

### Original Article

## Decision strategies in continuous ratings of jealousy feelings elicited by sexual and emotional infidelity

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**Abstract:** Two studies (total  $N = 689$ ) tested the assumption of DeSteno, Bartlett, Braverman, and Salovey (2002) that sex differences in jealousy predicted by the evolutionary view are an artifact of measurement because they are restricted to a forced-choice response format and do not emerge when using continuous jealousy ratings. In Study 1, men and women rated how much a mate's emotional and sexual infidelity contributed to their jealousy feeling. In Study 2, men and women rated the intensity of their jealousy feeling elicited by a mate's emotional and sexual infidelity. In one condition they were asked to make their ratings spontaneously whereas in the other condition they were instructed to make their ratings only after careful consideration. The results of both studies lend no support for the artifact-of-measurement assumption. The implications of the present finding for the assumption of DeSteno et al. (2002) are discussed.

**Keywords:** jealousy, infidelity, decision strategies, continuous ratings, evolutionary psychology

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### Introduction

>From an evolutionary view, the psychological mechanism underlying jealousy has evolved because it recurrently solved an essential problem of individual reproduction in our evolutionary history: infidelity in reproductive relationships (Daly, Wilson, and Weghorst, 1982; Symons, 1979). A distinctive feature of the evolutionary view is the assumption of a sex-specific evolved jealousy mechanism (EJM) because different infidelity types have recurrently threatened male and female reproductive success. Specifically, a woman's sexual infidelity deprives her mate of a reproductive opportunity and may burden him with years of investment in a genetically unrelated child. In contrast, a man's sexual infidelity does not burden his mate with unrelated children, but he may divert resources from his mate's progeny if he develops a deep emotional attachment to another woman. As a consequence, the evolutionary view of jealousy predicts between-sex differences such that men should be more concerned than women about a mate's sexual infidelity, whereas,

conversely, women should be more concerned than men about a mate's emotional infidelity.

The prediction of between-sex differences in jealousy generated an impressive body of research during the past 15 years that has been mainly devoted to testing the hypothesis that men respond with stronger negative emotions than women to a mate's sexual infidelity whereas women respond with stronger negative emotions than men to a mate's emotional infidelity. This hypothesis was primarily tested by men's and women's self-reports about their jealousy response elicited by a mate's sexual and emotional infidelity. Two response formats have been used to assess these self-reports. In the most widely used response format men and women are forced to decide whether a mate's sexual or emotional infidelity generates more intense jealousy feelings (e.g., Buss, Larsen, Westen, and Semmelroth, 1992; Buss et al., 1999; Buunk, Angleitner, Oubaid, and Buss, 1996; Pietrzak, Laird, Stevens, and Thompson, 2002; Sagarin, Becker, Guadagno, Nicastle, and Millevoi, 2003; Wiederman and Kendall, 1999). Across different cultures, women consistently chose emotional infidelity significantly more frequently than men in this forced-choice response format (for reviews see Penke and Asendorpf, in press; Harris, 2003).

In contrast to the robust sex differences found with the forced-choice response format, continuous ratings of the intensity of negative emotional responses elicited by emotional and sexual infidelity have yielded less consistent results (Harris, 2003; Sagarin, 2005). To illustrate, Pietrzak et al. (2002), Sagarin et al. (2003), Bohner and Wänke (2004), and Edlund, Heider, Scherer, Farc, and Sagarin (2006) reported the interaction between sex and infidelity type predicted by the evolutionary view of jealousy with respect to a mate's hypothetical infidelity. In contrast, DeSteno, Bartlett, Braverman, and Salovey (2002; Study 1) using multiple continuous response formats consistently found that both men and women reported more intense negative emotions in response to a mate's hypothetical sexual infidelity. Similarly, Sabini and Green (2004, 2006) reported that both men and women rated the emotional impact of sexual infidelity greater than the import of emotional infidelity for being upset, angry and hurt. However, a peculiarity of the Sabini and Green (2004) study is that their participants had to first rate how blameworthy the partner was for his (her) sexual or emotional infidelity, respectively. As the authors convincingly argue, a partner is to blame for an action for which he or she is responsible (like having sexual intercourse with another person), but not for an emotion that comes upon us unbidden (like falling in love with another person; see also Weiner, 1995). Thus, ratings of blameworthiness might have set an anchor for the immediately following ratings of upset, angry and hurt. Interestingly, however, explicit ratings of jealousy (Sabini and Green, 2004; Study 3) marginally produced the interaction between sex and infidelity type predicted by the evolutionary view. Moreover, Edlund et al. (2006) point out that these failures to support the evolutionary view of jealousy might be attributable to a ceiling effect because these studies were using only a seven-point rating scale labeled 1 (*not at all*) and 7 (*very*), thus artificially narrowing the participants' response options.

This lack of correspondence between the findings obtained with the forced-choice response format and the continuous ratings of emotional intensity led DeSteno et al. (2002) to question the validity of the empirical support for the evolutionary view of sex differences in jealousy. These authors argue that this support predominantly derives from a single

methodology, the forced-choice response format. As DeSteno et al. (2002) note, the limitation to a single methodology always carries the risk of dealing with an artifact of measurement. This possible limitation, “takes on greater weight when one considers that the use of a forced-choice response format ... is known to induce different and more effortful decision strategies in the production of preference judgments” (DeSteno et al., 2002, p. 1105). As a consequence, “the previous findings used to support the evolutionary view might not represent differential jealousy resulting from sex-specific evolved modules, but a methodological artifact resulting from a specific and effortful decision strategy invoked by the format of the question” (DeSteno et al., 2002, p. 1105).

DeSteno et al. (2002) proposed three assumptions that in combination try to partially reconcile the diverging results obtained with the two response formats. (1) Men and women actually share the same default distress response that is greater towards sexual than emotional infidelity. (2) Continuous ratings invariably elicit rather simple decision strategies which revert to this default distress response towards sexual infidelity. (3) The forced-choice response format invariably generates deliberate and effortful considerations of the possible trade-offs of the two events which asymmetrically affect men’s and women’s decisions: The output of these trade-off considerations does not affect men’s final decision as most men continue insisting on their default distress response towards sexual infidelity. In complete contrast, the same trade-off considerations have a profound impact on women’s choices as the vast majority of women uses the output of these considerations to override their default distress response. As a consequence, most women now claim that emotional infidelity generates more intense jealousy feelings. This presumed asymmetry in the influence of the deliberate and effortful trade-off considerations on men’s and women’s responses is finally made responsible for a method-specific sex difference in jealousy obtained with the forced-choice response format. Note, however, that DeSteno et al.’s assumption predict within-sex differences for both simple decision strategies (i.e., both men and women share the same default distress response that is greater towards sexual than emotional infidelity) as well as deliberate and effortful decision strategies (i.e., men report greater distress about sexual than emotional infidelity, whereas women report more distress about emotional than sexual infidelity). In contrast, the evolutionary view of jealousy predicts between-sex differences in response to sexual and emotional infidelity.

DeSteno et al. (2002) partially tested their assumptions in two studies. In Study 1, they demonstrated the divergence between forced-choice and continuous scale response formats: Whereas the forced-choice response format yielded the sex-differences in jealousy predicted by the evolutionary view, no sex differences were found on various continuous jealousy measures. Moreover, both men and women reported greater negative emotions in response to sexual infidelity on the continuous ratings. In Study 2, the participants made their judgments in the forced-choice response format under two different conditions. In the deliberate and effortful decision condition, the participants were urged to consider carefully their response before choosing between sexual and emotional infidelity. In the automatic (simple) condition, the deliberate and effortful decision processes were supposedly suppressed by a cognitive load in terms of a digit-string memory task imposed on the participants while choosing between the two response alternatives, thus forcing the participants to make their choice using simple decision processes. The deliberate and

effortful condition yielded the well-known sex difference inasmuch as 96% of the men but only 36% of the women selected sexual jealousy. In contrast, in the automatic condition, the majority of not only the men but also of the women chose sexual infidelity (92% and 65%, respectively). Based on this finding, DeSteno et al. (2002) assume that both men and women using automatic decision strategies rely on the same initial response tendency towards sexual infidelity. In contrast, deliberate and effortful decision strategies asymmetrically affect men's and women's responses: Men, in accordance with their initial response tendency, still consider sexual infidelity as eliciting stronger jealousy. Women, in contrast, abandon their initial response tendency and now claim that emotional infidelity generates more intense jealousy. Note, however, that contrary to DeSteno et al.'s (2002) claim that "the sex difference on the forced-choice measure disappeared under conditions of cognitive constraint," (p. 1103) which has been repeated by DeSteno, Bartlett, and Salovey (2006; see also Berman and Frazier, 2005; Harris, 2003, for the same claim), a reanalysis of their data shows that the sex difference in the cognitive load condition was merely attenuated but did not completely disappear as still significantly more women than men chose emotional infidelity (35% vs. 8%),  $\chi^2 = 6.20$ ;  $df = 1$ ;  $N = 57$ ,  $p = .013$  (Sagarin, 2005). Moreover, the cognitive load study has been criticized both on theoretical (Barrett, Frederick, Haselton, and Kurzban, 2006) and methodological grounds (Schützwohl, in press a; see also Penke and Asendorpf, in press). The purpose of the following two studies was to further examine DeSteno et al.'s predictions of within-sex differences in jealousy and to contrast them with the predictions of between sex-differences derived from the evolutionary view with respect to continuous ratings of jealousy.

## **Study 1**

In the standard forced-choice response format (e.g., Buss et al., 1992), the participants are requested to decide whether a mate's sexual or emotional infidelity generates comparatively more intense jealousy feelings. In the continuous rating format, the participants are typically asked to rate the intensity of the emotional reactions elicited by a mate's sexual and emotional infidelity, respectively (e.g., DeSteno et al., 2002; Pietrzak et al., 2002; Sagarin et al., 2003).

In the present study, in contrast, the participants indicated on continuous ratings scales the extent to which a mate's sexual and emotional infidelity contributes to their jealousy feeling. This task appears to more closely capture the comparative nature of the original forced-choice response format than the typical intensity ratings described above. However, at the same time the present task shares an important feature with the typical intensity ratings because the participants are not forced to differentiate between the two infidelity types. This feature allows the participants the use of simple decision strategies. Accordingly, if continuous rating scales invariably elicit simple decision strategies as suggested by DeSteno et al. (2002), both men and women should indicate that sexual infidelity contributes more to the jealousy feeling than emotional infidelity because these simple decision strategies revert to the same within-sex default distress response towards sexual infidelity. If, however, the sex differences predicted by the evolutionary view of jealousy are robust and not method specific, between-sex differences should emerge such

that emotional infidelity contributes more to women's than men's jealousy, whereas, conversely, sexual infidelity contributes more to men's than women's jealousy. In sum, whereas the assumptions of DeSteno et al. predict only a main effect for infidelity type, support for the evolutionary view would require an interaction between sex and infidelity type.

## **Method**

### *Participants*

The participants were 101 female and 98 male students of various disciplines at the Universities of Bielefeld and Osnabrück. Their age ranged from 19 to 41 years ( $M = 24.5$  years;  $SD = 4.0$ ). They were not paid for their voluntary participation.

### *Materials*

In this paper and pencil study, the participants were first instructed to think of a committed romantic relationship that they had had in the past, that they were currently having, or that they would like to have. They were then asked to imagine that they discover that their partner formed both a deep emotional as well as a passionate sexual relationship with another person. Next they were requested to rate the extent to which the emotional and sexual aspect of their partner's infidelity contributed to their jealousy reaction on separate rating scales. The seven verbal labels of the two ratings scales ranged from emotional (sexual) infidelity contributed (from left to right) "not at all"; "barely"; "somewhat"; "pretty much"; "quite a lot"; "very much"; to "exclusively" to their jealousy.

### *Procedure*

The participants were tested individually at various locations in the University buildings where they were approached by the female experimenter. To enhance the anonymity of the study, the participants were requested to fold the questionnaire immediately after its completion and to drop it into an opaque box.

## **Results**

The rated contribution of emotional and sexual infidelity to the jealousy reaction was subjected to a two-way analysis of variance (ANOVA) with sex as the between-subjects factor and rating of infidelity type (sexual vs. emotional) as the within-subjects factor. For this purpose, the respective ratings were assigned values from 1 (*contributed not at all*) to 7 (*contributed exclusively*). The ANOVA yielded a marginally significant main effect of infidelity type,  $F(1, 197) = 2.76$ ,  $p = .098$ , partial  $\eta^2 = .014$ . The main effect for sex was not significant,  $F(1, 197) = 2.48$ ,  $p > .10$ , partial  $\eta^2 = .012$ . Contrary to the assumptions of DeSteno et al. (2002), emotional infidelity was rated to contribute somewhat more to the jealousy reaction than sexual infidelity (5.41 vs. 5.21). More importantly, however, the interaction predicted by the evolutionary view turned out to be significant,  $F(1, 197) = 5.52$ ,  $p = .02$ , partial  $\eta^2 = .027$ . Within-sex comparisons revealed that women rated the contribution of emotional infidelity significantly higher than that of

sexual infidelity (5.65 vs. 5.18),  $t(100) = 3.18, p = .002, d = .41$ . In contrast, men's ratings for the contribution of sexual and emotional infidelity did not significantly differ (5.23 vs. 5.15),  $t(97) < 1, d = .06$ . Between-sex comparisons revealed that women reported that emotional infidelity contributed more to their jealousy reaction than men (5.65 vs. 5.15),  $t(197) = 2.93, p = .004, d = .42$ . In contrast, men's and women's ratings for the contribution of sexual infidelity did not significantly differ (5.23 vs. 5.18),  $t(197) < 1, d = .04$ .

**Table 1.** The percentage of women and men who provided the same ratings for emotional and sexual infidelity ( $e = s$ ); who rated emotional infidelity higher than sexual infidelity ( $e > s$ ); and who rated sexual infidelity higher than emotional infidelity ( $s > e$ ) in Study 1.

	$e = s$	41%
Women	$e > s$	40%
	$s > e$	19%
	$e = s$	40%
Men	$e > s$	24%
	$s > e$	36%

In a second analysis step, the individual ratings were pigeonholed in one of three categories: emotional and sexual infidelity contribute equally to the jealousy reaction; emotional infidelity contributes more than sexual infidelity; and sexual infidelity contributes more than emotional infidelity. The percentage of men and women assigned to the three categories are shown in Table 1. As can be seen from Table 1, an almost equal percentage of women and men did not differentiate between the contributions of the two infidelity types (41% vs. 40%). However, more women than men (40% vs. 24%) indicated that emotional infidelity contributed more to their jealousy reaction, whereas conversely more men than women (36% vs. 19%) reported that sexual infidelity contributed more,  $\chi^2 = 8.81, df = 2, n = 199, p = .01$ .

## Discussion

A considerable proportion of men and women did not differentiate between the contribution of sexual and emotional infidelity to their jealousy feeling. This lack of differentiation in both men and women presumably indicates that the continuous rating

scales indeed activated simple decision strategies regardless of the participants' sex. Despite this evidence that the present task encouraged the use of simple decision strategies, DeSteno et al.'s prediction that this strategy should result in both men and women reporting more jealousy in response to sexual than emotional infidelity could not be confirmed. Furthermore, both within-sex comparisons yielded results at variance with their predictions: Women rated emotional infidelity as contributing significantly more to their jealousy feeling than sexual infidelity and men's ratings did not differentiate between the two infidelity types. In contrast the evolutionary view was partially supported inasmuch that women rated the contribution of emotional infidelity higher than men but no between-sex differences were found for the contribution of sexual infidelity. Moreover, the categorical analysis of the ratings revealed results in agreement with the evolutionary view since more men than women provided higher ratings for the contribution of sexual infidelity, whereas conversely more women than men provided higher ratings for the contribution of emotional infidelity.

An obvious limitation of the present study is that the contribution measures are non-mutually exclusive (Harris, 2002; Berman and Frazier, 2005) which affects those participants who rated that at least one infidelity type contributed exclusively to their jealousy reaction while the other infidelity type contributed at least barely to their jealousy reaction. A reanalysis of the data after excluding those participants yielded virtually identical results. One might further object that in the present study some participants might have used simple decision strategies (i.e., those who did not differentiate between the two infidelity types as well as perhaps those rating sexual infidelity as contributing more to their jealousy feelings), whereas others might have used more deliberate and effortful decision strategies (i.e., those rating emotional infidelity as contributing more to their jealousy feelings). This objection cannot be entirely refuted. Note, however, that this objection implies that the use of continuous rating scales does not invariably induce simple decision strategies as tacitly presumed by DeSteno et al. (2002). Moreover, in order to consider this objection viable one would have to additionally explain why especially women and to a lesser degree men used deliberate and effortful and effortful decision strategies when answering continuous rating scales. However, this objection nurtures on post hoc speculations because the decision strategies in Study 1 were not experimentally controlled. The purpose of Study 2 was to remedy this shortcoming.

## **Study 2**

Study 2 compared continuous ratings of jealousy elicited by sexual and emotional infidelity based on either simple or deliberate and effortful decision strategies. The participants instructed to employ simple decision strategies were requested to make their ratings as spontaneously as possible and without extensive considerations. In contrast, the participants instructed to use deliberate and effortful decision strategies were asked to make their ratings only after careful considerations and to take their time. According to DeSteno et al. (2002), "a clear dissociation will be found ... between judgments produced under different levels of cognitive elaboration" (p. 1105). As a consequence, based on DeSteno et al.'s assumption of a shared default distress response, both men and women in the

spontaneous condition should report higher jealousy ratings in response to sexual than emotional infidelity. Conversely, in the deliberate and effortful condition women, but not men, should provide higher jealousy ratings in response to emotional than sexual infidelity due to the asymmetrical impact of the deliberate and effortful decision process on women's but not men's ratings. If, however, the sex differences are robust and not limited to the forced-choice response format, the between-sex differences predicted by the evolutionary view should emerge regardless of the decision strategy. In sum, whereas support for the evolutionary view requires a two-way interaction between the participants' sex and the intensity ratings for sexual and emotional infidelity, the assumptions of DeSteno et al. (2002) should be reflected in a three-way interaction between sex, type of decision strategy and the two intensity ratings.

## **Method**

### *Participants*

The participants were 268 female and 222 male undergraduate students of introductory psychology courses at the Universities of Bielefeld and Osnabrück. Their age ranged from 19 to 49 years ( $M = 24.0$ ;  $SD = 5.2$ ). They were not paid for their voluntary participation.

### *Material*

The participants were first instructed to think of a committed romantic relationship that they had had in the past, that they were currently having, or that they would like to have. They were then informed that they discover that their partner had formed a deep emotional as well as a passionate sexual relationship with another person. Next, they were asked to indicate the intensity of their jealousy elicited by the imagination of the emotional and the sexual aspect of their partner's infidelity. In the spontaneous condition, the participants were instructed to make their decisions as spontaneously as possible, that is without extensive considerations. In the deliberate and effortful condition, the participants were instructed to make their decisions only after careful considerations and at their own pace. In each condition, the sentence containing the respective decision strategy was presented in bold font to highlight its importance.

Subsequently, to counter potential ceiling effects, two 11-point ratings scales were provided for the ratings of the intensity of their jealousy feelings elicited by the two aspects of their partner's infidelity. Additionally, the endpoints of the rating scales were anchored at 0 (*not at all jealous*) and 10 (*extremely jealous*) in order to provide a full range of response options. The sequence of the two ratings was counterbalanced across sex and condition. Finally, the participants were asked to indicate whether they had already had a committed romantic relationship.

### *Procedure*

The participants were tested in groups varying in size. The participants within each group were assigned to the same condition. The experimenter explicitly stressed the importance of the respective condition before the participants started to answer the questionnaire. To enhance the anonymity of the study, the participants were requested to proceed independently and to fold the questionnaire immediately after its completion.

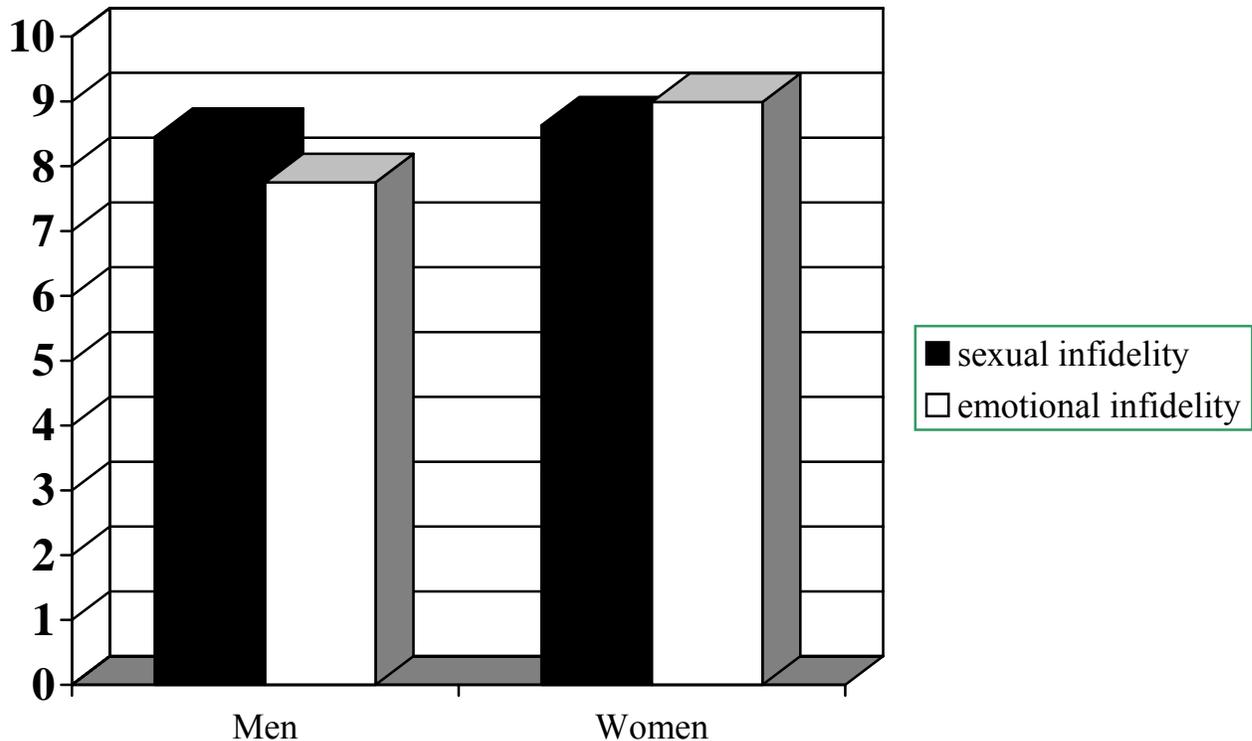
## **Results**

The vast majority of the participants (93%) reported relationship experience. One male participant failed to answer the pertinent question. Because there were only 17 men and 16 women without relationship experience, the following analyses are based on the data of the 204 men and 252 women with relationship experience. These analyses were rerun including the participants without relationship experience with essentially unchanged results.

A three-way Analysis of Variance (ANOVA) of the jealousy ratings with participants' sex and decision strategy (simple vs. deliberate and effortful) as the between-subjects factors and rating of infidelity type (sexual vs. emotional) as the within-subjects factor yielded a significant main effect of the sex factor,  $F(1, 452) = 21.35, p < .001$ , partial  $\epsilon^2 = .045$ . This main effect is attributable to women providing overall significantly higher ratings than men (8.81 vs. 8.10). Additionally, the interaction between the infidelity ratings and the decision strategy turned out to be significant,  $F(1, 452) = 8.48, p = .004$ , partial  $\epsilon^2 = .018$ . The jealousy caused by sexual infidelity was rated as significantly more intense in the simple than in the deliberate and effortful decision strategy condition (8.77 vs. 8.29),  $t(454) = 2.67, p = .008, d = .25$ . In contrast, the intensity of jealousy elicited by emotional infidelity did not differ between the two decision strategy conditions (8.45 vs. 8.42),  $t(454) < 1$ .

More importantly, however, the interaction between the two infidelity ratings and participant sex was highly significant,  $F(1, 452) = 26.67, p < .001$ , partial  $\epsilon^2 = .056$ . As illustrated in Figure 1, within-sex comparisons showed that women reported significantly more intense jealousy in response to a mate's emotional than sexual infidelity (8.99 vs. 8.63),  $t(251) = 2.88, p = .004, d = .22$ . Conversely, men reported significantly more intense jealousy elicited by sexual than emotional infidelity (8.45 vs. 7.75),  $t(203) = 3.85, p < .001, d = .31$ . Between-sex comparisons revealed that in accordance with the evolutionary view of jealousy, women reported significantly more intense jealousy than men in response to emotional infidelity (8.99 vs. 7.75),  $t(454) = 6.64, p < .001, d = .61$ . Again no sex differences emerged with respect to jealousy elicited by sexual infidelity (8.63 vs. 8.45),  $t(454) = 1.04, d = .09$ . The three-way interaction that one would have expected on the basis of DeSteno et al.'s (2002) considerations was virtually non-existent,  $F(1, 452) = 0.41$ , partial  $\epsilon^2 = .001$ . The remaining main and interaction effects also failed to be significant,  $F$ 's  $< 2.2$ .

**Figure 1.** Men's and women's mean jealousy ratings as a function of infidelity type.



## **Discussion**

Study 2 tested DeSteno et al.'s (2002) assumption that simple decision strategies reveal men's and women's shared default stress response towards sexual infidelity as causing more jealousy, whereas deliberate and effortful decision strategies lead women but not men to override this default stress response. Contrary to these assumptions, women reported more intense jealousy in response to emotional infidelity, irrespective of the decision strategy. As in Study 1, the between-sex differences predicted by the evolutionary view of jealousy were found for emotional but not for sexual infidelity. One might object that despite the efforts to experimentally control the decision strategies, (some or all of) the participants did not comply with the instructions. Granted this objection, there are two possible alternative scenarios. However, each scenario is problematic for one of DeSteno et al.'s (2002) central assumptions. According to the first scenario, the use of ratings scales indeed induced simple decision strategies in the participants as proposed by DeSteno et al., irrespective of their instructions. If this were the case, then no sex differences should have

been found because simple decision strategies supposedly revert to the default distress response shared by men and women towards sexual infidelity. According to the second scenario, the participants employed deliberate and effortful decision strategies. This scenario would explain the sex differences but is equally problematic for DeSteno et al. (2002) position because it contradicts their assumption that the use of rating scales invariably induces simple decision strategies.

As illustrated in Figure 1, the present findings also highlight that jealousy in romantic relationships elicited by a mate's hypothetical sexual or emotional infidelity typically is an extremely intense emotion. In fact, 43% of the men and 28% of the women gave the maximal jealousy rating for hypothetical sexual infidelity. With respect to hypothetical emotional infidelity, 50% of the women and 45% of the men reported extreme jealousy. These extreme ratings obviously back up Edlund et al.'s (2006) assumption that some failures to find sex differences in continuous jealousy ratings for sexual and emotional infidelity might be attributable to too narrowly defined ratings scales that fail to capture the frequently extreme nature of jealousy feelings in romantic relationships.

## **General Discussion**

In sum, the results of the present experiments revealed no evidence supporting DeSteno et al.'s (2002) claim that the sex differences in jealousy predicted by the evolutionary view are an artifact of measurement because they are restricted to a forced-choice between emotional and sexual infidelity. By the same token, the present results also failed to support DeSteno et al.'s (2002) assumption that men and women share the same initial tendency towards sexual infidelity as that infidelity type generating more jealousy. Moreover, both their assumptions and the pertinent empirical support they provided face additional challenges. First, whereas DeSteno et al. (2002; Study 1) found that women reported greater jealousy in response to sexual infidelity on the continuous measures, several studies, in addition to the present one, reported exactly the opposite findings with these measures (e.g., Bohner and Wänke, 2004; Pietrzak et al., 2002; Sagarin et al., 2003). Moreover, although Harris (2002) did not explicitly request ratings of the intensity of jealousy feelings, she found that both men and women indicated on five-point rating scales that they focused more on the emotional infidelity aspect of one's mates' actual infidelity (but see Edlund et al., 2006, who refuted Harris use of the word focus, and Schützwohl, 2007, for an empirical demonstration of the irrelevance of the focus of jealousy on the sexual and emotional aspect of infidelity for the evolutionary view).

Second, Schützwohl (2004) provided evidence questioning the adequacy of their assumption that the forced-choice response format invariably induces deliberate and effortful decision strategies. In this study briefly mentioned earlier, unbeknown to the participants, decision times were assessed in the standard forced-choice question as an indicator of the deliberate- and effortfulness of the pertinent decision processes. It was found that women selecting emotional infidelity made their decision significantly faster than women selecting sexual infidelity. Analogously, men selecting sexual infidelity made their decision significantly faster than men selecting emotional infidelity. From an evolutionary view, these findings suggest that women selecting emotional infidelity and

men selecting sexual infidelity simply relied on their sex-specific initial response tendency activated by the respective jealousy mechanism, whereas both women opting for sexual infidelity and men opting for emotional infidelity needed to engage in more deliberate and effortful decision processes to override their initial response tendency. Thus, contrary to basic assumptions of DeSteno et al. (2002), (1) the forced-choice response format apparently does not invariably induce the same deliberate and effortful decision processes in all participants; (2) less effortful decision strategies do not reveal same-sex default distress responses towards sexual infidelity but instead sex-specific initial response tendencies for men (sexual infidelity) and women (emotional infidelity); (3) suggesting an asymmetry in decision strategies in the forced-choice response format which is not associated with the participants' sex as implied by DeSteno et al. (2002) but which within each sex is associated with the final choice (Schützwohl, 2004). Moreover, Schützwohl (2005) reported that men were significantly faster than women in deciding whether infidelity cues would elicit either a first pang of jealousy or intolerable jealousy if these cues were more diagnostic of sexual jealousy. Conversely, women made these decisions significantly more rapidly than men for cues more diagnostic of emotional infidelity. Together with the pronounced sex differences in particular in the present no-load condition with time pressure but without distraction, these findings suggest that the sex differences obtained with the forced-choice task are due to fast, spontaneous decisions rather than long deliberation (see also Penke and Asendorpf, in press).

Third, DeSteno et al. (2002) failed to provide any theoretical argument to substantiate their assumption that men and women share the same initial tendency towards sexual infidelity as that infidelity type generating more jealousy. Fourth, in a similar vein, these authors have yet to offer an explanation as to why women but not men should be affected in their decisions by the different response formats.

Finally, the present findings contribute to the accumulating evidence that in rating studies of jealousy reactions to sexual and emotional infidelity, the evolutionary prediction of between-sex differences is consistently supported for emotional but not for sexual infidelity (Penke and Asendorpf, in press). One exception to this pattern has been recently presented by Schützwohl (in press b) with respect to ratings of relief about the disconfirmation of the prospect of a mate's sexual and emotional infidelity. In two studies, men reported more relief than women about the disconfirmation of the prospect of sexual infidelity. Additionally, women consistently reported more relief about the disconfirmation of emotional than of sexual infidelity. Thus, one important aim of future research will be to explore potential causes for men's and women's different ratings patterns for jealousy and relief in response to the (dis-)confirmation of a mate's sexual and emotional infidelity.

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