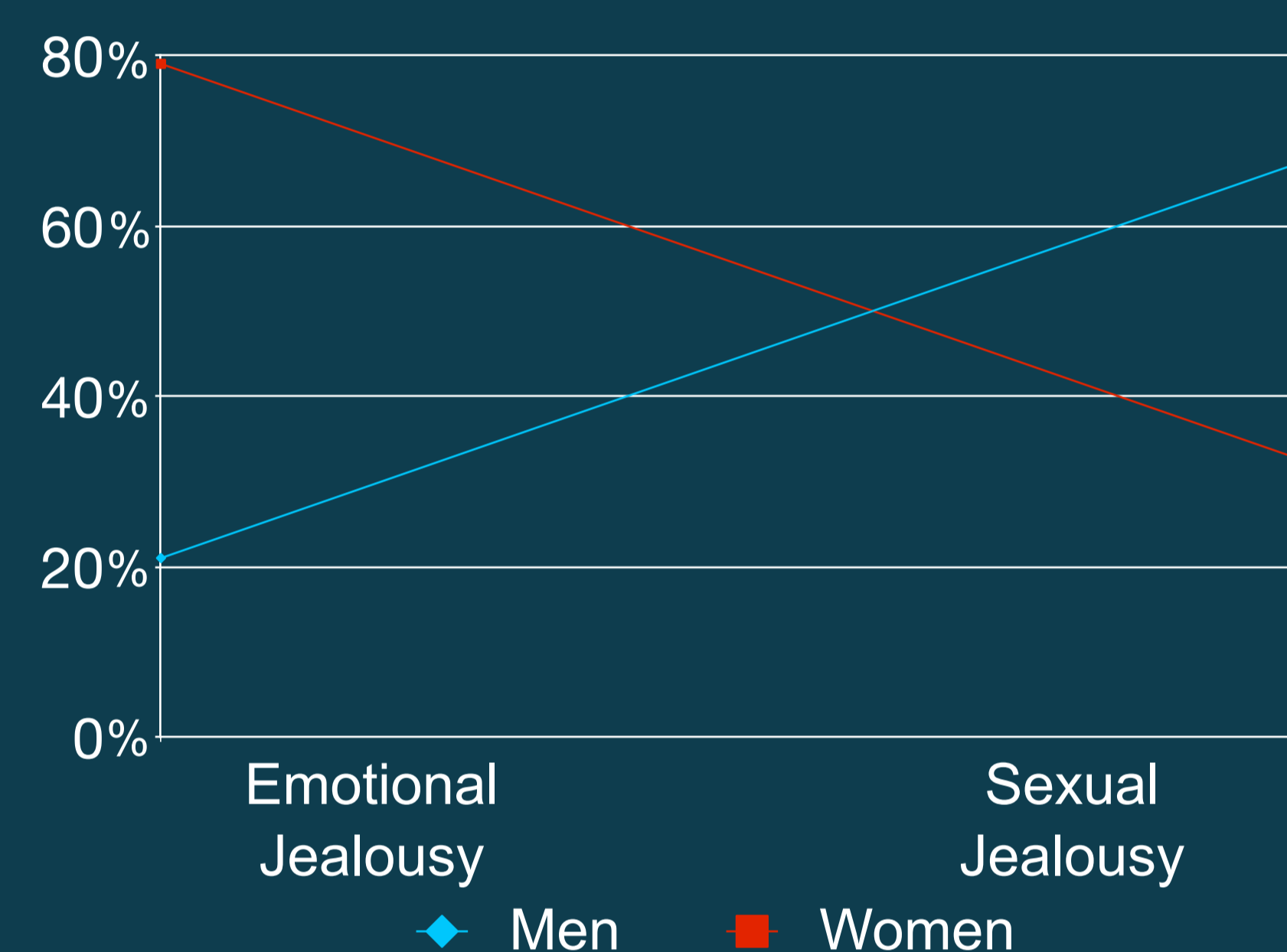


Figure 2. Percentage of men and women that report feeling more emotional or sexual jealousy, in forced-choice questions.

The reason as to why emotional jealousy appears to be as high as sexual jealousy in men may partly be traced to the uniqueness of the paternal investment in humans. Men's high investment in their offspring is unusual among mammals, especially among those that live in multi-male, multi-female communities, considering that, in all, about only 5% of male mammals invest in their offspring (Clutton-Brock, 1991). For males, the cost of letting the female partner diverge her energy, attention and resources to others is positively correlated with the amount of investment the he provides, and the man in hunter gatherer bands contributed with the largest share of the caloric needs of the family (Wooders & van den Berg, 2001), sharing his food surplus with the female and the offspring instead of using it only for developing a sexually competitive body. So it would be expected that emotional jealousy would indeed play an adaptive role for human male ancestors, not only for women.

In the forced-choice questions, of those who marked sexual infidelity as more distressing or as harder to forgive in all four questions concomitantly, 67.8% were men. Of those who marked all four questions saying that emotional infidelity was worse, 78.9% were women. These results indicate a significant association between the participants' sex and infidelity-type.

Forced-choice (dicotomous) questions, however, are not as precise as interval measures, since the smallest difference between the intensity of the two jealousy types is enough to produce discrete and extreme responses. Individuals throughout our phylogenetic history were not hard-wired to choose between infidelity types, they were probably actually selected to feel distressed over both types of infidelity, however in different intensities and in different situations.

Objectives and Hypothesis

This study aimed to test the evolutionary hypothesis regarding jealousy in a Brazilian sample from all five regions, through two means of assessment. We hypothesized there would be a significant difference between intensity of jealousy types within each sex in continuous measures, as predicted by evolutionary psychologists, but not as robust a difference as found in forced-choice questions

Method

Participants

- 435 people from the 5 regions of Brazil
- Mean age 27.8 years SD=8.0
- 60% of women, 40% of men
- 58.7% were graduated
- 79.8% were in a committed relationship,
 - Of these, 93.6% were in a heterosexual relationship.

Procedure and Instruments

The participants answered an online survey containing:

- Sociodemographic questions
- Questions about relationships (regarding, for example, marital status, sex of partner, duration of current relationship, number of relationships, and others)
- The Scale of Sexual and Emotional Jealousy: a Brazilian validated scale containing 10 items that measure the level of distress elicited by sexual or emotional infidelity cues (Cronbach alpha=.82).
- Four forced-choice questions about the two kinds of infidelity (emotional and sexual):
 - In the first, they should inform which would be harder to forgive;
 - In the second, while the task was the same, the two kinds of infidelity were rendered mutually exclusive;
 - In the third, both kinds of infidelity happened together;
 - In the last question, they were asked to inform which type of infidelity would distress them more.

Conclusion

The present results corroborate part of evolutionary psychologists' studies regarding jealousy, with evidence that for women emotional jealousy is more intense than sexual jealousy. However it should be noted that no difference between the two types of jealousy was found for men with interval measures, and this lead us to think about the adaptive function that emotional jealousy may have played for men, as discussed above.

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