THE CURIOUS CASE OF DISREGARDED FEEDBACK: WOMEN’S RESPONSES TO MATING RELEVANT FEEDBACK FROM SAME AND OPPOSITE SEX OTHERS

by

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Abstract

This study examined women’s responses to appearance-based feedback from same- and opposite-sex others. Given the roles that men and women play in mating contexts, with men posing as potential mates while women pose as potential competitors, we hypothesized that women should be distrustful of appearance-based feedback from same-sex others. Heterosexual, undergraduate female participants completed a two-part experiment assessing their self-perceived physical attractiveness at two time points. A baseline measure of self-perceived attractiveness was collected in an online survey. The second measure of physical attractiveness was taken after participants were led to believe alleged same- or opposite-sex others had rated their appearance positively or negatively. Results revealed that the sex of feedback source had no effect on perceptions of physical attractiveness. However, an effect of feedback source sex was found for changes in desired levels of physical attractiveness for a mate. Women who received negative feedback from same-sex others reported placing a lesser emphasis on a prospective mating partner’s attractiveness in a long-term, but not short-term mating contexts. Our findings suggest that women respond more to appearance-based derogation from other women than they do when that derogation comes from men, supporting appearance derogation as an effective competitive mating strategy.
The Curious Case of Disregarded Feedback:

Women's Responses to Mating Relevant Feedback from Same and Opposite Sex Others

In the classic tale of Cinderella, a poor girl is mistreated by her stepmother and stepsisters. Jealous of Cinderella’s beauty, they steal her clothes and force her to dress in rags, while keeping her busy with difficult chores. When the prince holds a ball, inviting every young girl in the land to attend so that he can find a suitable wife, the stepsisters tell Cinderella that she shouldn’t bother going because the prince would never marry an ugly housemaid like her. Despite their mean words, Cinderella calls on her fairy godmother for help. She receives a stage coach, a sparkling gown, and a pair of glass slippers, and departs for the ball. The prince, seeing how beautiful she is, ignores all of the other girls at the ball and falls in love with her. Of course, after a dramatic turn of events following that evening, the two are married and live happily ever after.

The words of Cinderella’s stepsisters provide a clear example of how female appearance derogation can be used as a competitive mating strategy. Indeed, research on women's mating competition finds that this is among women's most preferred strategies for trying to manipulate the behavior of their mating rivals (Buss & Dedden, 1990). However—at least in the case of Cinderella—it appears that this strategy was not successful. Instead of staying home, Cinderella attended the ball (where she also managed to capture the heart of the much-sought-after Prince Charming). Cinderella’s failure to take seriously the negative feedback given to her by her sisters may reflect an actual information processing strategy that women use when they suspect mating-related sabotage from the communicator. That is, if a woman is given negative feedback about her appearance by another woman (who is a mating rival), it is possible that she may dismiss this feedback, assuming it to reflect an act of intrasexual aggression on the part of her
female competitor. In the current research, we sought to explore this possibility by looking at how women respond to negative appearance feedback from same-sex others.

**Intrasexual competition among women**

Intrasexual competition, which was originally described by Darwin (1871), involves competition among members of one sex for access to members of the other sex. Women engage in intrasexual competition for access to high quality mates (Rosvall, 2011) because one of the adaptive challenges facing women is to find a partner who will be willing to invest resources into offspring. Since women must obligatorily invest a great deal of time and effort into offspring production (Trivers, 1972), and because men vary in their ability to procure and invest resources, women must compete with one another for mates who have a high potential to do so. Competitive strategies employed by females are typically indirect in nature, as women tend to incorporate non-physical tactics, such as spreading unflattering rumors about other women (Österman et al., 1998). Indirect aggression offers a more advantageous ratio of cost to benefit for females because direct, physical competition comes with a higher risk of bodily harm. Women should be motivated to protect their bodies because they must bear offspring within themselves, as a mother’s investment in children begins even before conception and continues to be central to offspring survival through the early years of life (Campbell, 2013). Similarly, physical beauty is one of women’s most important resources when it comes to mate acquisition, so it is in a woman’s best interests to avoid bodily injury.

One key domain in which women compete for mates is in physical attractiveness (Fisher, Cox, & Gordon, 2009) because men place high value on physical beauty (Li et al., 2002). Men are highly attuned to physical characteristics when selecting partners because many features of a woman's appearance serve as honest signals to her fertility status (Thornhill et al., 2003). Indeed,
women with higher estrogen levels, indicating higher fertility, are rated as having more feminine, attractive, and healthy-looking faces (Law Smith et al., 2006). Men who secure access to fertile mates are rewarded with greater reproductive success, making physical attractiveness a major factor influencing men's mate choices (Buss, 1989). Because of this, women compete with one another not only by seeking to enhance their own beauty—often through risky beautification strategies such as sun tanning or taking dangerous diet pills (Hill & Durante, 2011), but also by aiming to make their rivals appear less attractive (Fisher & Cox, 2009).

This goal can be accomplished by verbally derogating the appearance of other women. Fisher and Cox (2009) found that men’s perception of a woman’s attractiveness can be significantly lowered if her appearance is evaluated negatively by an attractive female rival. Appearance derogation is one of the most common derogation tactics employed by women against their competitors (Buss & Dedden, 1990). Women are more likely than men to experience being labeled as unattractive, and respond to such a label with sadness and embarrassment (Spreadbury & Reeves, 1983). Appearance-based rejection engenders negative emotions in women (Campbell & Wilbur, 2009) and lowers their self-esteem because it implies that they have a low capacity to be a desirable mate (Pass, Lindenberg, & Park, 2010). According to sociometer theory, self-esteem functions as a gauge of social acceptance, and the motivation to preserve self-esteem essentially promotes the avoidance of social devaluation (Leary, 1999). A more specific adaptation of this model shows that in a mating context, rejection by opposite-sex others leads to a decrease in mating aspirations, suggesting that self-perceived mate value may be calibrated to experiences of acceptance or rejection by potential mates (Kavanagh, Robins, & Ellis, 2010). Thus, negative evaluations from others can have a lasting impact on a person’s self-esteem and social status.
Because of the overt use of verbal appearance derogation as a competitive tactic and its negative effects on self-esteem and mating aspirations, women may be less inclined to accept appearance-based feedback from other women, who pose as potential rivals and are likely to have ulterior motives when communicating. Conversely, women should be more likely to heed appearance-based feedback from men, who play a role as the potential mates for whom women are competing. In the present study, we hypothesize that women will respond to negative appearance-based feedback from men by lowering their self-perceived attractiveness, but they will not respond to the same feedback if it comes from other women.

**Method**

**Participants**

Female undergraduate students ($N = 128$) at Texas Christian University were recruited via SONA. Prior to data analyses, participants were excluded if their age was 2.5 standard deviations or greater than the rest of the sample ($n = 5$) to ensure that all included participants viewed the raters as part of their own peer group, if they reported never having experienced a romantic relationship ($n = 6$) since past relationship experience has been found to be related to self-perception of mate value (Fisher, Cox, Bennett, & Gavric, 2008), if they failed manipulation or attention checks or reported having rushed through the study ($n = 6$), or if they reported having taken an evolutionary psychology course in which they may have been exposed to this hypothesis ($n = 9$). After exclusions, our final sample consisted of 108 female participants ($M_{age} = 19.52$, $SD_{age} = 1.25$, age range $= 18 – 22$).

**Materials and Procedure**

**Time 1 Procedure.** Participants were told the cover story that the purpose of the research was to gather college-aged women to participate in a focus group for a new online dating
platform. To this end, they completed a variety of distractor items assessing their online dating behavior, attitudes towards online dating, and past romantic experience. They then completed measures online assessing constructs of interest such as physical attractiveness and mate budgeting. Completion of these measures at Time 1 served as our baseline. All participants completed standard demographic items as well as items assessing attention, suspicion, and study care.

**Attractiveness.** At both Time 1 and Time 2 participants responded to 7 items assessing their physical attractiveness. One of these items was taken from the Mate Value Scale (Landolt, Lalumière, & Quinsey, 1995) and required participants to rate their physical attractiveness relative to their peers. Four of the items came from the Comparison to Other Women Scale (Lucas & Koff, 2014) and asked participants to rate their appearance relative to other women. The final two items came from the Perceived Attractiveness Measure (McCreary & Sadava, 2001). All items were responded to on 7-point scales with higher values indicating higher attractiveness. See Appendix A for wording of all items.

**Mate Budgeting.** This task required participants to define their standards for potential mates (Li, Bailey, Kenrick, & Linsenmeier, 2002). They were instructed to imagine that they were considering someone as a potential partner for a single date, as a sex partner, and as a marriage partner. They then were asked to report the minimum level of attractiveness a man must possess in order to be an acceptable partner in each context. Participants based their standards on a percentile scale, such that a response of 6 indicates that a potential partner must be more attractive than 60% of all other men in order to be considered acceptable.

**Time 2 Procedure.** Participants who had previously completed Study 1 were brought into the laboratory and greeted by a research assistant, who reiterated the cover story that the
The purpose of the study was to serve as a focus group for an online dating platform. Lending support to the ruse, the research assistant wore a T-shirt with the Cat’s Eye logo (See Appendix B), which was also shown on the online survey. After completing a photo release form, participants’ photos were taken under the pretense that they would be sent to students at nearby universities and rated for attractiveness.

**Rater Sex.** Via random assignment, participants were either told that 10 men or 10 women at one of the surrounding universities would rate their photograph for attractiveness. Onscreen, they saw 10 black silhouettes of their purported raters, and were told that at the end of the study they would be matched with an individual who received attractiveness ratings similar to their own. Rater sex served as one of our independent variables.

**Distractor Task.** Participants then completed a distractor task while waiting to receive feedback from their alleged raters. The distractor task involved recording the words containing the letters “e” and “i” from Lewis Carroll’s poem *The Jabberwocky*. Participants spent 8 minutes working on this task; at the end of 8 minutes, the website automatically advanced to the next page, which contained instructions for participants to define the words that they had recorded from the poem. This task lasted 7 minutes, after which the website automatically advanced to the page containing the supposed results from the photograph raters.

**Feedback Condition.** Participants were randomly assigned to receive either positive or negative feedback on their physical attractiveness. All participants were shown an image of the 9-point Likert-type scale (1 = extremely unattractive; 9 = extremely attractive) on which the ratings were allegedly made. Along with the scale, they were given the individual numerical ratings from each rater and the average score of all 10 ratings. Those in the negative feedback
condition received an average score of 3 (moderately unattractive), while those in the positive feedback condition received an average score of 7 (moderately attractive).

After receiving feedback, participants completed the same mate choice budgeting task and measures of assessing self-perceived attractiveness as they did in Study 1, as well as measures assessing experience with online dating, attitudes and behavior related to online dating, an attention filter, a manipulation check asking participants to identify the sex of their raters and how attractive they were judged to be, standard demographic measures, and measures assessing suspicion. All participants were thoroughly debriefed to ensure that the manipulation did not unduly affect their self-concept or self-esteem. Finally, participants were verbally asked by the experimenter not to share the ruse with anyone and also signed a form indicating they would not disclose the true purpose of the study.

**Results**

**Attractiveness Analysis.** Our primary dependent variable was self-perceived attractiveness. To calculate this, we first created a mean composite attractiveness score for both Time 1 (α = .92) and Time 2 (α = .94). We then created a variable that would represent change between the two time points by subtracting the Time 1 mean composite from that of Time 2. Positive values on this score indicate perceptions of attractiveness increased after the manipulation, while negative values indicate the opposite. To determine whether rater sex and feedback condition influenced participants’ self-perceived attractiveness, a 2 (Rater sex: male rater vs. female rater) x 2 (Feedback Condition: positive appearance feedback vs. negative appearance feedback) between-subjects analysis of variance (ANOVA) was conducted while controlling for previous relationship experience. Results revealed a significant main effect for feedback condition, $F(1, 103) = 6.96, p = .01, \eta^2_p = .06$, where participants who received
negative feedback reported viewing themselves as less attractive ($M = -.61, SD = .86$) than participants who received positive feedback ($M = -.19, SD = .81$). There was no significant main effect of rater sex on participants’ self-perceived attractiveness ($p = .59$). Moreover, there was no significant interaction between rater sex and feedback condition on women’s perceptions of attractiveness ($p = .45$).

**Mate Budgeting Analysis.** Change scores were calculated to show the difference in participants’ responses between Time 1 and Time 2 by subtracting each participant’s Time 2 score from their Time 1 score. A 2 (Rater sex: male rater vs. female rater) x 2 (Feedback condition: positive appearance feedback vs. negative appearance feedback) between subjects ANOVA was conducted on change scores of desired partner attractiveness for a single date while controlling for current relationship status. No main effect was found for rater sex ($p = .16$) or feedback condition ($p = .18$), but there was a significant 2-way interaction, $F(1, 103) = 16.28$, $p = .03$, $\eta^2_p = .04$. Simple effects tests revealed significant differences between feedback conditions for participants who were rated by women, $F(1, 103) = 20.02$, $p = .02$, but not for those who were rated by men ($p = .55$). Compared to women who received positive appearance feedback from other women ($M = .56, SD = 1.85$), those who received negative appearance feedback ($M = -.65, SD = 1.85$) lowered their acceptable percentile of partner attractiveness when considering a potential single date partner.

Similarly, a between-subjects ANOVA was conducted on change scores for a sex partner’s desired attractiveness while controlling for current relationship status. There were no main effects for rater sex ($p = .48$) or feedback condition ($p = .07$), nor was there a 2-way interaction ($p = .23$).
A between subjects ANOVA was also run to analyze change scores for potential marriage partner attractiveness while controlling for current relationship status. There were no main effects for rater sex ($p = .92$) or feedback condition ($p = .21$). However, there was a significant 2-way interaction, $F(1, 103) = 7.21$, $p = .01$, $\eta^2_p = .06$. Simple main effects revealed a significant difference for feedback condition for those who were rated by other women, $F(1, 103) = 16.06$, $p = .01$, but not for those who were rated by men ($p = .30$). Women who received negative attractiveness feedback from other women ($M = -.52$, $SD = 1.50$) reported significantly lower desired levels of attractiveness for marriage partners than women who received positive feedback from other women ($M = .63$, $SD = 1.52$).

**Discussion**

In this study, we sought to examine women’s responses to appearance-based feedback from others, expecting that women would update their self-perceived attractiveness only when negative appearance feedback came from men. However, this hypothesis was not supported by the results of the study. While participants did perceive themselves as less attractive after receiving negative appearance feedback, it made no difference whether the source was men or women. This finding seems to suggest that women do not engage in source monitoring when changing their self-perceived attractiveness in response to negative appearance-based feedback from others. One possible reason for this is that the female raters described in the study were women at another university and would thus have separate social circles from our participants. Although other women do play a role as potential competitors, it is possible that the perceived distance between schools led our participants to feel that the women rating them would be competing for a separate group of men and therefore would not have reason to be competitive or manipulative.
However, we did find an interaction between feedback condition and rater sex on responses to the mate budgeting task. When evaluated negatively by other women, participants lowered their standards for attractiveness of potential single date partners and for potential marriage partners, while there was no change in these standards when negative feedback came from men. Interestingly, this pattern did not extend to potential sex partners; in a short term mating context, negative appearance evaluations from other women had no effect on participants’ standards for attractiveness. This is likely related to the expectation of investment associated with different mating contexts; in a long-term (or potentially long-term) context, women need to ensure lasting investment from their mates so as to enhance offspring survivability (Trivers, 1972). However, in a short-term mating context, women’s preferences tend to shift in favor of more masculine, physically attractive partners who may be less likely to invest resources into potential offspring (Regan et al., 2000; Hegner & Wingfield, 1987). It is possible that, because of this difference in mate quality priorities depending on mating context, women who have been subject to appearance derogation feel a need to seek less attractive mates because they will be a safer bet for continued resource investment. Women who are experiencing lower self-esteem as a result of appearance derogation (Pass, Lindenberg, & Park, 2010) may be less inclined to think that highly attractive mates will be willing to invest in them in a long-term context, which could lead them to desire less attractive long-term mates. In a short-term context, however, women should continue to seek highly attractive partners because there is little expectation of resource investment, making women place a greater emphasis on their partners’ genetic quality for offspring production.

While women’s changes in desired partner attractiveness may be explained by differences in mating context goals, the question remains of women’s source monitoring
strategies. Contrary to what we expected to find based on Dawkins and Krebs’ (1978) assertions about manipulation and mindreading, the “victims” did not uncover the ulterior motives of the “manipulators”. In this case, the derogating women are manipulators, who assert their will over their rivals. The rival women, then, are the manipulated victims, but should become “mind-readers,” who pick up on cues from the manipulator and use those cues to their own advantage. According to Dawkins and Krebs’s logic (1978), women should be able to detect that appearance derogation from other women is a manipulative act that gives their competitors a mating advantage and thus develop counter-adaptations to ignore negative appearance feedback from other women. However, this is not what was found in the present research. Instead, we found that women respond only to negative feedback from other women and ignore the same feedback when it comes from men. It is possible that the women in our study felt inclined to trust the female raters because of perceived distance and lack of competition with that particular group; likewise, they may have felt that the men in that group were not potential partners because of the distance, thus their feedback was deemed to be of little importance. Future research may aim to determine whether this is truly the case by presenting the anonymous raters as students at the same university to ensure that participants perceive them as being relevant to their own social groups.

While we did not find support for our hypothesis that women will disregard negative appearance feedback from other women, we did find an interesting effect of source sex on women’s desire for long-term partner attractiveness. This contributes to the theory of source vigilance (Sperber et al., 2010) by showing some contexts in which women respond to mating-relevant information from potentially untrustworthy sources in a curious way. Our findings may also suggest that, though women have developed appearance derogation as a competitive
strategy (Buss & Dedden, 1990), the coevolution of a defense mechanism against such a tactic has yet to emerge (Dawkins & Krebs, 1987).
References


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Appendix A

Self-Perceived Attractiveness Measures

Mate Value Scale (Landolt, Lalumière, & Quinsey, 1995)

1. Relative to my peers, I consider myself _________.

   (1 = Much less attractive; 7 = Much more attractive)

Comparison to Other Women Scale (Lucas & Koff, 2014)

1. I’m better looking than most other women.
2. I’m sexier than most other women.
3. I have a more attractive body than most other women.
4. I’m prettier than most other women.

   (1 = strongly disagree; 7 = strongly agree)

Perceived Attractiveness Measure (McCreary & Sadava, 2001)

1. How physically attractive do you think you are?
2. How sexually appealing do you think you are?

   (1 = well below average; 7 = well above average)
Appendix B

Cat’s Eye Logo

CAT'S EYE®
a better way to date