

Original Article

**HOW WE VIEW THOSE WHO DEROGATE:
PERCEPTIONS OF FEMALE COMPETITOR DEROGATORS**

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Abstract

Past research on intrasexual competition for mates has revealed at least four strategies that people may deploy. One of the most frequently used strategies is competitor derogation, such that people derogate potential rivals with respect to their appearance and personality. What remains unknown is how those who derogate rivals are perceived by others. Here we examine how female derogators are viewed by men (i.e., potential mates) and women (i.e., potential rivals), and investigate whether the form of derogation matters. We used a pre-post research design to document changes in perceptions of derogators who made negative statements about other women's appearance, personality or sexuality. Overall, men significantly decreased their evaluations of the derogator's friendliness, kindness, trustworthiness and overall desirability as a mate. Women mirrored these results, but also significantly decreased their views of the derogator's fitness as a parent and her physical attractiveness, and in the case of appearance derogations, her promiscuity. We examine these results within the framework of women's intrasexual competition for mates.

Keywords: Intrasexual competition, mating strategies, sex differences, facial attractiveness

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Introduction

Intrasexual competition occurs when individuals of the same sex compete for mating access to members of the opposite sex. It has evolved as an important behavioural adaptation for attracting mates and for collecting resources necessary for reproduction (Darwin, 1871). Moreover, it relies upon the selection of traits and characteristics that provide an advantage for an individual who is competing amongst same sex rivals for mating access. The traits and characteristics that are used for intrasexual competition are those most preferred by the opposite sex (Andersson, 1994; Darwin, 1871). For example, women should compete in terms of physical attractiveness because of the importance men place upon it, relative to women (Buss, 1988; Buss, 1994; Buss & Dedden, 1990; Fisher, 2004).

Intrasexual competition is composed of at least four strategies: self-promotion, competitor derogation, competitor manipulation and mate manipulation (listed in decreasing frequency of use; Fisher & Cox, in press). Whereas self-promotion refers to any act used to enhance the positive qualities of oneself, competitor derogation is when one performs any act to decrease a rival's value. Competitor manipulation is when one attempts to reduce competition by altering a rival's perception of the potential mate, while mate manipulation is when one changes the mate's perceptions of, or ability to interact with, one's rivals.

Competitor derogation is an effective strategy for intrasexual competition (Schmitt & Buss, 1996), and it remains second only to self-promotion. There are various explanations for why it is not more utilized. First, it may be easier for an individual to hide that she is self-promoting (and hence deny that she is competing) by disguising it as general self-improvement. That is, an individual could claim to merely be trying to look her best, when in reality it is to look the best, relative to a group of female friends. Second, self-promotion does not demand that one know the rival, whereas competitor derogation does. If a woman wears cosmetics and takes various measures to improve her overall appearance, she is competing against all the women she encounters afterwards who might win the attention of a potential mate she is interested in pursuing. In contrast, to derogate a rival, she would have to make an observation about a rival's appearance or personality and then perform a derogation, such as a carefully phrased put-down. Third, those who derogate competitors might be perceived as mean-spirited (e.g., Schmitt & Buss, 1996), and hence, as an undesirable mate. Of the three possible explanations, we selected the latter one to test in the current study because it lends itself most readily to an experimental design. However, we admit that the three explanations are not orthogonal and therefore, all three may underpin, to varying extents, why people do not derogate competitors more frequently.

Previously, Fisher (2004) examined changes in women's ratings of female faces during ovulation (i.e., maximum fertility) as compared to menstruation (i.e., minimal fertility). She found ovulating women provided lower evaluations of female facial attractiveness compared to menstruating women, which she considered to be due to increased intrasexual competition during a time when it is most critical for reproduction. Although the results were intriguing, the study did not reveal what benefit women gained, evolutionarily speaking, by derogating other women's attractiveness. Thus, Fisher, and Cox (2009) tested the possibility that women's negative statements (i.e., verbal derogations) about a rivals' appearance would cause potential mates to decrease their evaluations of rivals. That is, a woman derogates a rival in the hopes that it causes a

potential mate to decrease his assessment of that rival. Their findings support this conjecture; women's derogations cause men, as well as other women, to decrease their initial facial attractiveness ratings of female faces. Moreover, they found that derogations made by an attractive woman had significantly more sway (i.e., were far more effective) compared with statements made by an unattractive woman. Women, in contrast, were not influenced by the attractiveness of the derogator. Thus, the findings of the study revealed that competitor derogation changes perceptions of the *derogated*. In contrast, though, it remains unknown how the *derogator* is viewed, which is the topic of the current study.

Current Study

The goal of the current project was to investigate how female competitor derogators are viewed by potential mates and rivals. Given that competitor derogation is an effective strategy, and that making derogatory statements does cause potential mates to alter their view of rivals, it is curious that it is not used more frequently. Our hypothesis is that a competitor derogator is perceived as undesirable by potential mates, which is why this strategy is used less often than self-promotion. We propose that the negative perception will encompass a variety of characteristics including how potential mates view the derogator's friendliness, kindness, physical attractiveness, promiscuity, trustworthiness, overall desirability, and ability to make a fit parent. Men were also asked if they would consider the derogator for a long-term relationship and a short-term sexual relationship.

We were also interested in how other women view the derogator. Thus, we also examined how potential rivals perceive the derogator with respect to many of the same dimensions as men. We did not ask them about the potential for long-term or sexual relationships, and we included an additional item asking women if they believed the derogator could make her more attractive (i.e., give her a make-over). We added this item to indirectly investigate women's perceptions of the derogator's attractiveness. If participants believed that they could make the derogator more attractive with a make-over, it might suggest that they perceive her as not being highly competitive. That is, if the derogator was really competing, she would be maximally attractive and the participants would not be able to improve her appearance with a make-over.

In order to document whether there were any changes in participants' perceptions, we used a two-phase study. In phase 1, participants simply viewed a photograph and provided ratings. In phase 2, using a different group of participants to avoid carry-over effects, we asked participants to read what one woman said about another woman, and then rate the person making the statement. The two phases are discussed in detail below.

Methods: Phase 1

Participants

The sample included 23 men (age, in years, $M = 22.09$, $SD = 3.98$) and 61 women ($M = 20.23$, $SD = 3.56$). All were self-reported heterosexuals, and were students from an eastern Canadian university enrolled in any psychology course that offered course credit for participation. Thus, the participants were from various programs and at various years of study. They were given a small course credit for their time.

Stimuli and Procedures

The stimuli consisted of 50 female faces that were obtained from the website hotornot.com in October 2008. On this website, individuals post a photograph of themselves, and then strangers anonymously rate how “hot” they are using a 1-10 scale, such that 1 indicates the person is unattractive (i.e., “not hot”) and 10 suggests the person is attractive (i.e., “hot”). The selected faces were all rated as being, on average, between “7” and “9” ($M = 8.16$, $SD = 1.35$) and thus, moderately high to highly attractive. We restricted the search criteria to include only 18 to 24 year olds, and ensured that the photographs contained the model’s full head and neck, face and eyes directed to the camera lens, and that she was smiling. Thus, we only chose “head shots” and limited the sample further by excluding anyone wearing sunglasses. Due to the fact that these were photographs the models selected of themselves, the women were wearing various hairstyles and had different levels of cosmetics use. Finally, the photographs were cropped to remove extraneous background information if necessary, and to guarantee that the faces were approximately equivalent in size.

To avoid fatigue, participants viewed half of the faces (i.e., 25 of the 50 photographs; we refer to these as “sets” such that there were two sets of photographs). Each face was printed on professional photo-quality paper as a 4”X6” photograph, and before each participant was tested the set was shuffled, and then individual photographs were attached to a survey. For each face, participants evaluated, using a 1 (not at all) to 7 (very much) scale how friendly, kind, physically attractive, promiscuous, and trustworthy they thought the woman was, her overall desirability as a mate, her potential to make a fit parent, and how much they would consider her for a long-term relationship and brief sexual relationship. These data then became our baseline for each model in the photograph. Participants were tested individually in a private room and aside from this task, they completed a short demographic survey.

Methods: Phase 2

Participants

There were 27 men (age, in years $M = 21.48$, $SD = 2.76$) and 57 women ($M = 21.11$, $SD = 3.20$) in our sample. They were similar in all aspects to the first sample, as they were students at the same university who were taking any psychology course that offered a small credit for participation.

Stimuli and Procedures

In order to generate competitor derogations we were required to create negative statements for each face. To do so, we asked a separate group of ten women, drawn from the same participant pool, to view and make statements about the same 50 female faces used in Phase 1. This procedure was performed as a group in a casual atmosphere to allow the women to be open and treat it socially, similar to how competitor derogation might occur in a dance club. They were instructed by the researcher to view a face and make a “derogatory or negative statement about her appearance,” or about her sexuality or personality. The type of statement was randomly assigned to the photographs, such that approximately one third of the photographs were assigned to each of the three types

of derogations (i.e., 16 for appearance derogations, 17 for personality derogations, and 17 for sexuality derogations). The reason appearance, personality and sexuality were selected as topics for the derogations was because Fisher, Cox, and Gordon (2009; see also Fisher & Cox, in press) found that these three are often used as content of derogations.

Here is an example of an appearance derogation:

She's pretty but.... She wears a lot of makeup and wears padded, pushup bras all the time (even to the gym!). It takes her forever to do her makeup, and she has to continually fix it every time she goes by a bathroom or mirror. Total high maintenance.

This example is for personality derogation:

I've been friends with her for a long time. She's ok. She's a total tough girl, which is fine, she's really conniving and tries to egg people on. She had a ex-boyfriend once who called the cops on her because she kicked him really hard in the crotch, twice, when he flirted with a friend of her's.

Here is an example of sexuality derogation:

I know her really well. She's a virgin and is holding out until she's married. She likes to hold hands, but she's totally grossed out with the idea of masturbating. I once asked her if she had a vibrator and she thought it was something to process food.

The stimuli were created such that one woman's photograph (i.e., the derogator) was placed at a top of a page, accompanied by a female name (selected at random from a local dating website of similar aged women). Below her photograph was the derogation, and below that, the photograph of the person being derogated (along with another female name). Participants were told that the first woman always made the statement about the other woman.

We created four sets of stimuli, such that we counterbalanced who was making the derogation. For example, if Nikki was paired with Tracey, in one set Nikki derogated Tracey and in the other, Tracey derogated Nikki. Participants were asked to read the statement made by the first woman and then rate her on a series of questions. These questions were identical to Phase 1, except that we included the derogator's name for clarity. Participants were tested in a private room, and completed a short demographic survey when they were finished.

Results

We performed two separate multivariate analysis of variance (MANOVA) models, such that there was one for men and one for women. The dependent variable was mean ratings for all the questions combined, for the three types of derogations (appearance, personality, and sexuality), and the independent variable was phase (1

versus 2). For men, all three forms of derogations revealed significant main effects for phase; appearance, $F(1,49) = 11.00, p = .002$, personality, $F(1,49) = 6.66, p = .01$, and sexuality, $F(1,49) = 5.07, p = .03$.

To see what dimensions (i.e., survey questions, such as friendliness, kindness) led to these main effects for men, we then created one-way analysis of variance (ANOVA) models. The dependent variable, however, was the difference in ratings (phase 1 – phase 2), which was calculated for the three types of derogations.

For brevity, we report here only the significant ANOVA model results. For appearance derogations, men’s perceptions decreased for friendliness, $F(1,51) = 9.31, p = .004$, kindness, $F(1,51) = 53.81, p < .001$, trustworthiness, $F(1,51) = 4.17, p = .04$, and overall desirability, $F(1,50) = 4.02, p = .05$ (see Figure 1). For personality derogations, perceptions decreased for friendliness, $F(1,52) = 5.38, p = .02$, kindness, $F(1,52) = 18.65, p < .001$, fitness as a parent, $F(1,52) = 9.49, p = .003$, and overall desirability, $F(1,51) = 3.79, p = .05$ (see Figure 2). Last, for sexuality derogations, perceptions decreased for kindness, $F(1,52) = 14.64, p < .001$, trustworthiness, $F(1,52) = 8.89, p = .004$, and overall desirability, $F(1,51) = 5.49, p = .02$ (see Figure 3).

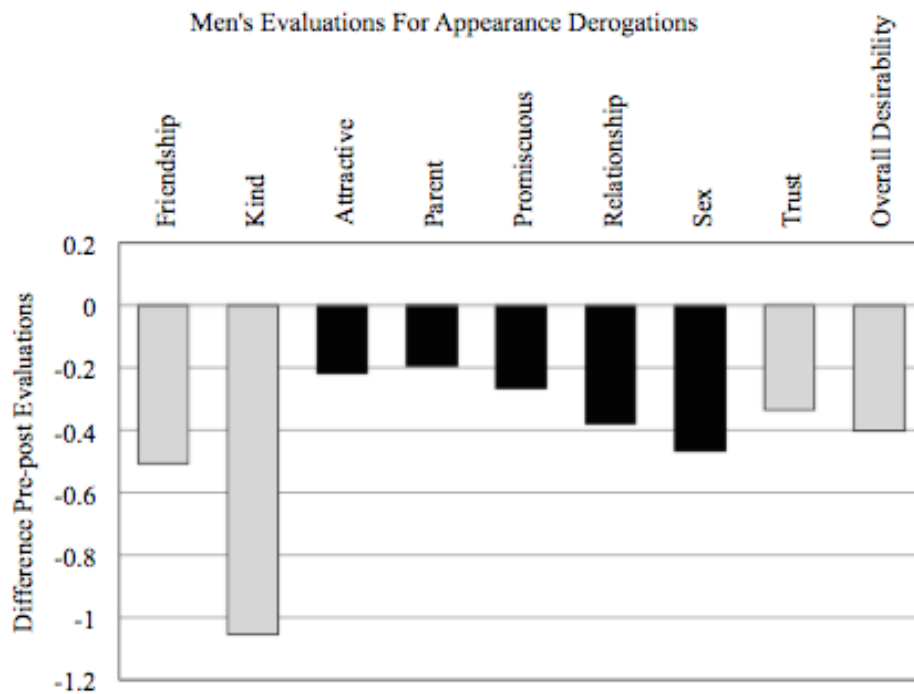


Figure 1. Changes in men’s evaluations between phase 1 and phase 2 for female derogations pertaining to appearance. Light grey bars represent a significant change in evaluations ($p < .05$), black bars represent non-significant change. Participants rated on a 1 (not at all) to 7 (very much) scale how friendly, kind, physically attractive, promiscuous, trustworthy, and overall desirable they thought the female derogator was, how fit for a parent she would be, and how likely they would be to consider her for a long-term relationship and brief sexual relationship.

Perceptions of Competitor Derogators

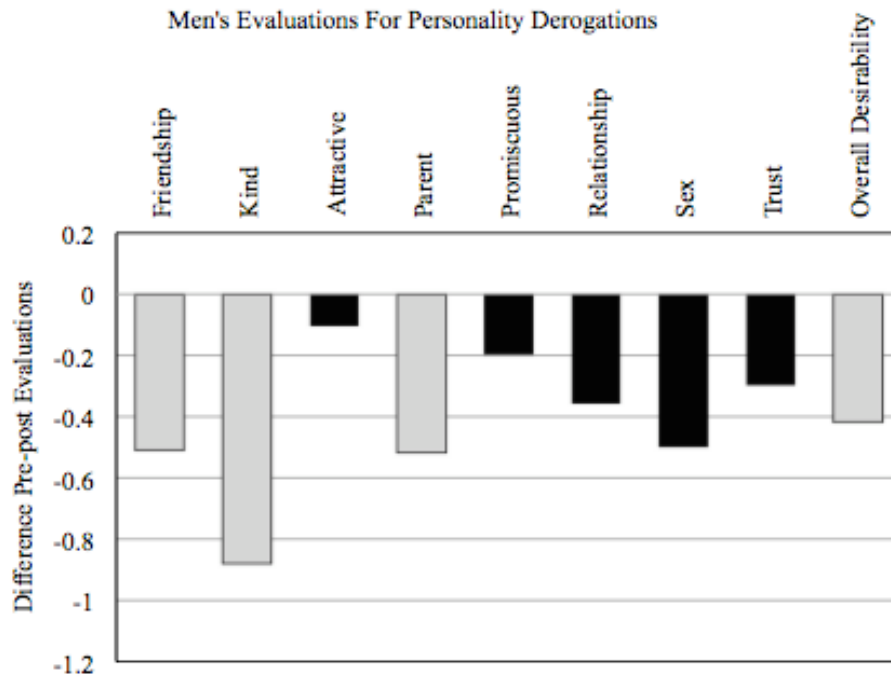


Figure 2. Changes in men's evaluations between phase 1 and phase 2 for female derogations pertaining to personality. See caption Figure 1.

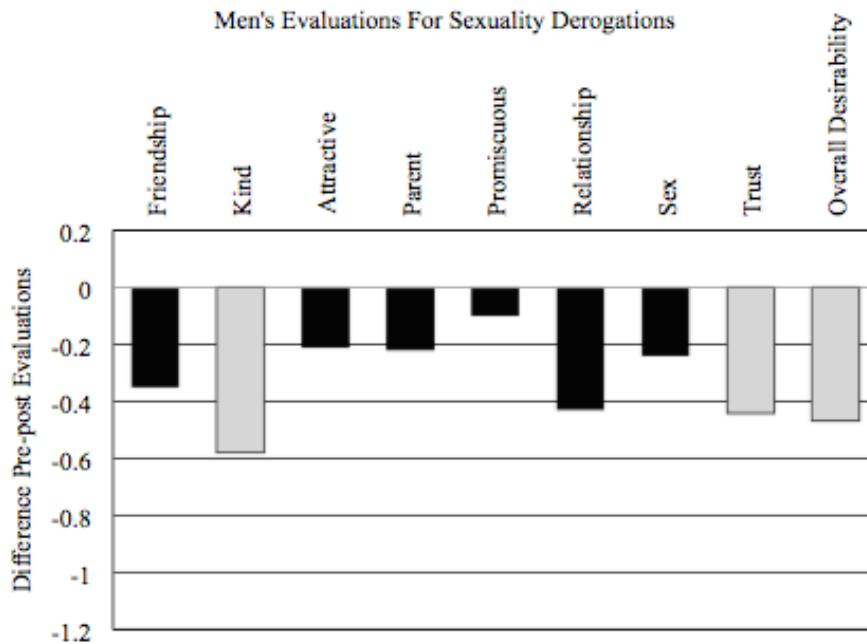


Figure 3. Changes in men's evaluations between phase 1 and phase 2 for female derogations pertaining to sexuality. See caption Figure 1.

Perceptions of Competitor Derogators

As for women, the MANOVA revealed that all three forms of derogations led to significant main effects for phase; appearance, $F(1,115) = 66.06, p < .001$, personality, $F(1,115) = 57.90, p < .001$, and sexuality, $F(1,115) = 35.55, p < .001$. Again, for brevity, we report here only the significant ANOVA model results. For appearance derogations, perceptions decreased for friendliness, $F(1,116) = 59.15, p < .001$, kindness, $F(1,116) = 139.55, p < .001$, attractiveness $F(1,116) = 6.70, p = .01$, fitness as a parent $F(1,116) = 15.92, p < .001$, promiscuity $F(1,166) = 3.81, p = .05$, trustworthiness, $F(1,116) = 60.86, p < .001$, and overall desirability, $F(1,116) = 15.08, p < .001$ (see Figure 4). For personality derogations, perceptions decreased for friendliness, $F(1,117) = 54.34, p < .001$, kindness, $F(1,117) = 79.63, p < .001$, attractiveness $F(1,117) = 27.68, p < .001$, fitness as a parent $F(1,117) = 26.11, p < .001$, trustworthiness, $F(1,117) = 43.22, p < .001$, and overall desirability, $F(1,117) = 34.89, p < .001$ (see Figure 5). Finally, for sexuality derogations, perceptions decreased for friendliness, $F(1,117) = 19.76, p < .001$, kindness, $F(1,117) = 73.40, p < .001$, attractiveness $F(1,117) = 8.71, p = .004$, fitness as a parent $F(1,117) = 12.42, p < .001$, trustworthiness, $F(1,117) = 29.17, p < .001$, and overall desirability, $F(1,117) = 20.53, p < .001$ (see Figure 6).

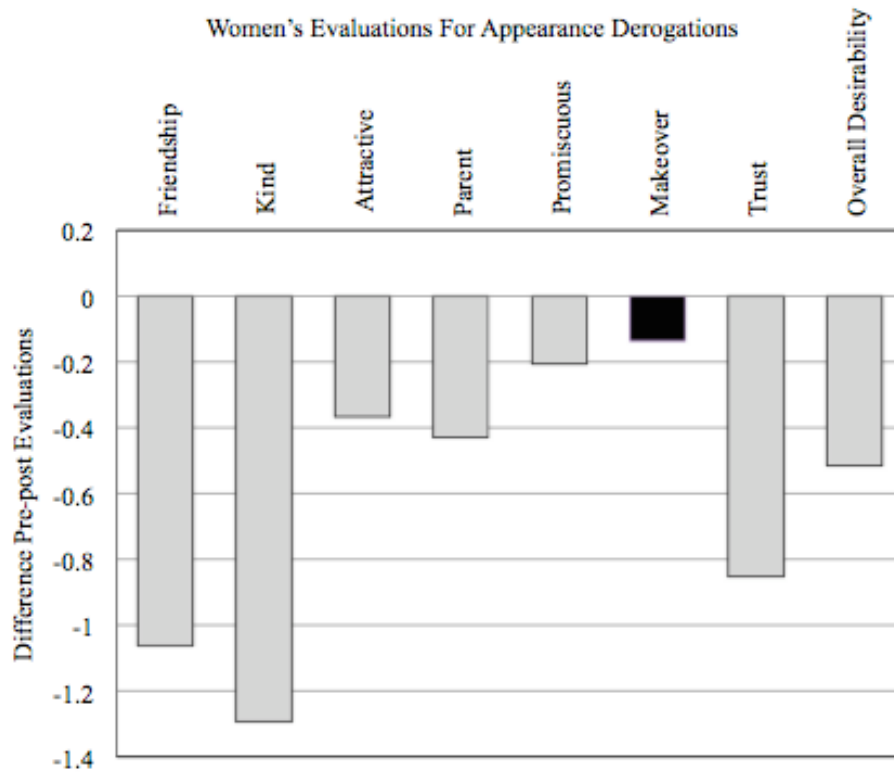


Figure 4. Changes in women's evaluations between phase 1 and phase 2 for female derogations pertaining to appearance. Light grey bars represent a significant change in evaluations ($p < .05$), black bars represent non-significant change. Participants rated on a 1 (not at all) to 7 (very much) scale how friendly, kind, physically attractive, promiscuous, trustworthy, and overall desirable they thought the female derogator was, how fit for a parent she would be, and whether they thought they could improve the appearance of the derogator (e.g., by giving her a make-over).

Perceptions of Competitor Derogators

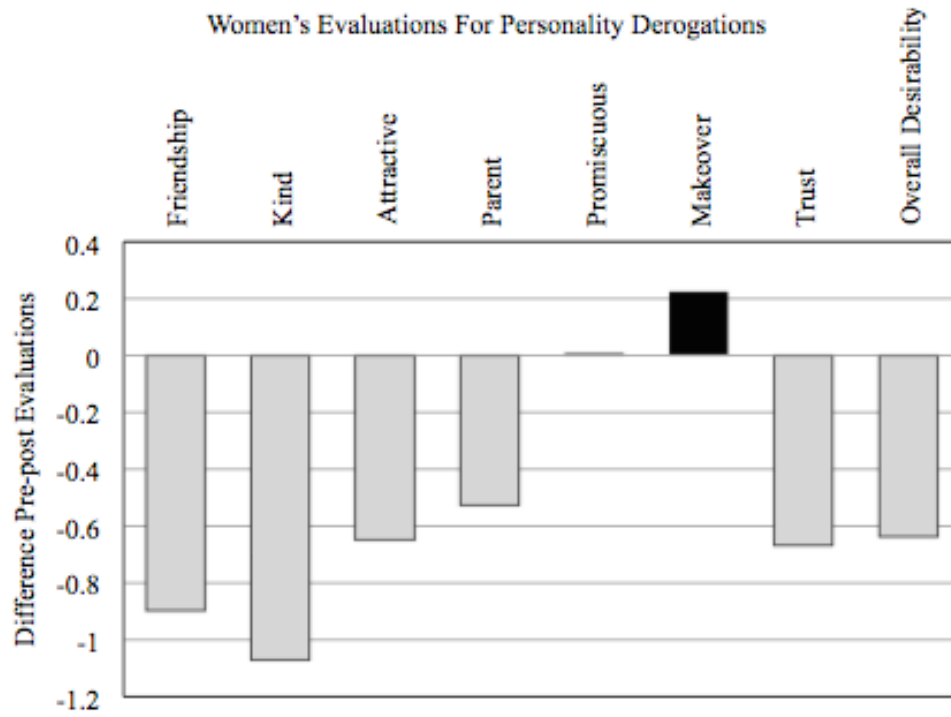


Figure 5. Changes in women's evaluations between phase 1 and phase 2 for female derogations pertaining to personality. See caption Figure 4.

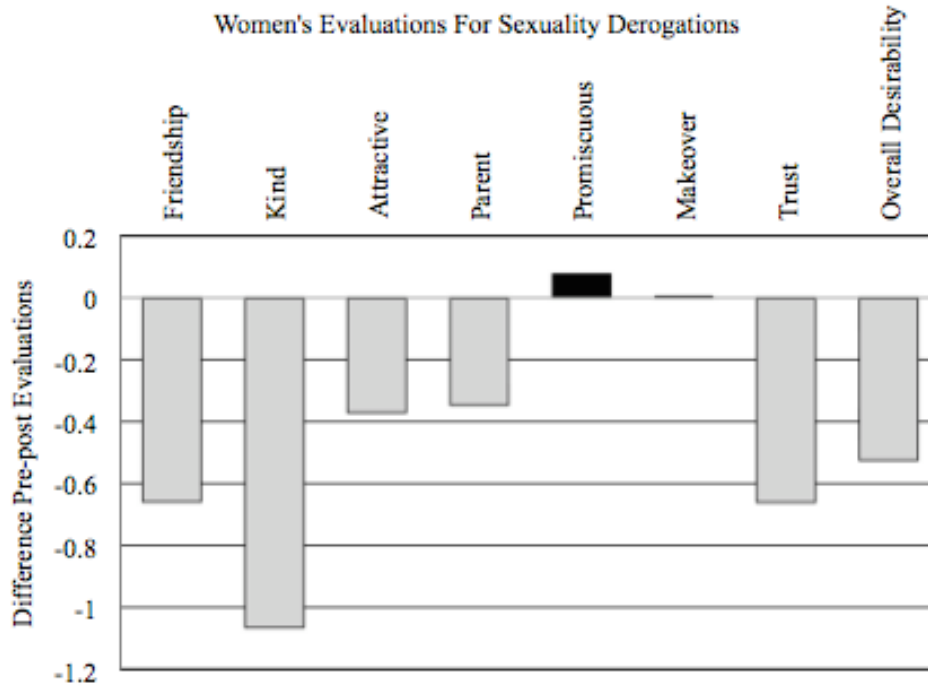


Figure 6. Changes in women's evaluations between phase 1 and phase 2 for female derogations pertaining to sexuality. See caption Figure 4.

Discussion

We explored how women's derogations regarding a rival's appearance, personality and sexuality affected men's views of the derogator. We hypothesized that one reason women do not derogate competitors more frequently, relative to self-promotion, is because their overall desirability as a mate will be decreased. Our results support this hypothesis. For all three types of derogations, men's evaluations of the derogator's friendliness, kindness, trustworthiness and overall desirability significantly decreased.

What is interesting, however, is that derogations, regardless of the type, did not influence men's perceptions of the derogator's physical attractiveness, her promiscuity, how willing they would be to consider her for a long-term relationship or for a short-term sexual relationship. Thus, the harm rendered by derogating a competitor is limited to personality features (as well as overall desirability). Previously, researchers documented that men's views of women's physical attractiveness remains relatively stable, even after learning about their sexual history or expected duration of any forthcoming romantic relationships, whereas women are more influenced by this type of information (Williams, Fisher & Cox, 2008). In light of this finding, we had expected that men would not show any decrease in attractiveness evaluations, but presumably would be less open to considering derogators for long-term relationships, given that men place a premium on kindness and honesty in potential mates (Buss, 1989). The fact that there was no change might reflect men's desire to form long-term relationships with physically attractive mates, and that this preference overrides, at some level, the perceived need for kind, honest mates.

We also asked women about their views of derogators, given that these individuals represent potential rivals for access to mates. Also, however, these derogators could represent potential friends or allies. It is not surprising, then, that women harshly judged derogators in most of the dimensions we provided. Women significantly decreased their perceptions of the derogator's friendliness, kindness, physical attractiveness, fitness as a parent, trustworthiness and how overall desirable she would be as a mate. In the case of appearance derogations, women decreased their evaluations of the derogator's promiscuity. The only item that consistently did not reveal any change was whether the women believed they could 'make-over' or improve the derogator's appearance. This lack of change could suggest that participants believed that the derogators were attempting to look their best, and hence, were actually competing.

If women view the derogators as potential friends, these results are hardly surprising; who wants a friend who makes negative statements about other women? For women, it may be easy to imagine oneself become the victim of these sorts of derogations. It is possible that women are more susceptible to the derogations than men, given that women tend to rely upon indirect aggression (Björkqvist, 1994; Campbell, 1999; Mealey, 2000). That is, these types of statements might be perceived by women as being highly, albeit indirectly, aggressive, whereas men might not perceive it in the same manner. Research has demonstrated that women are more prone than men to compete in non-physically aggressive ways, such as by using verbal attacks or indirect social aggression (e.g., Campbell, 1999; Mealey, 2000). This sex difference may be due to women's tendency towards less physical strength than men, which causes women to develop alternative and distinct methods of competing (Björkqvist, 1994). Campbell (1999) suggests that this lack of physical competitiveness reflects not merely an absence

of male-type risk-taking, but rather a successful female adaptation that results in reproductive benefit. She argues that when females become mothers, they become the primary caregivers and protectors of their children. Therefore, the presence of the mother is often more critical to children's survival than the presence of the father. As a consequence, it is more important for the mother to remain alive than the father, leading to less risk-taking by women and the use of indirect, low-risk, strategies to resolve disputes. Furthermore, mothers are more likely to invest in their children since they are assured of their genetic relatedness to their offspring through the act of birthing, whereas fathers may be uncertain of their paternity. In summary, "female choice... and ... reproductive strategies are selected not by virtue of being the female half of reproductive pair, but by being an individual woman reproducing in competition with other women to raise her offspring successfully" (Lancaster, 1991, p.2).

There were several limitations of the current research. We had to rely upon a contrived experiment to be able to examine quantifiable changes in perceptions due to the act of derogating. Similar to all research of this nature, the use of this technique means that future research is required to determine if the same changes exist in real-world contexts. We also only tested undergraduate students; however, these young adults represent a demographic when competition and mate selection should be the most intense (i.e., before individuals marry or establish long-term relationships). It is also possible that perceptions changed in ways that we did not tap with the survey items. Perhaps it would be useful to have a confederate derogate another confederate, and then interview participants and ask them how they perceive the derogator.

Although we attempted to control the attractiveness of the women in the photographs, participants may have considered some of the women more attractive than others. As mentioned, past research has shown that attractive women have more sway when they make derogations about other women (Fisher & Cox, 2009). Therefore, in the future researchers may wish to control for individuals' evaluations of attractiveness and ensure that equivalently rated women are used as the derogator and derogated.

In our opinion, the most noteworthy direction for future research is to examine how male derogators are perceived by women. In the current work, we limited our investigation to female derogators because the previous research leading to this study only examined female intrasexual competition, and we were striving to answer a question raised by that earlier work. However, it would be informative to document women's views of male derogators, as it would help explain why men do not derogate as often as they self-promote (Fisher & Cox, in press; Schmitt & Buss, 1996). Although women do consider men's physical attractiveness important (e.g., Weisfeld, Russell, Weisfeld, & Wells, 1992), their attractiveness assessments may be more linked to personality, and thus, not as stable as seen for men's assessments in this study.

Here we have demonstrated that one reason women may not derogate competitors more frequently is because it harms how potential mates perceive their overall desirability, as well as their friendliness, kindness and trustworthiness. Other women also form negative evaluations regarding female derogators, which might decrease the likelihood of establishing alliances. In spite of these costs, it remains a beneficial strategy for intrasexual competition, as evidenced by past research (Fisher & Cox, in press; Schmitt & Buss, 1996). It remains to be determined whether women view men who derogate as harshly, and if that explains men's tendency to self-promote instead of competitor derogate.

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