

# Sex Differences in Jealousy: A Study from Norway

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## *Abstract*

Two infidelity scenarios and the Distress about Mating Rivals Questionnaire were administered to 506 undergraduate students, 202 men and 304 women. The results from the infidelity scenarios strongly suggest that men become more upset by sexual aspects of infidelity compared to women. Women were more upset than men by their partner's emotional commitment to another woman. Data from the Distress about Mating Rivals Questionnaire showed that men relatively more than women will be more distressed by a rival that has higher status and prestige, better financial prospects and more physical strength compared to themselves. In contrast, women would be relatively more distressed than men by a rival that is more kind and understanding, has a more attractive face and a more attractive body than themselves. The results lend support to evolutionary based explanations for the observed sex differences.

**Key words:** Jealousy, sex differences, evolutionary psychology, Norway, Distress About Mating Rivals Questionnaire

Since Darwin (1859) published his theory of evolution, the concept of evolution by natural selection has become one of the most important principles in all life sciences by directing the study of behaviour and its mechanisms. Darwin (1871) later formed another hypothesis, the principle of sexual selection. Inherent in the notion of sexual selection lies the assumption that the sex which invests the most in producing offspring becomes a limiting resource over which the other sex will compete (Bateman, 1948). Further, sexual selection can be divided

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into intra- and inter-sexual selection. Intra-sexual selection denotes competition between members of the same sex (primarily among members of the less limited sex) for reproductive access to the limited sex (normally females, but this may change with contextual factors or between species). Intra-sexual selection has for example been suggested as a selection factor for characteristics used in inter-male aggressive encounters, sometimes referred to as weapons, such as horns, physical strength etc. Inter-sexual selection, on the other hand, is related to mate choice typically made by the limited sex, also referred to as female choice. Females are by this assumed to generate selection pressure on males who display their quality as breeding partners; hence females typically prefer men with larger muscles and size (Trivers, 1972). As a result certain characteristics as well as mate preferences may have been shaped through the sexual selection process.

Although studies have shown that both men and women seem to put high value on similar characteristics in a potential mate, such as dependability, emotional stability, intelligence, sociability and good health (Buss, 1989), there is also ample evidence for sex differences in mate preferences, assumed to reflect that men and women have encountered different adaptive problems in the environment of evolutionary adaptedness (EEA). According to the sexual strategies theory (Buss and Schmitt, 1993) men would prefer partners who were both young and physically attractive because these features would indicate fertility, thus maximizing the larger reproductive potential in men (see also Symons, 1987). Women, have significantly smaller reproductive potential than men due to their long pregnancies and relatively few fertile years. Therefore women are assumed to maximize their reproductive success by selecting mates who are willing and able to commit time, energy and resources to the family and who also are able to provide physical protection (Buss, 1989). Thus, according to this view, women would prefer men high in power, income, status and physical strength (Ellis, 1992). The sex differences in mate preference described here are assumed to reflect evolved predispositions, shaped by natural and sexual selection (Buss, 1989).

Jealousy is one of the areas of research where sex differences related to mating have been investigated. Evolutionary psychologists have hypothesized that men and women would differ psychologically in the importance given to cues that trigger jealousy (Daly, Wilson and Weghorst, 1982; Symons, 1979). Men are expected to be more jealous than women to cues of sexual infidelity due to the risk of investing time and energy in another man's offspring. Women, regarded as the most heavily invested party and dependent on the man's investment in the offspring, have been hypothesized to be more jealous due to cues of emotional infidelity, because this could imply the potential loss of the partner's resources to another woman. This assumption is based upon the seminal work on parental investment theory by Trivers (1972). According to Trivers (1972) the human male

is one of very few mammals in which the male invests heavily in own offspring but cannot be certain of paternity whereas the mother is totally certain of maternity. While fathers' investment is optional and mothers' investment is obligatory there will be a pattern of dissimilarity. Children who receive investments from fathers will probably receive more resources. Thus, all signs that the father will refrain from offering support ought to be perceived as distressing by mothers. However, fathers that invest in other males' children will be evolutionary dead ends (Trivers, 1972). Although it is assumed that there exist some basic sexual similarities in jealousy (e.g., an emotion which alerts an individual to threats to a valued relationship, activated by interested and more desirable rivals, and which acts as a motivational mechanism with behavioral output aimed at blocking infidelity and abandonment) men and women are hypothesized to differ in the weight they give to sexual and emotional cues that trigger jealousy (Buss & Haselton, 2005).

In order to investigate sex differences in jealousy Buss et al. (1999) conducted a series of studies using a forced choice format asking subjects what would be most upsetting: imagining their partner forming a deep emotional relationship or enjoying a sexual relationship with another person. Buss et al. (1999) found evidence in line with predictions derived from evolutionary theory in both collectivistic and individualistic societies, among others The United States, Korea and Japan. In these studies, the vast majority of women (approximately 82%) reacted more negatively to emotional than to sexual infidelity. In contrast, a larger proportion of men (approximately 43%) reported sexual infidelity to be more upsetting than emotional infidelity. In one similar study conducted in Sweden, Wiederman and Kendall (1999) reported results that concur with these findings. They found that 62% of the men chose the sexual infidelity scenario as the most upsetting, whereas 63% of women chose the emotional infidelity scenario as the most upsetting. Overall, the findings referred to above are cited in support of evolutionary explanations of the sex differences in jealousy.

DeSteno and Salovey (1996) have argued, however, that men are not more jealous than women about sexual infidelity. Instead they suggested that men, more than women, typically believe that sexual infidelity often will result in emotional infidelity, referring to this as the double shot of infidelity. This social cognitive perspective explains observed sex differences as being due to socialisation: we acquire culturally transmitted beliefs about gender, jealousy, romantic and sexual relationships. If one has the socially acquired belief that men, more than women, can have sex without being in love and if commitment and love are most important to humans, then it follows that men will be more worried than females about sexual infidelity. It is worth noting, though, that this belief would be correct in most observed cultures (Schmitt, 2005), including Norway (Kennair, Schmitt,

Fjeldavli & Harlem, 2009). Also, the difference may stem from both socialisation and biological preparedness.

While the aetiology of these observed sex differences is difficult to address, the double shot hypothesis itself may be tested. In a series of studies Buss et al. (1999) investigated the social cognitive explanation and found that men were still more distressed by sexual infidelity and women by emotional infidelity when items were reworded in order to exclude the other form of infidelity (emotional attachment without sexual involvement versus sexual involvement without deep emotional attachment) thereby refuting the social cognitive explanation. Further support for the evolutionary explanation for sex differences in jealousy comes from studies in several different countries such as Australia (Ward & Voracek, 2004), Spain and Chile (Fernandez, Sierra, Zubeidat & Vera-Villarroel, 2006) all showing that men relatively to women regard sexual infidelity as more upsetting than emotional infidelity. In a recent study from Germany it was also shown that more women than men reported that they would be more relieved about the disconfirmation of the prospect of emotional rather than sexual infidelity (Schützwohl, 2008). Mathes (2005) found that men's desire for children correlated positively with sexual jealousy supporting the uncertainty of paternity explanation, and thus the evolutionary explanation for sex differences in jealousy. In one study it was also found that women reacted more strongly than men on physiological measures when presented with an emotional infidelity scenario, whereas men reacted stronger than women when presented with a sexual infidelity scenario (Pietrzak, Laird, Stevens, & Thompson, 2002). Buss, Shackelford, Choe, Buunk and Dijkstra (2000) furthermore conducted a study in three different nations (USA, Korea, Netherlands) asking about which rival characteristics the respondents would find most upsetting. The respondents were asked to rank order 11 rival characteristics (kind and understanding, attractive face, skilled sexual partner, high in status and prestige, willing to commit, good financial prospects, attractive body, virginity, physical strength, good future job prospects and good sense of humour) on a scale from 1 (most upsetting) to 11 (least upsetting). The findings were in general in line with evolutionary theory showing overall that men reported becoming more distressed than women when a potential rival had better job prospects, better financial prospects and more physical strength than themselves. Overall, women reported being more upset than men if a rival was more kind and understanding, having a more attractive body and a more attractive face than themselves. By and large, these results were interpreted as supporting evolutionary theory.

Although the social cognitive explanations for sex differences in jealousy seem to have been refuted in previous research from other nations, we also wish to consider them in the current paper. But there are other alternative explanations that may be more relevant to test with our specific sample: According to

social structure theory, most of the sex differences in mating preferences occur because most societies direct men into more advantaged social and economical positions compared to women (Eagly and Wood, 1999). Social structure theory thus predicts that women would seek men high in position and power in order to gain upward mobility. In contrast, men have better access to resources and, thus, are in a better position to place premiums on the quality (i.e., attractiveness) of the exchange object itself (Howard, Bloomstein and Schwarz, 1987). Social structure theory implies that much of the sex differences in mating preferences will shrink or disappear in societies enforcing gender equality. Sex differences in mating preferences are assumed to be cultural and societal products and not reflections of innate dispositions. It is important to note that social structure theory also accepts that evolutionary factors are relevant: Women give birth, men are physically stronger, and such factors influence the social structure of past and also modern societies, albeit to a lesser degree. Social structure theory thus suggests that mental differences are not the direct results of evolution. Mental differences will, according to Eagly & Wood (1999; Wood & Eagly, 2007), primarily be a result of what opportunities societies provide women and men. Their approach is therefore in contrast to evolutionary psychology, as they believe socio-cultural factors will be the most relevant influence on the behaviour and mental responses of women and men rather than evolved mental mechanisms adapted to past ecological conditions. The current research tests whether social structure theory is correct in assuming that there will be a smaller or less systematic sex difference in a Norwegian sample, as a result of this sample being from the most gender egalitarian nation available.

Wiederman and Kendall (1999) conducted the only study on sex differences in jealousy in a Scandinavian context, as far as we know. As societal changes that alter the economical and status prospects for men and women occur continuously, studies on sex differences in mental mechanisms hypothesized to be evolutionary based should be replicated on a short time interval in different socio-cultural conditions and contexts. According to Buss (2000) an important test of evolutionary based explanations of jealousy would be to investigate sex differences in jealousy in different nations. He argues that sex differences should be fairly similar, regardless of the nature of the socialization of men and women. Norway is regarded as one of the societies in the world today that scores highest on the dimension "egalitarianism", implying that great value is placed upon social justice and equality (Schwartz, 2006). In line with this Norway is typically the highest rated nation in terms of gender empowerment as indexed by the United Nations (1997). Thus, we argue that conducting studies concerning sex differences in jealousy in Norway may provide a test of an evolutionary explanation of sex differences in jealousy and shed important light upon the competing

social structure theory. According to Eagly & Wood (1999; Wood & Eagly, 2007) their major prediction is that the sex differences will be reduced in more gender egalitarian cultures. If this is a scientific criticism of Buss et al.'s work, then a testable culture must exist. The world's most gender egalitarian nation ought to provide this test. This is the major question addressed by the current research.

Using the forced choice studies by Buss et al. (1999) concerning sexual versus emotional infidelity in a Norwegian context in 2005 focusing upon young adults we hypothesized that we would obtain very comparable results as Buss et al. (1999) if the evolutionary theory is correct, whereas we would expect much smaller sex differences if the social structure theory is correct. If the evolutionary theory is correct we would expect large sex differences when asking which aspect (sexual intercourse or emotional attachment) would be most upsetting, when presenting a scenario implying that one's partner has both formed an emotional attachment and had sexual intercourse with another person. Collecting data concerning distress about mating rivals we would, according to the evolutionary theory, expect to find that men will be more distressed by interested rivals who, relative to themselves, have better financial prospects, better future job prospects, higher status and prestige, and greater physical strength, and women to be more distressed by interested rivals who, relative to themselves, have a more attractive face and a more attractive body. If the social structure theory is correct such sex differences would be very small or non-existing or random.

## Methods

### Sample

The sample consisted of 506 students, 202 men, aged 18 to 46 (mean age = 22.1, SD = 3.9) and 304 women, aged 18 to 46 (mean age = 21.3, SD = 4.2). They were all recruited from undergraduate studies at the University of Bergen and at the College of Bergen.

### Instruments

*Demography.* The respondents were asked to state their sex and age. They were also asked to indicate whether they currently were involved in a romantic relationship and whether they ever had been involved in a romantic relationship.

*Infidelity scenario 1.* This scenario was developed by Buss et al. (1999). The respondents are presented with a scenario where they are instructed to imagine that a person they are having a serious committed romantic relationship with becomes interested in someone else. They are asked what would upset them more: A) Imagining your partner forming a deep emotional (but not sexual) rela-

tionship with that person or B) Imagining your partner enjoying a sexual (but not emotional) relationship with that person.

*Infidelity scenario 2.* This scenario was also developed by Buss et al. (1999). The respondents are presented with a scenario where they are instructed to imagine that their partner both has formed an emotional attachment to another person and had sexual intercourse with that other person. They are asked to state which aspects of their partner's involvement would upset them more: A) The sexual intercourse with that other person or B) the emotional attachment to that other person.

*Distress about Mating Rivals Questionnaire.* This questionnaire was developed by Buss et al. (2000). The respondents are instructed to imagine that they are involved in a serious or committed romantic relationship and that their partner has become interested in a long-term relationship with someone else. A total of 11 characteristics of the rival are described and respondents are instructed to rank-order (from 1 to 11) these characteristics based upon how upsetting it would be if their rival possessed each of these. The 11 items are as follows: 1) was more kind and understanding than you, 2) had a more attractive face than you, 3) was a more skilled sexual partner than you, 4) was higher in status and prestige than you, 5) was more willing to commit to a long term relationship than you, 6) had better financial prospects than you, 7) had a more attractive body than you, 8) was a virgin (had no previous sexual experience), 9) was physically stronger than you, 10) had better job prospects than you and, 11) had a better sense of humour than you.

### *Procedure*

The participants completed the questionnaires at lectures on the undergraduate level at the University of Bergen and at the College of Bergen. It took the respondents about 15 minutes to complete the questionnaires and these were handed in immediately following their completion. Participation was anonymous and voluntary and no monetary or any other material reward was given. The data collection part of this study took place in the autumn of 2005.

### *Statistics*

The data were analysed with SPSS (version 13.0). The data from the infidelity scenarios were analysed by non-parametric statistics, computing chi-square values. The data from the Distress about Mating Rivals Questionnaire were analysed using parametric statistics, computing means, standard deviations, Student's t-test for independent samples and Cohen's d (effect size) in order to compare the data with previous studies on sex differences and also analysing the data this way. Due to missing data, the number of observations included in the analyses is somewhat less than the total number of participants.

## Results

The data from Infidelity scenario 1 showed that the sex difference was statistically significant ( $\chi^2 = 61.2$ ,  $df = 1$ ,  $p < .01$ ), see Figure 1. The results show that men, relative to women, regarded the sexual aspect as more upsetting than the emotional aspect of infidelity. The responses to the Infidelity scenario 1 were not related to whether the subject currently was in a romantic relationship or not, neither for men ( $\chi^2 = 0.2$ ,  $df = 1$ ,  $p > .05$ ) nor for women ( $\chi^2 = 0.7$ ,  $df = 1$ ,  $p > .05$ ). Nor were the responses to infidelity scenario 1 related to whether the subject was or ever had been in a romantic relationship or not, neither for men ( $\chi^2 = 1.3$ ,  $df = 1$ ,  $p > .05$ ) nor for women ( $\chi^2 = 0.0$ ,  $df = 1$ ,  $p > .05$ ).

Significant sex differences were found for Infidelity scenario 2 ( $\chi^2 = 40.0$ ,  $df = 1$ ,  $p < .01$ ), see Figure 2. The results show that men, relative to women, regarded the sexual intercourse as more upsetting than the emotional attachment. The responses to the Infidelity scenario 2 were not related to whether the subject currently was in a romantic relationship or not, neither for men ( $\chi^2 = 0.9$ ,  $df = 1$ ,  $p > .05$ ) nor for women ( $\chi^2 = 0.2$ ,  $df = 1$ ,  $p > .05$ ). Nor were the responses to infidelity scenario 2 related to whether the subject was or ever had been in a romantic relationship or not, neither for men ( $\chi^2 = 2.0$ ,  $df = 1$ ,  $p > .05$ ) nor for women ( $\chi^2 = 0.0$ ,  $df = 1$ ,  $p > .05$ ).

Table 1 shows the results based upon the Distress about Mating Rivals Questionnaire. The results show that women compared to men would be more distressed by a rival being more kind and understanding, having a more attractive face and having a more attractive body. Men, compared to women would be more distressed by a rival having higher status and prestige, better financial prospects and more physical strength.

## Discussion

Concerning Infidelity scenario 1, we found sex differences in jealousy, in line with the evolutionary based explanation. Women regarded emotional infidelity as more disturbing than did men, whereas men found sexual infidelity most disturbing. These findings are in line with previous findings in Korea, Japan, USA (Buss et al., 1999), Sweden (Wiederman and Kendall, 1999), Australia (Ward & Voracek, 2004), Spain and Chile (Fernandez et al., 2006) and can be considered as support for evolutionary based assumptions concerning mate preferences and investment in offspring. It is important to note, however, that this does not mean that the evolutionary theory is correct – merely that the hypotheses and predictions based on evolutionary psychology are confirmed empirically across nations. There may be many similarities among these nations, but there is consensus about the notion that they do vary on e.g. measures of degree of gender equality (UN

1997). As such, this refutes the major prediction of social structure theory (Eagly & Wood, 1999).

In Infidelity scenario 2, the respondents were asked to state which aspect would be most upsetting (sexual or emotional) when they imagined that their partner both had sexual intercourse and had developed an attachment to another person. If the double shot hypothesis is correct we would expect no sex differences in this scenario (DeSteno & Salovey, 1996). However, our results showed significant sex differences, which implies that the double shot hypothesis does not seem to explain the results.

Our results showed that the responses to Infidelity scenarios I and II were not dependent upon whether or not the subjects currently were or ever had been in a romantic relationship. This indicates that the sex difference in jealousy is not due to a mechanism that is triggered by the experience of being in a romantic relationship (Buss, 1995). Future studies should investigate whether sex differences in jealousy are explained by other biological, psychological, sociological or cultural factors. At this point any alternative explanation would be mere speculation, although one could not rule out that cross-cultural gender roles (despite varying gender equality) or pop culture could explain these results.

When it comes to the data from the Distress about Mating Rivals Questionnaire the results from the current study were in general remarkably similar to the findings of Buss et al. (2000). Men reported greater distress than did women about rivals that were higher in status and prestige, had better financial prospects and were physically stronger. In contrast, women reported more distress than men about rivals who were more kind and understanding, had a more attractive face and who had a more attractive body. These results support the evolutionary psychology middle level theories concerning sex differences in jealousy. These predictions have not previously been investigated in Norway, but findings in other nations such as Korea, Holland and the US are in line with our results (Buss et al., 2000).

The Norwegian society is considered to place a high value on social justice and equality (Schwartz, 2006). Findings in different nations support the evolutionary psychology hypothesis that men and women will be more distressed about rivals who surpass them on the relevant sex-linked components of mate value or desirability (Dijkstra and Buunk, 1998). These components are related to adaptive problems that men and women have faced during evolution. Thus, our results lend support to the evolutionary theory about jealousy and seem to refute explanations derived from both the social cognitive (DeSteno & Salovey, 1996) and the social structural theory (Eagly & Wood, 1999). We did not find, however, as we would expect according to evolutionary theory, sex differences concerning rivals with better future job prospects than the respondents themselves. This

finding suggests that men did not find this rival characteristic especially threatening. One explanation for this unexpected finding can be linked to the items in the survey concerning status and prestige and future job prospects, respectively. These may tap into the same domain, especially since Buss et al. (2000) found the reverse pattern concerning these two items. This may imply that one of them is emphasized more, and that the other item then is considered redundant, thus obtaining lower ratings. Another possible explanation might be based upon the fact that the sample exclusively consisted of students at college and university level, implying that all of them will have relatively good future job prospects. As a consequence, men in this sample will perhaps not be threatened by rivals with somewhat better future job prospects since they may regard themselves as high on this characteristic. It should also be noted that not all jobs, even high in academic status, are paid very well. Thus, having a job high in academic status but with a moderate income will probably not represent important resources for a woman seeking a potential mate. Finally, all such modern phenomena such as income or jobs need to be interpreted by mechanisms evolved to evaluate status – mismatch between relevant indicators in the EEA and modern status may cause some arbitrary perception.

If sex differences in jealousy are due to evolved mental mechanisms one may ask why not all men and women display the same pattern in relation to infidelity (but see Buss & Haselton, 2005). Buss (1995) has explained these differences as a result of different triggers in the environment that mediate the mechanism's activity. For example Belsky, Steinberg and Draper (1991) have proposed that a father's presence or absence in early childhood will affect later sexual strategies. Accordingly, individuals growing up in a fatherless home develop an expectation that parental resources aren't reliable or predictable. As a result such individuals develop a sexual strategy marked by early sexual maturation and frequent partner switching. This strategy is designed to produce a large number of offspring with a low investment in each. The Belsky-Draper hypothesis has received empirical support in a cross-cultural longitudinal study showing that absence of fathers was associated with early sexual activity (Ellis et al., 2003; but see Mendle et al., 2006). Recent developments within evolutionary psychology have further attempted to provide a theoretical foundation for explaining individual differences (Buss & Hawley, 2011), which in many cases are more important predictors of behaviour than gender differences (Simpson & Gangestad, 1991).

#### *Limitations and directions of future studies.*

The current study is a replication of previous studies conducted in other cultures. As such it is important to note that the materials used and the theory underlying the questionnaire are formulated from an evolutionary psychology perspective.

Whether this has influenced the results needs to be tested in further research. Would researchers from a different theoretical perspective using different questions find different results?

The forced choice format used in this and other studies is also not without its critics. For example, DeSteno, Bartlett, Braverman and Salovey (2002) only found sex differences when the forced choice format was used and not when the ratings were based on a continuous scale. Also, there is clearly large intra-sex variability in responses to the infidelity scenarios, which so far has received little attention (Harris, 2005). Sex differences in responses to infidelity scenarios have also been weaker and inconsistent when the scenarios have been presented during cognitive constraints (Penke & Asendorpf, 2008).

It could also be argued that student populations have been over-represented in studies investigating sex differences in jealousy. Another criticism is that the infidelity scenarios designed by Buss et al. (1999) are too artificial and that the recorded responses so far have been limited to immediate emotional reactions.

Hence, future studies of sex differences in jealousy should use a wider range of response formats and also include more heterogeneous samples as well as identifying variables significantly related to the intra-sex variability in responses to the infidelity scenarios. Future studies should also investigate reactions to real life infidelity. Recordings of responses to the infidelity should also be broadened to include behavioral inclinations and actual behaviour.

Further, from a theoretical perspective, the results suggest that the evolutionary hypothesis provides the best prediction – but it does not mean that the evolutionary explanation is true. Further theoretical and empirical research may develop better predictive hypotheses.

## *Conclusions*

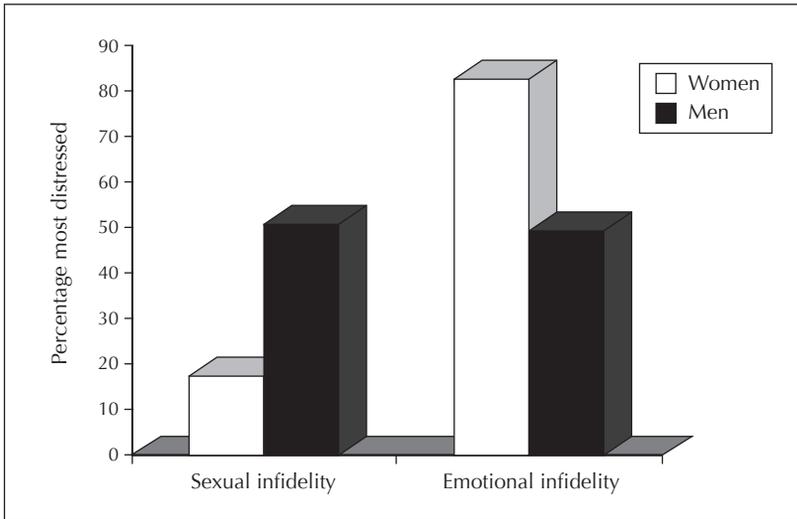
The current study, focusing upon sex differences in jealousy within a Norwegian context, adds to a growing body of evidence that supports evolutionary psychology. The results don't suggest that all men and all women will react the same way in response to infidelity. Rather it shows a general gender specific tendency to react in a specific way. We therefore assume, due to the universality of the results, that the best supported hypothesis is that the sex differences found in this study have their roots in universal evolved mental mechanisms. However, this does not exclude individual differences or environmental effects, and it is important to note that such factors also need to be addressed in future studies.

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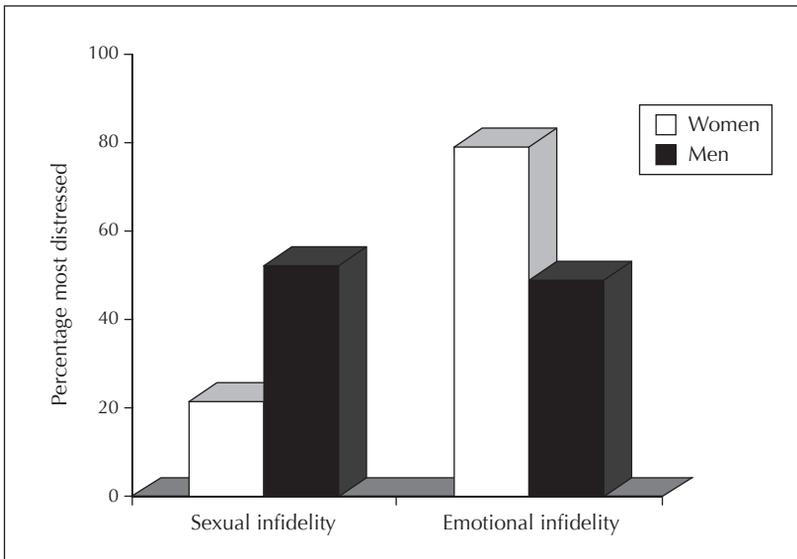
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**Figure 1:** Scenario 1. Percentage of participants reporting greater distress to sexual infidelity than emotional infidelity as a function of participant sex ( $N = 496$ )



**Figure 2:** Scenario 2. Percentage of participants reporting greater distress to sexual infidelity than emotional infidelity as a function of participant sex ( $N = 495$ )



**Table 1:** Sex differences in upset as a function of rival characteristics

Rival characteristic <sup>a</sup>	Women		Men			t	p	d
	Mean	SD	Mean	SD				
1. Kind and understanding (1)	8.73	2.91	7.91	3.34		2.67	.008	0.28
2. More attractive face (2)	7.65	2.37	6.21	2.78		5.49	.000	0.57
3. More attractive body (7)	7.48	2.53	5.90	2.58		5.97	.000	0.62
4. More skilled sexual partner (3)	7.34	2.50	7.40	2.71	-	0.24	.807	0.02
5. Better sense of humour(11)	6.79	2.73	6.96	3.05	-	0.56	.578	0.06
6. Higher in status and prestige (4)	6.61	2.48	7.22	2.88	-	2.26	.025	0.23
7. Better future job prospects (10)	5.78	2.26	6.26	2.68	-	1.90	.059	0.20
8. Willingness to commit (5)	5.03	3.07	4.88	3.09	-	0.47	.638	0.05
9. Better financial prospects (6)	4.95	2.29	6.16	2.61	-	4.86	.000	0.50
10. Virgin (8)	2.82	2.70	2.77	2.65		0.18	.859	0.02
11. Physically stronger (9)	2.78	2.26	4.47	2.74	-	6.64	.000	0.69

Analyses based on data provide by 253 women and 147 men. The df of all t-tests is 398; p-values are two-tailed. The d is an effect size index representing the difference between means in standard deviation units. Cohen (1988) defines effect sizes as small if they are .20, medium if they are .50, and large if they are .80 or greater.

<sup>a</sup>) Rival characteristics are presented from the most (1) to the least (11) upsetting, as reported by women. The number in parentheses following each characteristic is the corresponding upset ranking of that characteristic, as reported by men. The mean scores has been calculated so that the more upsetting a rival characteristic is, the higher is the corresponding score.